DRAFT ENVIRONMENTAL IMPACT REPORT

FOR THE

WEST AREA SPECIFIC PLAN

VOLUME I (EIR)

FEBRUARY 27, 2019

Prepared for:

City of Salinas
Community Development Department
65 West Alisal Street (Second Floor)
Salinas, CA 93901

Prepared by:

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De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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Appendix H: Noise Technical Report

Appendix I: Transportation Impact Analysis

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INTRODUCTION

The City of Salinas (City) has determined that a program-level environmental impact report (EIR) is required for the proposed West Area Specific Plan (herein the Specific Plan or Plan Area) Project (proposed project) pursuant to the requirements of the California Environmental Quality Act (CEQA). It is noted, however, that the Specific Plan provides a very high level of design detail for certain components of the project. Where sufficient detail is available in the Specific Plan, a full project-level analysis is provided in this EIR.

This EIR examines the planning, construction and operation of the project. The program-level approach, with project-level analysis where sufficient detail exists in the Specific Plan, is appropriate for the proposed project because it allows comprehensive consideration of the reasonably anticipated scope of the development plan; however, as discussed above, not all design aspects of the future development phases are known at this stage in the planning process. Subsequent individual development that requires further discretionary approvals will be examined in light of this EIR to determine whether additional environmental documentation must be prepared.

This EIR has been prepared as a Program EIR pursuant to CEQA Guidelines Section 15168. A program-level analysis considers the broad environmental effects of the West Area Specific Plan. This EIR will also function as a "first tier" EIR, as explained below.

CEQA Guidelines Section 15168 states that a program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

1) Geographically;
2) As logical parts in the chain of contemplated actions;
3) In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program; or
4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The program-level analysis considers the broad environmental effects of the proposed West Area Specific Plan. The EIR examines all phases of the project including planning, construction and operation. The program-level approach is appropriate for the West Area Specific Plan because it allows comprehensive consideration of the reasonably anticipated scope of development plan; however, not all aspects of the future development are known at this stage in the planning process. Individual development projects within the Specific Plan Area that require further discretionary approvals will be examined in light of this EIR to determine whether additional environmental documentation must be prepared.

According to CEQA Guidelines section 15168, subdivision (c)(5), "[a] program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible." Later environmental documents (EIRs, mitigated negative

declarations, or negative declarations) can incorporate by reference materials from the program EIR regarding regional influences, secondary impacts, cumulative impacts, broad alternatives, and other factors (CEQA Guidelines Section 15168[d][2]). These later documents need only focus on new impacts that have not been considered before (CEQA Guidelines Section 15168[d][3]).

Section 15168(c), entitled "Use with Later Activities," provides, in pertinent part, as follows:

> Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared:
>
> (1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.
> (2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activities as being within the scope of the project covered by the program EIR, and no new environmental document would be required.
> (3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.
> (4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.

Here, the City anticipates preparing a written checklist or similar device whenever landowners within the Specific Plan Area submit applications for site-specific approvals (i.e. small-lot tentative maps, conditional use permits, or other discretionary entitlements). The checklist would serve, in part, as a consistency checklist to determine if the application for site specific approval is consistent with the General Plan, Specific Plan, Conditions of Approval, and Mitigation Measures. It would also include a review of the project details relative to what was anticipated and analyzed in the program EIR (i.e. are there new environmental effects that were not covered by the program EIR). The City's expectation, at least at present, is that the checklist will conclude that most, or all, components of the Specific Plan can be developed with no new analysis of environmental effects given that there is a high level of resolution with regard to the project details that have been analysis in this program EIR. In some cases, however, a site-specific application (i.e. commercial use) may have specific issues associated with the project, or business, that this program EIR could not anticipate given the information that was available at this time. In those situations, the detailed site-specific information from that application could have site-specific effects not wholly anticipated in this EIR and would require some additional environmental review. (See also CEQA Guidelines section 15063, subd. (b)(1)(C).)

Future site-specific approvals may also be narrowed pursuant to the rules for tiering set forth in CEQA Guidelines Section 15152. "'[T]iering is a process by which agencies can adopt programs, plans, policies, or ordinances with EIRs focusing on 'the big picture,' and can then use streamlined CEQA review for individual projects that are consistent with such…[first tier decisions] and are…consistent

with local agencies' governing general plans and zoning.'" (*Koster v. County of San Joaquin* (1996) 47 Cal.App.4th 29, 36.) Section 15152 provides that, where a first-tier EIR has "adequately addressed" the subject of cumulative impacts, such impacts need not be revisited in second- and third-tier documents. Furthermore, second- and third-tier documents may limit the examination of impacts to those that "were not examined as significant effects" in the prior EIR or "[a]re susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means." In general, significant environmental effects have been "adequately addressed" if the lead agency determines that:

> (A) they have been mitigated or avoided as a result of the prior environmental impact report and findings adopted in connection with that prior environmental impact report; or
>
> (B) they have been examined at a sufficient level of detail in the prior environmental impact report to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.

Here, as noted above, the City anticipates preparing a written checklist(s) or similar device whenever landowners within the Specific Plan area submit applications for site-specific approvals (i.e. tentative maps, conditional use permits, or other discretionary entitlements). The checklist would serve in part as a consistency checklist to determine if the application for site specific approval is consistent with the General Plan, Specific Plan, Conditions of Approval, and Mitigation Measures, and it would also include a review of the project details relative to what was anticipated and analyzed in the program EIR (i.e. have all significant environmental impacts identified been "adequately addressed" in the program EIR). Thus, if a new analysis is required for these site-specific actions, it would focus on impacts that cannot be "avoided or mitigated" by mitigation measures that either (i) were adopted in connection with the Specific Plan or (ii) were formulated based on information in this EIR.

In addition, because the EIR addresses the effects of rezoning the land within the proposed Specific Plan Area, future environmental review can also be streamlined pursuant to Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183. These provisions, which are similar but not identical to the tiering provisions, generally limit the scope of necessary environmental review for site-specific approvals following the preparation of an EIR for a "zoning action." For such site-specific approvals, CEQA generally applies only to impacts that are "peculiar to the parcel or to the project" and have not been previously disclosed, except where "substantial new information" shows that previously identified impacts would be more significant than previously assumed. Notably, impacts are considered not to be "peculiar to the parcel or to the project" if they can be substantially mitigated pursuant to previously adopted, uniformly applied development policies or standards. As noted above, the City anticipates that, in assessing the extent to which the Specific Plan EIR has previously addressed significant impacts that might occur with individual projects, the City may conclude that in some instances (e.g., with respect to agricultural resources, cultural resources, geology, soils, and paleontological resources), no further analysis beyond that found in the program EIR will be necessary.

Finally, for purely residential projects consistent with the Specific Plan, the City intends to preserve its ability to treat such projects as exempt from CEQA pursuant to Government Code section 65457. Subdivision (a) of that statute provides that "[a]ny residential development project, including any subdivision, or any zoning change that is undertaken to implement and is consistent with a specific plan for which an [EIR] has been certified after January 1, 1980, is exempt from the requirements of [CEQA]." The statutes go on to say, moreover, that "if after adoption of the specific plan, an event as specified in Section 21166 of the Public Resources Code occurs, the exemption provided by this subdivision does not apply unless and until a supplemental [SEIR] for the specific plan is prepared and certified in accordance with the provisions of [CEQA]. After a supplemental [SEIR] is certified, the exemption … applies to projects undertaken pursuant to the specific plan." (See also CEQA Guidelines section 15182.)

When purely residential projects are proposed, the City will consider whether they qualify for this exemption or whether the West Area Specific Plan EIR must be updated through a supplement to this EIR or a subsequent EIR as required by Public Resources Code section 21166 and CEQA Guidelines sections 15162 and 15163.

PROJECT DESCRIPTION

The following provides a brief summary and overview of the proposed project. Section 2.0 of this EIR includes a detailed description of the proposed project, including maps and graphics. The reader is referred to Section 2.0 for a more complete and thorough description of the components of the proposed project.

The proposed West Area Specific Plan (hereinafter also referred to as the Specific Plan) establishes the land use planning and regulatory guidance, including the land use and zoning designations and policies, development regulations, and design standards, for the approximately 797-acre Specific Plan Area. The Specific Plan will serve as a bridge between the Salinas General Plan and individual development applications in the Specific Plan Area, applying—and adding greater specificity to—the goals, policies and concepts of the General Plan for that area. The Specific Plan provides a complete blueprint for development of the Specific Plan Area, including:

- A description of proposed land uses,
- Policies, regulations and standards to support the Specific Plan,
- Infrastructure needed to support the Specific Plan, and
- Implementation and administrative processes needed for plan development.

The Specific Plan has been crafted to be consistent with overall community goals as expressed in the City of Salinas General Plan, as well as more specific policies and implementation measures contained in other documents. The City of Salinas Zoning Code requirements will apply to development applications and property within the Specific Plan Area unless specifically superseded by the development regulations or design standards contained in the Specific Plan.

The underlying purpose of the proposed project is the approval and subsequent implementation of the proposed West Area Specific Plan (including the Specific Plan's goals) and related entitlements.

Proposed land uses in the approximate 797-acre Specific Plan Area include residential, mixed use commercial, community park, neighborhood parks, small parks, schools and open space (including supplemental storm water detention/retention basins). Implementation will involve development of the site under the New Urbanism Zoning Districts of Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Medium Density Residential, Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC) as well as the Public and Semipublic (PS), Parks (P), and Open Space (OS) Zoning Districts.

The quantifiable objectives of the proposed project include the development of up to 4,340 residential dwelling units (with a minimum of 3,553 required under the General Plan), up to 571,500 square feet of commercial/mixed use building area, and up to 177 acres of public facilities (including three elementary schools, a high school, a middle school, open space areas (including supplemental storm water detention/retention basins) and 11 parks). It is anticipated that the Specific Plan Area will house up to 15,928 residents at project build-out.

Refer to Section 2.0, Project Description, for a more complete description of the project details.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the proposed West Area Specific Plan Project that are known to the City of Salinas, were raised during the Notice of Preparation (NOP) process, or raised during preparation of the Draft EIR. This Draft EIR discusses potentially significant impacts associated with air quality, biological resources, cultural and tribal resources, greenhouse gases, climate change and energy, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, transportation/circulation, and utilities.

The City received nine written comments on the NOP for the proposed West Area Specific Plan Draft EIR. A copy of each letter is provided in **Appendix A** of this Draft EIR. The comments covered the following aspects of the proposed Specific Plan, each of which is considered a public concern:

- Potential impacts to cultural and tribal cultural resources;
- Potential impacts to traffic and circulation (2);
- Potential impacts on local public transit;
- Potential impacts on the local public school system (2);
- Consideration of agricultural impacts;
- Consideration of mosquito reduction best management practices; and
- Consideration of stormwater impacts on the regional system.

ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126.6 of the CEQA Guidelines requires an EIR to describe a reasonable range of alternatives to the project or to the location of the project which would reduce or avoid any of the significant impacts of the project, and which could feasibly attain most of the basic objectives of the proposed project. The alternatives analyzed in this EIR include the following four alternatives in addition to the proposed West Area Specific Plan Project:

- No Project (Existing General Plan) Alternative
- Reduced Land Area Alternative
- Reduced Residential Intensity/Density Alternative
- Smaller-scale Project Alternative

Alternatives are described in detail in Section 5.0, Alternatives to the Proposed Project. A comparative analysis of the proposed project and each of the project alternatives is provided in Table ES-1. As shown in the Table, the No Project (No Build) Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. The Smaller-scale Project Alternative is the next best alternative in terms of its overall environmental impact. The Smaller-scale Project Alternative ranks equal to or better than the proposed project for almost every environmental issue. In addition, in aggregate, the Reduced Land Area Project Alternative and the Reduced Residential Intensity/Density Project Alternative rank better than the proposed project. It should be noted that none of the alternatives meet all of the project objectives. Additionally, the reduced number of residential units in the Reduced Residential Intensity/Density Alternative and the Smaller-Scale Alternative would be inconsistent with the General Plan standards for the Plan Area and would not meet the minimum number of residential units required for New Urbanism under the General Plan.

TABLE ES-1: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE WEST AREA SPECIFIC PLAN

ENVIRONMENTAL TOPIC	PROPOSED PROJECT[1]	NO PROJECT (NO BUILD) ALTERNATIVE	REDUCED LAND AREA PROJECT ALTERNATIVE	REDUCED RESIDENTIAL INTENSITY/DENSITY ALTERNATIVE	SMALLER-SCALE PROJECT ALTERNATIVE
SECTION 3.1 - AIR QUALITY (AQ)					
AQ Impact 3.1-1	LS	Equal	Greater	Greater	Greater
AQ Impact 3.1-2	SU	Less	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-3	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-4	LS	Less	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-5	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-6	LS/MM	Slightly Greater	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-7	CC & SU	Slightly Less	Slightly Less	Slightly Less	Slightly Less
SECTION 3.12- BIOLOGICAL RESOURCES (BIO)					
BIO Impact 3.2-1	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-2	LS/MM	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-3	LS/MM	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-4	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-5	LS/MM	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-6	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-7	LS/MM	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-8	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-9	S&U	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-10	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-11	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-12	CC & SU	Less	Slightly Less	Equal	Slightly Less
SECTION 3.3 - CULTURAL RESOURCES (CLT)					
CLT Impact 3.3-1	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
CLT Impact 3.3-2	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
CLT Impact 3.3-3	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
CLT Impact 3.3-4	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
CLT Impact 3.3-5	LS & LCC	Slightly Less	Slightly Less	Slightly Less	Slightly Less
SECTION 3.4 - GREENHOUSE GASES AND CLIMATE CHANGE (GHG)					
GHG Impact 3.4-1	S&U	Less	Slightly Less	Slightly Less	Equal
GHG Impact 3.4-2	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
GHG Impact 3.4-3	LS	Slightly Less	Slightly Less	Slightly Less	Slightly Less

ENVIRONMENTAL TOPIC	PROPOSED PROJECT[1]	NO PROJECT (NO BUILD) ALTERNATIVE	REDUCED LAND AREA PROJECT ALTERNATIVE	REDUCED RESIDENTIAL INTENSITY/DENSITY ALTERNATIVE	SMALLER-SCALE PROJECT ALTERNATIVE
GHG Impact 3.4-4	CC & SU	Less	Less	Less	Less
SECTION 3.5 - HAZARDS AND HAZARDOUS MATERIALS (HAZ)					
HAZ 3.5-1	LS/MM	Slightly Less	Slightly Less	Equal	Slightly Less
HAZ 3.5-2	LS/MM	Slightly Less	Slightly Less	Equal	Slightly Less
HAZ 3.5-3	LS & LCC	Slightly Less	Slightly Less	Equal	Slightly Less
SECTION 3.6 - HYDROLOGY AND WATER QUALITY (HYD)					
HYD Impact 3.6-1	LS & LCC	Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-2	LS & LCC	Slightly Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-3	LS & LCC	Greater	Slightly Greater	Slightly Less	Slightly Greater
HYD Impact 3.6-4	LS	Slightly Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-5	LS	Slightly Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-6	LS	Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-7	LS	Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-8	LS & LCC	Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-9	LS & LCC	Slightly Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-10	LS & LCC	Greater	Slightly Greater	Slightly Less	Slightly Greater
HYD Impact 3.6-11	LS & LCC	Less	Slightly Less	Slightly Less	Slightly Less
SECTION 3.7 - NOISE (NOI)					
NOI Impact 3.7-1	SU	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-2	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-3	LS	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-4	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-5	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-6	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-7	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-8	CC & SU	Less	Slightly Less	Slightly Less	Slightly Less
SECTION 3.8 - POPULATION & HOUSING (POP)					
POP Impact 3.8-1	LS	Greater	Slightly Greater	Slightly Greater	Slightly Greater
POP Impact 3.8-2	LS & LCC	Greater	Slightly Greater	Slightly Greater	Slightly Greater
SECTION 3.9 - PUBLIC SERVICES (PS)					
PS Impact 3.9-1	LS/MM	Less	Equal	Slightly Less	Slightly Less
PS Impact 3.9-2	LS	Slightly Less	Equal	Slightly Less	Slightly Less

ENVIRONMENTAL TOPIC	PROPOSED PROJECT[1]	NO PROJECT (NO BUILD) ALTERNATIVE	REDUCED LAND AREA PROJECT ALTERNATIVE	REDUCED RESIDENTIAL INTENSITY/DENSITY ALTERNATIVE	SMALLER-SCALE PROJECT ALTERNATIVE
PS Impact 3.9-3	SU	Less	Equal	Slightly Less	Slightly Less
PS Impact 3.9-4	SU	Less	Equal	Slightly Less	Slightly Less
PS Impact 3.9-5	LS	Less	Equal	Slightly Less	Slightly Less
PS Impact 3.9-6	CC & SU				
SECTION 3.10 - TRANSPORTATION AND CIRCULATION (TC)					
TC Impact 3.10-1	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-2	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-3	CC & SU	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-4	CC & SU	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-5	NI	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-6	LS	Less	Equal	Equal	Equal
TC Impact 3.10-7	LS	Less	Slightly Greater	Slightly Less	Slightly Greater
TC Impact 3.10-8	LS/MM	Less	Slightly Greater	Slightly Less	Slightly Greater
SECTION 3.11 - UTILITIES (UT)					
UT Impact 3.11-1	LS	Less	Less	Less	Less
UT Impact 3.11-2	LS/MM	Less	Equal	Less	Less
UT Impact 3.11-3	LS	Less	Equal	Less	Less
UT Impact 3.11-4	LS & CC	Less	Equal	Less	Less
UT Impact 3.11-5	LS	Less	Equal	Slightly Less	Slightly Less
UT Impact 3.11-6	LS	Equal	Equal	Less	Equal
UT Impact 3.11-7	LS & LCC	Less	Slightly Less	Slightly Less	Slightly Less
UT Impact 3.11-8	LS	Less	Less	Slightly Less	Less
UT Impact 3.11-9	LS & CC	Less	Less	Equal	Less
UT Impact 3.11-10	LS	Less	Equal	Less	Less
UT Impact 3.11-11	LS & CC	Less	Equal	Less	Less

[1]THE SIGNIFICANCE DETERMINATIONS CONTAINED IN THE SECOND COLUMN OF THIS TABLE REFER ONLY TO THE SIGNIFICANCE OF THE PROPOSED PROJECT, AND NOT NECESSARILY TO THE POTENTIAL SIGNIFICANCE DETERMINATIONS OF EACH OF THE ALTERNATIVES.

NOTES: GREATER/SLIGHTLY GREATER = GREATER IMPACT THAN THAT OF THE WEST AREA SPECIFIC PLAN; LESS/SLIGHTLY LESS = LESS IMPACT THAN THAT OF THE WEST AREA SPECIFIC PLAN; EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE WEST AREA SPECIFIC PLAN.

NI = NO IMPACT; LS = LESS THAN SIGNIFICANT IMPACT; LS/MM = LESS THAN SIGNIFICANT WITH MITIGATION ; S & U = SIGNIFICANT AND UNAVOIDABLE; CC & SU = CUMULATIVELY CONSIDERABLE AND SIGNIFICANT AND UNAVOIDABLE; LS & LCC = LESS THAN SIGNIFICANT AND LESS THAN CUMULATIVELY CONSIDERABLE

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SUMMARY OF IMPACTS AND MITIGATION MEASURES

The environmental impacts of the proposed project, the impact level of significance prior to mitigation, the proposed mitigation measures and/or adopted policies and standard measures that are already in place to mitigate an impact, and the impact level of significance after mitigation are summarized in Table ES-2. In addition to the mitigation measures listed below, the mitigation measures identified in the Salinas 2002 General Plan Final Environmental Impact Report (FEIR) and the 2007 Final Supplement for the Salinas General Plan Final Program EIR apply to the project and are contained in Appendix J of this DEIR.

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TABLE ES-2: WEST AREA SPECIFIC PLAN IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
AIR QUALITY			
Impact 3.1-1: The project has the potential to conflict with or obstruct implementation of the applicable air quality plan	LS	*None required.*	--
Impact 3.1-2: Project operation has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation	PS	***Mitigation Measure 3.1-1****: Prior to approval of development review permits including tentative maps, the project applicant(s) shall incorporate the following features into project plans and specifications, as directed by the City of Salinas:* • *Provide traffic calming measures wherever feasible, within the Plan Area;* • *Provide preferential carpool/vanpool parking spaces;* • *Provide electric-vehicle parking spaces;* • *Require the use of low-VOC paint for all new building architectural coatings within the Plan Area, consistent with or better than, what is required by the City's Municipal Code.* ***Mitigation Measure 3.1-2:*** *Prior to approval of development review permit(s), the project applicant(s) shall incorporate effective methods to encourage the use of cleaner alternative fuel vehicles and carpooling within the Plan Area. Effective methods may include the installation of alternative fuel (e.g. electric) charging stations at locations spaced throughout the Plan Area, consistent with or better than what is required by the City's Municipal Code and Specific Plan. Additionally, this can be achieved by providing preferential parking for alternatively-powered vehicles, including electric cars, and/or by providing carpool/vanpool parking spaces.* ***Mitigation Measure 3.1-3****: Prior to approval of development review permit(s), the project applicant(s) shall incorporate the use of alternative energy for the residential and mixed-use/commercial developments, including by implementing alternative energy (e.g. PV solar) building requirements, consistent with or better than, what is required by the City's Municipal Code. Project applicant(s) shall also ensure that pre-installed electrical hookups and/or charging stations, as applicable, are incorporated into all project plans and*	SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		specifications. ***Mitigation Measure 3.1-4:*** *Prior to the issuance of building permits, the project applicant(s) shall provide plans that demonstrate that low-flow (high-efficiency) indoor water fixtures will be installed throughout the Plan Area, including for bathroom and kitchen faucets, toilet fixtures, and showers, in both residential and non-residential buildings, in compliance with or better than the standards required within the most recent version of the California Green Building Standards Code.* ***Mitigation Measure 3.1-5****: Prior to the issuance of building permits, the project applicant(s) shall provide plans that demonstrate that water-efficient irrigation systems will be installed throughout the Plan Area, consistent with or better than the requirements contained within the State's Model Water Efficient Landscape Ordinance, the City's Water Conservation Ordinance and the Salinas Zoning Code Landscaping and Irrigation requirements.* ***Mitigation Measure 3.1-6****: Prior to approval of improvement plans or development review permits, as applicable, the project applicant(s) shall ensure that pedestrian/bicycle facilities (e.g. pedestrian paths, outdoor bike racks, etc.) are provided within the Plan Area, in coordination with and subject to approval by the City of Salinas. The project proponent shall also provide covered bicycling parking near the entrance to commercial establishments within the Plan Area, consistent with or better than the requirements contained within the City's Municipal Code.* ***Mitigation Measure 3.1-7****: Prior to the issuance of development review permit(s), the project applicant(s) shall incorporate of one or more of the following additional Plan Area requirements, as determined by the City of Salinas:* • *Install secured bicycle storage facilities (bike lockers, cages, interior space, or similar as approved by the City Engineer) at all commercial and public facilities with 50 employees or more;* • *Incorporate park-and-ride lots.*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.1-3: Project construction has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation	PS	***Mitigation Measure 3.1-8****: Prior to the issuance of grading permits, the project applicant shall prepare a grading plan subject to review and approval by the City. In the event that ground-disturbance exceeds 2.2 acres per day for initial site preparation activities that involve extensive earth-moving activities (e.g., grubbing, excavation, rough grading), and 8.1 acres per day for activities that involve minimal earth-moving (e.g., finish grading), the required grading plans shall include the following measures to be implemented as needed to prevent visible dust emissions:* • *Water all active construction sites to prevent visible dust emissions. Frequency should be based on the type of operation, soil, and wind exposure;* • *Prohibit grading and earthmoving activities, and cover stock piles, during periods of high wind (over 15 mph);* • *Limit vehicle speed on construction sites to 15 mph.* • *Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);* • *Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area;* • *Maintain at least 1-foot of freeboard in each haul truck;* • *Provide windbreaks on the windward perimeter of construction projects where adjacent to open land;* • *Cover inactive storage piles;* • *Sweep streets if visible soil material is carried out from the construction site; and/or* • *Post a publicly visible sign written in English and Spanish which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Air Resources District (MBARD) shall be visible to ensure compliance with Rule 402 (Nuisance). The sign shall be in accordance with MBARD and/or City requirements, as applicable.*	LS
Impact 3.1-4: The proposed project has the potential to have carbon monoxide hotspot	LS	*None required.*	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
impacts			
Impact 3.1-5: The proposed project has the potential for public exposure to toxic air contaminants	PS	***Mitigation Measure 3.1-9:*** *Prior to issuance of building permits or commencing operation of any commercial building/use that would emit toxic air contaminants (such as gas stations or dry cleaning operations), the project applicant shall, at a minimum, perform prioritization screening in accordance with the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990) and the Air Toxics "Hot Spots" Information and Assessment Act. The prioritization screening shall be performed in accordance with the California Air Pollution Control Officers Association Air Toxic "Hot Spots" Program guidance. The prioritization screening shall also be conducted consistent with the guidance provided by the Monterey Bay Air Resources District, which will be responsible for determining which facilities based on their prioritization screening score, must perform a health risk assessment. In determining the need to prepare a health risk assessment, the Monterey Bay Air Resources District considers the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors specific to the facility that indicate that it may pose a significant health risk.* *If a health risk assessment is warranted for a facility based on its prioritization score, the project applicant shall assess the facilities for the potential to expose the public to toxic air contaminants in excess of the applicable thresholds (utilizing an air dispersion modelling program such as AERMOD). As of the time of this writing, the commonly accepted threshold for cancer risk is 10 in a million for carcinogens, and the reference exposure level for non-carcinogens (HI = 1). Facilities that exceed the applicable threshold(s) have the potential to expose the public to toxic air contaminants levels that would be considered significant. Facilities that exceed the applicable threshold(s) must incorporate mitigation to reduce the risks from emission of toxic air contaminants to an acceptable level (i.e., to a level that does not exceed the applicable threshold[s]). Potential mitigation includes: reducing the size of the facility area; rearranging the site to reduce the potential for impacts on the nearest sensitive receptors; and utilizing products that reduce the level of toxic air contaminants, or removal of such products from the operational phase of the project.*	LS

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PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.1-6: The proposed project has the potential for exposure to odors	LS	*None required.*	--
Impact 3.1-7: Cumulative impact on the region's air quality	PS	*Implement Mitigation Measures 3.1-1 through 3.1-8.*	CC and SU
BIOLOGICAL RESOURCES			
Impact 3.2-1: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Invertebrates	LS	*None required.*	--
Impact 3.2-2: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or	PS	***Mitigation Measure 3.2-1****: Prior to issuance of grading and/or building permits, the project applicant shall consult with the USFWS and CDFW for concurrence and a final confirmation that a take permit is not necessary for impacts to the hybrid population of California tiger salamander located along Natividad Road. The regulatory agency concurrence confirmation shall be provided to the City of Salinas for the project file. If the status of this metapopulation were to change and become protected prior to construction, or the regulatory agencies do not concur that the metapopulation does not require a take permit, then the project applicant shall initiate a consultation with the agencies and obtain the appropriate take permits.* ***Mitigation Measure 3.2-2****: Prior to issuance of grading and/or building permits, in order to avoid and minimize impacts to California tiger salamander to the extent feasible, the*	LS

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PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
USFWS - Reptile and Amphibian		*proposed project activities shall be compliant with the following Avoidance and Minimization Measures during Construction Activities. These measures are intended to apply, regardless of the consultation process with regulatory agencies.* *a. Prior to excavation work or other ground disturbance, a qualified biologist(s) will conduct environmental education training for all construction personnel covering the California tiger salamander, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained.* *b. The biologist(s) will oversee the hand excavation of any burrows located in suitable habitat that are within the project footprint (Farmland Fringe, Irrigation Ditch, Roadside Ditch, and Farmland Residence). These excavations will be performed carefully using hand-trowels and spades. Burrows will be excavated to the terminus of the tunnels, or to where the burrow is less than or equal to 0.5 inch in diameter.* *c. If ground disturbing activities in suitable habitat (Farmland Fringe, Irrigation Ditch, Roadside Ditch, and Farmland Residence) are projected to extend beyond the first rain of the rainy season, the applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California tiger salamanders from entering these sites. Drift fencing will be installed and inspected by the biologist(s) no less than 72 hours prior to the first rain event of the rainy season. If weather conditions necessitate the installation of drift fencing, the approved biologist(s) will oversee the installation of pit traps to capture California tiger salamanders migrating during the rain events. The biologist(s) will check pit traps twice daily, once in the morning prior to the start of construction and once at the end of the work day.* *d. Any California tiger salamanders captured in pit traps or uncovered in burrows will be transferred immediately to a site designated by the USFWS and CDFW. Transported animals must be kept cool and moist.* *e. A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the USFWS and CDFW within 90 calendar days of completion of the project for which the grading and/or building permit was required. The report will include:*	

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PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		i. Dates of project groundbreaking and completion. *ii. Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of California tiger salamanders.* *iii. An explanation of failure to meet such measures, if any.* *iv. Known project effects on the California tiger salamander.* *v. Observed incidences of injury to or mortality of the species.* *vi. Any other relevant information.* ***Mitigation Measure 3.2-3**: Prior to issuance of grading and/or building permits the project applicant shall consult with the USFWS for concurrence and a final confirmation that a take permit is not necessary for impacts to the California red-legged frog that is documented in the region, and has the potential to utilize the surrounding drainages. The regulatory agency concurrence confirmation shall be provided to the City of Salinas for the project file. If the regulatory agency does not concur that the project does not require a take permit, then the project applicant shall initiate a consultation with the agency and obtain the appropriate take permit.* ***Mitigation Measure 3.2-4**: Prior to issuance of grading and/or building permits, in order to avoid and minimize impacts to CRLF to the extent feasible, the proposed project activities shall be compliant with the following Avoidance and Minimization Measures during Construction Activities. These measures are intended to apply, regardless of the consultation process with regulatory agencies.* *a. Prior to excavation work or other ground disturbance, a biologist(s) will conduct environmental education training for all construction personnel covering the California red-legged frog, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained.* *b. The biologist(s) will monitor construction activities located in suitable habitat that is within the project footprint (Irrigation Ditch, Roadside Ditch).* *c. The applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California red-legged frog from entering the construction site.*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		Drift fencing will be installed and inspected by the biologist(s). *d. A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the U.S. Fish and Wildlife Service within 90 calendar days of completion of the project, for which the grading/building permit was required. The report will include:* *i. Dates of project groundbreaking and completion.* *ii. Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of.* *iii. An explanation of failure to meet such measures, if any.* *iv. Known project effects on the California red-legged frog.* *v. Observed incidences of injury to or mortality of the species.* *vi. Any other relevant information.* *If proposed construction activities may result in the "take" (harass, harm, pursue, wound, kill, trap, or capture) of California red-legged frog or California tiger salamander, the project proponent shall obtain state and federal Incidental Take Permits, and comply with all stipulated conditions to protect special-status amphibians.*	
Impact 3.2-3: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Birds	PS	***Mitigation Measure 3.2-5:*** *Building and grading permits and plans issued for development in the project area shall note the following: If construction activities occur during the avian breeding season (February 1 – September 15) then the project proponent shall conduct pre-construction surveys to prevent impacts to nesting birds. No more than 15 days prior to the start of construction a bird survey shall be conducted by a qualified biologist to identify any active nests within the Specific Plan Area, and shall be submitted to the City. If construction stops for a period of 15 days or more during the avian breeding season than an additional bird survey shall be conducted. The biologist will conduct a survey in the Specific Plan Area for all special-status birds protected by the federal and state ESA, MBTA and CFGC. The biologist shall map all nests that are within, and visible from, the Specific Plan Area. If nests are identified, the biologist shall map the location and establish a minimum 300-foot buffer zone around active nests. Construction activity shall be prohibited within the buffer zones until the young have fledged. Nests shall be monitored at least twice per week during the nesting season and a report submitted to the City and*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		CDFW monthly.	
Impact 3.2-4: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Fish	LS	*None required.*	--
Impact 3.2-5: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Mammals	PS	***Mitigation Measure 3.2-6:*** *Grading and/or building permits and plans issued for development in the project area shall note the following: Fifteen days prior to construction activities within 200 feet of the residential complexes located along Natividad Road and San Juan Grade Road, the project applicant shall retain a qualified biologist familiar with bat biology to perform a preconstruction survey for roosting special-status bats; and shall be submitted to the City. The survey shall include a minimum of one daytime and one evening survey. The survey shall cover the trees, structures, and debris located within these complexes. If active roosting is observed, removal of the tree or building shall be avoided until the bats can be excluded. All active non-maternity roosting sites shall be fitted with passive exclusion devices, such as one-way flaps or doors, and all bats shall be allowed to leave voluntarily. Once it is confirmed that all bats have left the roost (minimum of five days), crews shall be allowed to continue work in the area. If a maternity roosting site is discovered, a minimum 50-foot buffer shall be established around the roost. The project applicant shall consult with the qualified biologist in order to determine if a greater buffer is warranted based on the bat species, roost location, and specific construction activities to be performed in the vicinity. The buffer shall stay in effect until all young are determined to be volant (i.e., able to fly and feed independently) by a qualified biologist. Once it is determined that all young are volant (generally by August 1st), passive exclusion devices*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		shall be installed and all bats shall be allowed to leave voluntarily. Once it is determined by a qualified biologist that all bats have left the roost (minimum of five days), crews shall be allowed to work within the buffer zone. Project Improvement Plans will include this measure as a note in the plans.	
Impact 3.2-6: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS – Plants	LS	*None required.*	--
Impact 3.2-7: The proposed project has the potential to have substantial adverse effect on federally - or state- protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	PS	***Mitigation Measure 3.2-7****: Prior to grading/building permit issuance in an area that would disturb the irrigation ditches and/or roadside ditches, the project applicant shall obtain a jurisdictional determination from the USACE and CDFW for the ditches that are proposed to be disturbed. If these regulatory agencies concur that these facilities are exempt, then no further mitigation is necessary. If it is determined that these facilities are not exempt, authorization for fill from the regulatory agencies (USACE-404 permit, RWQCB-401 certification, 1600 Streambed Alteration Agreement) will be necessary and a permit shall be adhered to throughout the construction phase. At a minimum, the project applicant shall replace on a "no net loss" basis (minimum 1:1 ratio) the acreage and function of all wetlands and other waters that would be removed, lost, or degraded as a result of project implementation or operations, although a higher mitigation measure may be required by the USACE, RWQCB, and CDFW through their permitting processes. Wetland habitat shall be replaced at acreage and location agreeable to the USACE, RWQCB, and CDFW and as determined during the Section 401, 404, and 1600 permitting processes.*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.2-8: The proposed project has the potential to have substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	LS	*None required.*	--
Impact 3.2-9: The proposed project has the potential to interfere substantially with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites	PS	*None feasible.*	SU
Impact 3.2-10: The proposed project has the potential to conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan	LS	*None required.*	--
Impact 3.2-11: The proposed project has the potential to conflict with local policies or ordinances protecting biological resources	LS	*None required.*	--
Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species	PS	*None feasible.*	CC and SU
CULTURAL AND TRIBAL RESOURCES			
Impact 3.3-1: Project implementation may cause a substantial adverse change in the significance of a historical resource as defined	PS	***Mitigation Measure 3.3-1:*** *In the event that evidence of archaeological or historical features or deposits (e.g., ceramic shard, trash scatters, lithic scatters) are uncovered (discovered) during excavation and/or grading, all work shall stop in the area of the subject property until an appropriate data recovery program can be developed and*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
in CEQA Guidelines §15064.5		*implemented by a qualified archaeologist. This archaeologist shall determine whether the uncovered deposits or features qualify as either "historical resources" within the meaning of CEQA Guidelines section 15064.5, subdivision (a), "unique archaeological resources" as defined in Public Resources Code section 21083.2, subdivision (g), or "tribal cultural resources," as defined in Public Resources Code section 21074. If historical resources, unique archaeological resources, or tribal cultural resources are present, the project proponent shall preserve any such resources or implement any feasible mitigation measures identified by the archaeologist and imposed by the City. Recommended mitigation measures shall be reviewed by the City Planner and shall be approved if feasible in light of project design, logistics, and cost considerations and, if approved, shall be implemented and completed prior to commencing further work for which grading or building permits were issued, unless otherwise directed by the City Planner. Data recovery shall be an option if preservation in place is infeasible. Where resources have been determined to be "unique archaeological resources" but not "historical resources" or "tribal cultural resources," the project proponent's obligations shall be limited as set forth in Public Resources Code section 21083.2, subdivisions (d), (e), and (f). Grading/building permits and plans shall note this measure.*	
Impact 3.3-2: Project implementation may cause a substantial adverse change in the significance of archaeological resource pursuant to CEQA Guidelines §15064.5	PS	*Implement Mitigation Measure 3.3-1*	LS
Impact 3.3-3: Project implementation may directly or indirectly destroy a unique paleontological resource	PS	***Mitigation Measure 3.3-2**: If paleontological resources are discovered during the course of construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Salinas shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. If the paleontological resource is considered significant, it should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where the resource could be curated and displayed for public education purposes. Grading/ building permits and plans shall note this measure.*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.3-4: Project implementation may disturb human remains, including those interred outside of formal cemeteries	PS	***Mitigation Measure 3.3-3****: If human remains are found during construction within the Specific Plan Area, or at off-site infrastructure improvement locations, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until a qualified archeological monitor and the coroner of Monterey County are contacted. If it is determined that the remains are Native American, the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if:* *a) the Native American Heritage Commission is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission;* *b) the descendent identified fails to make a recommendation; or* *c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.* *Grading permit/building permits and plans shall note this measure.*	LS
Impact 3.3-5: The project may contribute to cumulative impacts on known and undiscovered cultural resources	LCC	*None required.*	--

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Environmental Impact	*Level of Significance Without Mitigation*	*Mitigation Measure*	*Resulting Level of Significance*
Greenhouse Gases, Climate Change, and Energy			
Impact 3.4-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	PS	***Mitigation Measure 3.4-1****: Prior to the approval of the tentative maps and development review permits, as applicable, pursuant to CEQA Guidelines section 15183.5(b), Plans for the Reduction of Greenhouse Gas Emissions, the project applicant shall prepare a Greenhouse Gas Reduction Plan (GGRP) aimed at achieving specific performance standards. The GGRP shall include the following:* *1) The GGRP shall achieve a per capita operational emissions level of 1.94 MT CO_2e/service population/year by year 2035, and 0.80 MT CO_2e/service population/year by year 2050.* *2) Calculation of GHG emissions projection using an acceptable modeling tool such as the most recent version of CalEEMod.* *GHG reduction measures may include building and site energy reduction measures, measures to reduce project-generated vehicle miles traveled, or other measures. Off-site measures such as participation in a community-wide GHG reduction program(s), if any are adopted, or payment of GHG reduction fees (carbon offsets) into a qualified existing program, if one is in place, may be considered after all feasible on-site reduction measures are considered. The effectiveness of the GHG reduction measures included in the GGRP must be verifiable based on evidence presented in the GGRP. Representative GHG reduction measures which may be considered may include, but are not limited to:* • *Measures identified by the California Air Pollution Control Officers' Association in Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures or updates to this document as may occur from time to time.* • *Applicable measures identified in guidance from MBARD, if any, and/or in guidance provided by other regional air districts such as the Bay Area Air Quality Management District, Sacramento Metropolitan Air Quality Management District, San Luis Obispo County Air Pollution Control District, or*	SU

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		other agencies with adopted GHG reduction guidance that is applicable on the date the project application is deemed complete by the City. *If sufficient feasible GHG reduction measures are unavailable to reduce GHG emissions to below the threshold of significance, the project applicant shall include evidence in the GGRP to this effect. The GGRP shall be subject to review and approval of the City of Salinas Community Development Department prior to approval of the tentative map or development review application, as applicable.* *Implementation of this mitigation measure shall not be required if the City has a qualified GHG reduction plan in place on the date a future individual project application is deemed complete, the qualified GHG reduction plan reflects the most recent legislatively-adopted GHG reduction targets (e.g., the 2030 target set by SB 32), includes an inventory of projected GHG emissions from development within the Plan Area, and includes GHG reduction measures applicable to development within the Plan Area whose implementation is required as a condition of approval of such projects.*	
Impact 3.4-2: Potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	PS	*Implement Mitigation Measure 3.4-1.*	LS
Impact 3.4-3: Project implementation may result in the inefficient, wasteful, or unnecessary use of energy resources	LS	*None required.*	--
Impact 3.4-4: Cumulative impact on climate change from increased project-related greenhouse gas emission	PS	*Implement Mitigation Measure 3.4-1.*	CC and SU

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
HAZARDS AND HAZARDOUS MATERIALS			
Impact 3.5-1: Potential to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment	PS	***Mitigation Measure 3.5-1***: *Prior to issuance of grading permits or building permits, (including the issuance of demolition permits for agricultural support buildings) as applicable, the applicant shall hire a qualified consultant to:* *1) Provide a final evaluation of the soils around the agricultural operations support buildings (residences, warehouses, barns, etc.) before they are demolished. If toxic levels of residual agrichemicals or surface staining are found, the contaminated soil shall be excavated and disposed of at an off-site disposal facility permitted to accept such waste. Any contaminated areas shall be remediated by the project applicant in accordance with recommendations made by the Monterey County Health Department Hazardous Materials Management Services, Regional Water Quality Control Board, Department of Toxic Substances Control, or other appropriate federal, State, or local regulatory agencies.* *2) Investigate structures for asbestos-containing materials and lead. If asbestos-containing materials and/or lead are found in the buildings, a Cal-OSHA certified ACBM and lead based paint contractor shall be retained to remove the asbestos-containing materials and lead in accordance with U.S. EPA and California Occupational Safety and Health Administration (Cal/OSHA) standards. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal/OSHA asbestos and lead worker construction standards. Any ACBM and lead shall be disposed of properly at an appropriate offsite disposal facility.* ***Mitigation Measure 3.5-2****: Prior to the issuance of grading permits, existing water wells within the grading area shall be destroyed under permit from the City of Salinas and/or the Monterey County Health Department, as applicable. Any destruction of these facilities shall be in accordance with the Monterey County Well Standards* for *Abandonment/Destruction. The project applicant shall provide the City of Salinas with a copy of the permit and a report or other information documenting the appropriate*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		destruction of these facilities. ***Mitigation Measure 3.5-3:*** *Prior to the issuance of building permits, water wells serving the proposed building shall be constructed and tested for water quality under permit from the Monterey County Health Department. The project applicant shall provide the City of Salinas with a copy of the permit and a report or other information documenting the appropriate construction and operation of these facilities.*	
Impact 3.5-2: Create a significant hazard to school sites due to siting or the placement of infrastructure	PS	***Mitigation Measure 3.5-4:*** *The property line of all school sites (even if it is a joint use agreement as described in subsection (o) of § 14010) shall be at least the following distance from the edge of respective power line easements as identified in the California Code of Regulations Title 5, Article 2. School Sites § 14010. Standards for School Site Selection (c).* • *100 feet for power lines that are between 50 and 133 kV.*	LS
Impact 3.5-3: Cumulative impact related to hazards and hazardous materials	LCC	None required.	--
HYDROLOGY AND WATER QUALITY			
Impact 3.6-1: The proposed project has the potential to violate water quality standards or waste discharge requirements during construction	PS	***Mitigation Measure 3.6-1:*** *Prior to issuance of grading permits, the project proponent shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the City of Salinas prior to submitting to the RWQCB to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ). The SWPPP shall be designed with Best Management Practices (BMPs) that the RWQCB has deemed to be effective at reducing erosion, controlling sediment, and managing runoff. These include: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Sediment control BMPs, installing silt fences or placing straw wattles below slopes, installing berms and other temporary run-on and runoff diversions. These BMPs are only examples of what should be considered and shall not preclude the use of equally or more effective new or innovative approaches currently available or being developed. Final*	LS

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		selection of BMPs will be subject to approval by City of Salinas. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.	
Impact 3.6-2: The proposed project has the potential to violate water quality standards or waste discharge requirements during operation	PS	***Mitigation Measure 3.6-2:*** *Prior to the approval of site improvement plans, the project applicant shall submit to the Salinas Public Works Department a Stormwater Control Plan detailing plans and calculations for water quality best management practices (BMPs) and water quality detention/retention basins designed to meet the applicable regulatory requirements and to reduce contaminant loadings to receiving waters to the maximum extent practicable.* *The Improvement Plans shall be consistent with the City's NPDES permit requirements at the time of permitting. The NPDES permit granted to the City of Salinas by the Central Coast RWQCB (CCRWQCB, 2012) requires the following:* *I. Erosion and Sediment Control BMPs – Erosion control and sediment control BMPs shall be designed, installed, and maintained to reduce the discharge of pollutants from construction sites to the maximum extent practical (MEP) and protect water quality;* *II. Erosion and sediment from slopes and channels shall be controlled by implementing an effective combination of erosion control (source control) and other sediment control BMPs; and* *III. Soil Stabilization – Stabilization of disturbed areas shall, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased.* *Additionally, the Improvement Plans shall be consistent with the requirements of the City's Stormwater Development Standards for New and Redevelopment Projects. The City of Salinas Stormwater Standards for New and Redevelopment Projects (City of Salinas, 2013) require the following practices:* *I. Limit disturbance of creeks and natural drainage features and provide setbacks according to the City's latest NPDES permit;*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		II. Minimize compaction of highly permeable soils; and *III. Limit clearing and grading of native vegetation to the minimum needed to build the project and provide fire protection.* ***Mitigation Measure 3.6-3:*** *Prior to the approval of site improvement plans, the project applicant shall submit to the Salinas Public Works Department a Stormwater Control Plan detailing plans and calculations for water quality best management practices (BMPs) and water quality detention basins designed to prevent to the maximum extent practicable the creation of new sources of polluted runoff. The detailed plans and calculations shall be subject to review and approval by the Salinas Public Works Department.* ***Mitigation Measure 3.6-4:*** *Prior to the approval of site improvement plans, the project applicant shall submit to the Salinas Public Works Department detailed plans and calculations for supplemental retention and peak flow control. BMPs will be designed to meet regulatory requirements and to reduce peak flows during storm events below peak flows under pre-project conditions. The detailed plans and calculations shall be subject to review and approval by the Salinas Public Works Department.*	
Impact 3.6-3: The proposed project has the potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge	PS	***Mitigation Measure 3.6-5:*** *Prior to the approval of site improvement plans, the project applicant shall site, and design and include an Operation and Maintenance Plan for stormwater retention/infiltration basins and infiltration promoting BMPs sufficient to assure that there is no reduction in groundwater recharge. In order to assure there is no reduction in recharge, the plan shall result in circumstances which maintain infiltration to support baseflow and interflow to wetlands and surface waters, and deep vertical infiltration to groundwater. The site, design, and installation shall be consistent with the requirements of the City's Stormwater Development Standards for New and Redevelopment Projects. The contents of the site, design, and installation shall be included in a stormwater control plan. The stormwater control plan shall be reflected on the Improvement Plans, subject to review and approval by the Salinas Public Works Department.* ***Mitigation Measure 3.6-6:*** *Prior to the approval of site improvement plans, the project applicant shall site, design, and include an Operation and Maintenance Plan for post-*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		construction BMPs and supplemental stormwater detention basins in accordance with City of Salinas stormwater development standards. Maintenance procedures (including frequency of procedure, cleaning schedules, applicant responsibility for each procedure, performance standards, or other means) and funding mechanisms shall be established for those facilities to assure adequate long-term performance and success in treating the water and controlling infiltration into the groundwater. The Improvement Plans and Operation and Maintenance Plan shall be subject to review and approval by the Salinas Public Works Department.	
Impact 3.6-4: The proposed project has the potential to alter the existing drainage pattern in a manner which would result in substantial erosion, siltation, flooding, or polluted runoff	LS	*None required.*	--
Impact 3.6-5: The proposed project has the potential to otherwise substantially degrade water quality	LS	*None required.*	--
Impact 3.6-6: Place housing or structures that would impede/redirect flows within a 100-year, or 200-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map	LS	*None required.*	--
Impact 3.6-7: The proposed project has the potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, seiche, tsunami, or mudflow	LS	*None required.*	--

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Impact 3.6-8: Cumulative increases in peak stormwater runoff from the plan area	LCC	*None required.*	--
Impact 3.6-9: Cumulative impacts related to degradation of water quality	LCC	*None required.*	--
Impact 3.6-10: Cumulative impacts related to degradation of groundwater supply or recharge	LCC	*None required.*	--
Impact 3.6-11: Cumulative impacts related to flooding	LCC	*None required.*	--
NOISE			
Impact 3.7-1: The proposed project has the potential to increase traffic noise levels at existing receptors	PS	*None feasible.*	SU
Impact 3.7-2: The proposed project has the potential to increase noise levels associated with construction activities	PS	***Mitigation Measure 3.7-1:*** *Prior to the approval of site improvement plans and respective permits, plans shall note that construction activities shall adhere to the requirements of the City of Salinas Municipal Code with respect to hours of operation.* ***Mitigation Measure 3.7-2:*** *Prior to the approval of site improvement plans and respective permits, plans shall note that all equipment shall be fitted with factory equipped mufflers and in good working order. All stationary noise generating equipment (i.e. generators) shall be located at least 300 feet from a sensitive receptor. All construction staging areas shall be located at least 300 feet from a sensitive receptor.*	LS
Impact 3.7-3: The proposed project has the potential to increase noise vibration association with construction activities	LS	*None required.*	--

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Impact 3.7-4: The proposed project has the potential to expose new sensitive receptors to excessive transportation noise	PS	***Mitigation Measure 3.7-3:*** *Prior to the approval of site improvement plans and respective permits, the plans shall note the location, design and constructions details of the eight-foot to nine-foot tall sound attenuation walls and/or landscaped berm/wall combinations, as applicable, that will be constructed along the primary Plan Area roadways, adjacent to proposed residential dwellings, in order to achieve the City's exterior noise standards. At the City's discretion, wall heights which achieve the City's conditionally acceptable 60-70 dB L_{dn} noise standard may be allowed. See the Draft EIR Table 3.7-14 for specific noise barrier/wall heights along each roadway. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, stucco or manufactured materials (with a density of four pounds per square foot or greater), earthen landscaped berms, or any combination of these materials as determined appropriate by the City of Salinas. The design/appearance of the wall is subject to the design approval by the City of Salinas based upon the standards contained in the West Area Specific Plan and the Salinas Zoning Code, as applicable to ensure that it is visually pleasing. Wood is not permitted due to eventual warping and degradation of acoustical performance. The walls shall not have gaps or penetrations which allow sound to flank through or around the walls. Small gaps which may occur using materials such as "keystone" blocks shall be avoided. Additionally, in accordance with Section 5-03.19 of the City's Municipal Code, best management practices shall be incorporated into the sound wall design in order to control graffiti and/or mitigate the potential impacts of graffiti. These graffiti prevention best management practices may include, without limitation:* *(1) The use or the installation and maintenance of ant-graffiti materials and surface treatments approved by the City on likely graffiti-attracting surfaces.* *(2) Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces.* *(3) Installation and maintenance of lighting to protect likely graffiti-attracting surfaces.* *(4) Immediate removal of graffiti by appropriate means within seventy-two hours.*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		(5) Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). *(6) Authorizing right of access by city employees or contract agents to remove graffiti if not removed within specified time periods.* *(7) Supplying the city at its request with paint (of the appropriate color and type), cleaning agents, and/or other materials acceptable to the city to abate or to deter graffiti.* *(8) Other requirements, as deemed reasonably feasible by the city planner, to deter, to protect or to reduce the potential for graffiti defacement.* ***Mitigation Measure 3.7-4:*** *Prior to the approval of building permits, the first row of residential dwellings located along E. Boronda Road and Natividad Road shall include windows having a Sound Transmission Class (STC) 35, or higher, rating installed in second floor facades and rooms that have windows or doors that face E. Boronda Road and/or Natividad Road. Exterior walls shall also require 3-coat stucco and RC-channels. The exterior wall specifications would specifically apply to the first row of homes and does not apply to facades facing away from the roadway. These requirements shall be included in the building plans for the specific dwelling units and noted on the building permits. A detailed analysis of any additional interior mitigation measures shall be conducted when building plans are available and prior to building permit issuance to verify these requirements. These requirements shall also be noted in the site improvement plans prior to approval by the City.* ***Mitigation Measure 3.7-5:*** *Prior to the approval of building permits, mechanical ventilation shall be required in the first row of all residential dwellings that face E. Boronda Road and/or Natividad Road, sufficient to allow residents, as desired for acoustical isolation, to keep their doors and windows closed and still maintain acceptable interior temperature and noise levels. This requirement shall be included in the building plans for the specific dwelling units and noted on the building permits. This requirement shall also*	

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		be noted in the site improvement plans prior to approval by the City.	
Impact 3.7-5: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed park and school uses	PS	***Mitigation Measure 3.7-6:*** *Prior to the approval of site improvement plans, as applicable, when parks or play areas are located near residential uses, the center of active play areas, such as football fields, soccer fields or other athletic fields, shall be located at a minimum distance of 90-feet from the nearest residential property lines. Large active play areas shall comply with the 60 dB L_{eq} and 70 dB L_{max} standards, and shall include these further noise level evaluations during the design phases of future park areas.* *Parks shall be designed such that residences front, or side in limited locations where approved by the City Planner, to the park. Minimum 6-foot tall sound walls and/or landscaped berms shall be constructed where school site directly abuts a residential property line in instances where site design (i.e., minimum distances, siting of activity areas, etc.) cannot achieve the 60 dB L_{eq} and 70 dB L_{max} noise standards. No wall shall be required where residential uses are fronted towards a park or school site and separated by a roadway or a walkway.* *Noise barrier walls shall be constructed of concrete panels, concrete masonry units, stucco or manufactured materials (with a density of four pounds per square foot or greater), earthen landscaped berms, or any combination of these materials as determined appropriate by the City of Salinas. The design/appearance of walls is subject to the design approval by the City of Salinas based upon the standards contained in the West Area Specific Plan and the Salinas Zoning Code, as applicable to ensure that it is visually pleasing. Wood is not permitted due to eventual warping and degradation of acoustical performance. The walls shall not have gaps or penetrations which allow sound to flank through or around the walls. Small gaps which may occur using materials such as "keystone" blocks shall be avoided. Additionally, in accordance with Section 5-03.19 of the City's Municipal Code, best management practices shall be incorporated into the sound wall design in order to control graffiti and/or mitigate the potential impacts of graffiti (see mitigation 3.7.3 for further discussion of best management practices.)*	LS
Impact 3.7-6: The proposed project has the potential to expose sensitive receptors to	PS	***Mitigation Measure 3.7-7:*** *Prior to the approval of development review permits, the plans shall demonstrate: where commercial, business professional, office, or similar uses abut*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
substantial noise from proposed commercial mixed-uses		*residential uses or where loading docks or truck circulation routes face residential areas, the following measures shall be included in the project design:* • *All HVAC equipment shall be located within mechanical rooms where possible or shielded from view with solid or grated barriers;* • *Emergency generators shall comply with the City's noise criteria at the nearest noise-sensitive receivers;* • *Delivery/loading activities shall comply with the Salinas Zoning Code standards and regulations; and* • *The applicant shall submit a noise study to verify that the appropriate noise control measures have been incorporated into the project design and will achieve compliance with the City's noise level standards.*	
Impact 3.7-7: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed well sites	PS	***Mitigation Measure 3.7-8:*** *The potential well and treatment plant sites are shown in the Specific Plan. The actual well and treatment plant facilities are subject to the approval of a Conditional Use Permit (CUP) by the City pursuant to the requirements of the Salinas Zoning Code and the West Area Specific Plan. The potential well and treatment plant sites and the CUP requirement for said facilities shall be clearly noted on the site improvement plans.* *Prior to approval of the CUP and subsequent issuance of the building permits for the well and treatment plant facilities, the plans shall demonstrate that the following measures shall be included in the project design:* • *The well and treatment facilities have been designed and will be built to not exceed a noise level of 55 dB L_{eq} at the nearest residential or school property line during normal operation of the facilities;* • *The generators shall not be permitted to exceed the City's daytime noise standard of 60 dB L_{eq};* • *The generators shall be tested only during daytime hours; and* • *Additionally, that the well and treatment facilities/sites have been designed (in accordance with the West Area Specific Plan) to incorporate decorative screen walls, landscaping and other features to ensure compatibility with surrounding*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		land uses.	
Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development	PS	*None feasible.*	CC and SU
POPULATION AND HOUSING			
Impact 3.8-1: The proposed Project has the potential to induce substantial population growth in an area	LS	*None required.*	--
Impact 3.8-2: Cumulative impact on the potential to induce substantial population growth in an area	LCC	*None required.*	--
PUBLIC SERVICES			
Impact 3.9-1: The proposed project may require the construction of fire department facilities which may cause substantial adverse physical environmental impacts	PS	***Mitigation Measure 3.9-1:*** *Prior to the issuance of a Certificate of Occupancy for each dwelling unit (and prior to issuance of building permits for non-residential uses), the applicant shall pay all applicable project impact fees per the impact fee schedule.*	LS
Impact 3.9-2: The proposed project may result in, or have the potential to require the construction of police department facilities which may cause substantial adverse physical environmental impacts	LS	*None required.*	--
Impact 3.9-3: Project implementation may result in the need for the construction of new schools, which has the potential to cause	PS	***Mitigation Measure 3.9-2:*** *Prior to the issuance of building permits for each dwelling unit, the applicant shall pay applicable school fees mandated by SB 50 to the Salinas Union High School District (SUHSD), and Santa Rita Union School District (SRUSD) and provide*	SU

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
substantial adverse physical environmental impacts		*documentation of said payment to the City.*	
Impact 3.9-4: Project implementation may result in effects on parks, or has the potential to require the construction of park facilities which may cause substantial adverse physical environmental impacts	PS	*See Impact 3.9-4 in Section 3.9 for more information.*	SU
Impact 3.9-5: Project implementation may result in effects on other public facilities	LS	*None required.*	--
Impact 3.9-6: Under cumulative conditions the proposed project may result in effects on public facilities	PS	*None required.*	CC and SU
TRANSPORTATION AND CIRCULATION			
Impact 3.10-1: Under Existing Plus Project conditions, implementation of the proposed Specific Plan would conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans	PS	***Mitigation Measure 3.10-1****: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the installation of a traffic signal at San Juan Grade Road/Van Buren Avenue, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans for each stage of project development shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-2****: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the optimization of the existing signal timing at San Juan Grade Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		final improvement plans shall note this improvement and the fair-share funding requirement. ***Mitigation Measure 3.10-3**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the signalization of the intersection at Hemingway Drive/East Boronda Road or equivalent traffic control (such as a roundabout), in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-4**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the optimization of existing signal timings at North Main Street/Laurel Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-5**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the widening of the intersection at Natividad Road/East Laurel Drive to add additional northbound and southbound through lanes, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-6**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the installation of a traffic signal or equivalent traffic control (such as a roundabout) at the intersection of North Sanborn Road/East Boronda Road, in proportion to the area planned for development by such*	

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement. ***Mitigation Measure 3.10-7****: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the optimization of existing signal timings and to add an eastbound left turn pocket at the intersection of Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. This mitigation includes the addition of an eastbound left turn pocket and optimization of the existing signal timing to better accommodate the expected changes in traffic distribution and volume with implementation of the proposed project. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-8****: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the addition a southbound left turn lane and optimization of the traffic signal's timing at the intersection of Salinas Street/North Main Street/West Market Street/East Market Street, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share requirement.* ***Mitigation Measure 3.10-9****: Each project applicant for development within the Specific Plan Area shall contribute its fair-share funding to the Transportation Agency for Monterey County (TAMC) Regional Development Impact Fee (RDIF) Program and the City of Salinas' Traffic Impact Fee (TIF) Program, as determined by the TAMC and the City of Salinas, respectively, in proportion to the area planned for development by each project applicant. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate the proposed project's impact to the U.S. 101*	

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		ramp junctions affected by the proposed project (i.e. the Northbound Road Off-Ramp and Northbound West Laurel Drive Off-Ramp). Fees are payable prior to issuance of a Certificate of Occupancy for residential and prior to building permit issuance for non-residential development.	
Impact 3.10-2: Under Existing Plus Project and Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans	PS	***Mitigation Measure 3.10-10****: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding to optimize the existing traffic signal timing and splits at intersection of North Main Street/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-11****: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding to convert the eastbound right turn lane to a shared through-right turn lane at Natividad Road/East Laurel Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-12****: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding for addition of an eastbound right turn pocket at the intersection of North Sanborn Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-13****: Each project applicant for development within the Specific*	LS

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		Plan Area shall provide its fair-share of funding for the installation of a traffic signal at the intersection of Williams Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement. ***Mitigation Measure 3.10-14****: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding to optimize the existing traffic signal timing and splits at the South Sanborn/North Sanborn/John Street intersection, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*	
Impact 3.10-3: Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans	PS	***Mitigation Measure 3.10-15****: Each project applicant for development within the Specific Plan Area shall contribute its fair-share of funding to the TAMC Regional Development Impact Fee provides mitigation for this impact identified as the installation of a traffic signal at intersection of U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road. Regional fees shall be determined by the City of Salinas in consultation with TAMC. Fees are payable prior to issuance of a Certificate of Occupancy for residential and prior to building permit issuance for non-residential development.* ***Mitigation Measure 3.10-16****: Each project applicant for development within the Specific Plan Area shall contribute its fair-share of the TAMC Regional Development Impact Fee to provide mitigation for this impact identified as the installation of a traffic signal at intersection of U.S. 101 Northbound Ramps/Crazy Horse Canyon Road. Total fees shall be determined by the City of Salinas in consultation with TAMC. Fees are payable prior to issuance of a Certificate of Occupancy for residential and prior to building permit issuance for non-residential development.*	CC and SU

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		Mitigation Measure 3.10-17*: Prior to the approval of final improvement plans for each tentative map, each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at intersection of Crazy Horse Canyon Road/San Juan Grade Road, in proportion to the area planned for development by such project applicant. Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-18****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at intersection of Natividad Road/Rogge Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-19****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at intersection of Natividad Road/Russell Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-20****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of southbound and westbound left turn lanes at the intersection of North Main Street/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement*	

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		and the fair-share funding requirement. ***Mitigation Measure 3.10-21****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a southbound left turn lane at the intersection of Constitution Boulevard/East Laurel Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-22****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at the intersection of Old Stage Road/Williams Road/Private Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-23****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a northbound through lane, the addition of a northbound right turn overlap phase, and the conversion of the westbound through lane to a westbound shared through-left turn lane at the intersection of North Main Street/East Bernal Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note these improvements and the fair-share funding requirement.* ***Mitigation Measure 3.10-24****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a northbound and*	

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		southbound through lanes at the intersection of Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement. ***Mitigation Measure 3.10-25****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a westbound left turn lane at the intersection of South Davis Road/Blanco Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-26****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of an eastbound left turn lane and a southbound left turn lane at the intersection of Salinas Street/North Main Street/West Market Street/East Market Street, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-27****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a northbound left turn lane at the intersection of South Main Street/West Blanco Road/East Blanco Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement*	

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		and the fair-share funding requirement. ***Mitigation Measure 3.10-28****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a northbound left turn lane at the intersection of South Main Street/West Blanco Road/East Blanco Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*	
Impact 3.10-4: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans	PS	***Mitigation Measure 3.10-29****: Prior to the approval of final improvement plans for each tentative map, each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at intersection of Old Stage Road/Hebert Road, in proportion to the area planned for development by such project applicant. Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-30****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of northbound and southbound through lanes on Natividad Road and for the conversion of the existing eastbound right turn lane on East Laurel Drive to a shared through-right turn lane, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-31****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of eastbound and southbound left turn lanes at Constitution Boulevard/East Laurel Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to*	CC and SU

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement. ***Mitigation Measure 3.10-32****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a westbound left turn lane at the intersection of North Sanborn Road/Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-33****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of an eastbound left turn lane at Williams Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.* ***Mitigation Measure 3.10-34****: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a southbound left turn lane at the intersection of East Front Street/Sherwood Drive/Market Street, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*	
Impact 3.10-5: Implementation of the proposed Specific Plan would not result in	LS	*None required.*	--

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ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
changes to air traffic patterns			
Impact 3.10-6: Implementation of the proposed Specific Plan would not substantially increase hazards due to a design feature	LS	*None required.*	--
Impact 3.10-7: Implementation of the proposed Specific Plan would not result in impacts related to emergency access	LS	*None required.*	--
Impact 3.10-8: Implementation of the proposed Specific Plan would not conflict with adopted multi-modal circulation policies, plans, or programs, and would not decrease the performance or safety of public transit, bicycle, or pedestrian facilities	LS	*None required.*	--
UTILITIES			
Impact 3.11-1: The proposed project has the potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board	LS	*None required.*	--
Impact 3.11-2: The proposed project has the potential to result in a determination by the wastewater treatment and/or collection provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	LS	*None required.*	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.11-3: The proposed project has the potential to require or result in the construction of new wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LS	*None required.*	--
Impact 3.11-4: Cumulative impact on wastewater utilities (Less than Significant and Less than Cumulatively Considerable)	LCC	*None required.*	--
Impact 3.11-5: The proposed project has the potential to require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LS	*None required.*	--
Impact 3.11-6: The proposed project has the potential to have insufficient water supplies available to serve the project from existing entitlements and resources	LS	*None required.*	--
Impact 3.11-7: Cumulative Impact on Water Utilities	LCC	*None required.*	--
Impact 3.11-8: The proposed project has the potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LS	*None required.*	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.11-9: Cumulative Impact on Stormwater Facilities	LCC	*None required.*	--
Impact 3.11-10: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and comply with federal, State, and local statutes and regulations related to solid waste	LS	*None required.*	--
Impact 3.11-11: Cumulative Impact on Solid Waste Facilities	LCC	*None required.*	--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

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CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

This section summarizes the purpose of the Environmental Impact Report (EIR) for the West Area Specific Plan "project" or "proposed project." The following discussion addresses the environmental procedures that are to be followed according to State law, the intended uses of the EIR, the project's relationship to the City's General Plan, the EIR scope and organization, and a summary of the agency and public comments received during the public review period for the Notice of Preparation (NOP).

1.1 PURPOSE AND INTENDED USES OF THE EIR

The City of Salinas, as lead agency, determined that the proposed Specific Plan is a "project" within the definition of the California Environmental Quality Act (CEQA). CEQA requires the preparation of an environmental impact report prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development. CEQA further requires public agencies to balance a variety of public objectives, including economic, environmental, and social factors in making a decision to approve a development project with significant and unavoidable environmental impacts.

The City of Salinas, as the Lead Agency, has prepared this Draft EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from construction and operation of the Specific Plan Project. The environmental review process enables interested parties to evaluate the proposed project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used by the City to determine whether to approve, modify, or deny the proposed project and associated approvals in light of the project's environmental effects. The EIR will be used as the primary environmental document to evaluate full project development, along with all associated infrastructure improvements, and permitting actions associated with the Project. All of the actions and components of the proposed project are described in detail in Section 2.0 of this Draft EIR.

1.2 TYPE OF EIR

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a Program EIR pursuant to CEQA Guidelines Section 15168. The program-level analysis considers the broad environmental effects of the proposed project as a whole.

It is noted that the Specific Plan provides a very high level of design detail for certain components of the project. To the extent that sufficient detail is available in the Specific Plan, a full project-level analysis is provided in this EIR. Examples of a full project level analysis would include topics that are related to the physical acreage affected (i.e. the project footprint), as opposed to the number of units, land uses/zoning, or other design parameters. Topics such as Biological Resources, Cultural Resources, and Hydrology/Water Quality are analyzed at a project-level analysis in this EIR given that these are physical environmental resources, and the area of impact is fully defined. Additionally, the Specific Plan includes a substantial level of detailed information that allows for a project-level analysis of topics such as Air Quality, Greenhouse Gases and Climate Change, Noise, Population and Housing, Transportation and Circulation, and Utilities. The analysis for these topics is driven by the number of units and square footage of development, which is detailed in the land use design and development projections. In some cases, there may be specific commercial uses that have design details developed at a later date that cannot reasonably be analyzed at a project-level at this time. Additionally, the design of the school facilities and other public facilities are not known at this time, so they are not able to be analyzed at a project-level.

This EIR examines the planning, construction and operation of the project. The program-level approach, with some project-level analysis, is appropriate for the proposed project because it allows comprehensive consideration of the reasonably anticipated scope of the development plan; however, as discussed above, not all design aspects of the future development phases are known at this stage in the planning process. Subsequent individual development that requires further discretionary approvals will be examined in light of this EIR to determine whether additional environmental documentation must be prepared.

CEQA Guidelines Section 15168 states that a program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

1) Geographically,
2) As logical parts in the chain of contemplated actions,
3) In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program, or
4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

According to CEQA Guidelines section 15168, subdivision (c)(5), "[a] program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible." Later environmental documents (EIRs, mitigated

negative declarations, or negative declarations) can incorporate by reference materials from the program EIR regarding regional influences, secondary impacts, cumulative impacts, broad alternatives, and other factors (CEQA Guidelines Section 15168[d][2]). These later documents need only focus on new impacts that have not been considered before (CEQA Guidelines Section 15168[d][3]).

Section 15168(c), entitled "Use with Later Activities," provides, in pertinent part, as follows:

> Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared:
>
> (1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.
> (2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activities as being within the scope of the project covered by the program EIR, and no new environmental document would be required.
> (3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.
> (4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.

Here, the City anticipates preparing a written checklist or similar device whenever landowners within the Specific Plan area submit applications for site-specific approvals (i.e. tentative maps, conditional use permits, or other discretionary entitlements). The checklist would serve in part as a consistency checklist to determine if the application for site specific approval is consistent with the General Plan, Specific Plan, Conditions of Approval, and Mitigation Measures, and it would also include a review of the project details relative to what was anticipated and analyzed in the program EIR (i.e. are there new environmental effects that were not covered by the program EIR). The City's expectation, at least at present, is that the checklist will conclude that most, or all, components of the Specific Plan can be developed with no new analysis of environmental effects given that there is a high level of resolution with regard to the project details that have been analysis in this program EIR. In some cases, however, a site-specific application (i.e. commercial use) may have specific issues associated with the project, or business, that this program EIR could not anticipate given the information that was available at this time. In those situations, the detailed site-specific information from that application could have site-specific effects not wholly anticipated in this EIR and would require some additional environmental review. (See also CEQA Guidelines section 15063, subd. (b)(1)(C).)

Future site-specific approvals may also be narrowed pursuant to the rules for tiering set forth in CEQA Guidelines Section 15152. "'[T]iering is a process by which agencies can adopt programs, plans, policies, or ordinances with EIRs focusing on 'the big picture,' and can then use streamlined

CEQA review for individual projects that are consistent with such…[first tier decisions] and are…consistent with local agencies' governing general plans and zoning.'" (*Koster v. County of San Joaquin* (1996) 47 Cal.App.4th 29, 36.) Section 15152 provides that, where a first-tier EIR has "adequately addressed" the subject of cumulative impacts, such impacts need not be revisited in second- and third-tier documents. Furthermore, second- and third-tier documents may limit the examination of impacts to those that "were not examined as significant effects" in the prior EIR or "[a]re susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means." In general, significant environmental effects have been "adequately addressed" if the lead agency determines that:

a) they have been mitigated or avoided as a result of the prior environmental impact report and findings adopted in connection with that prior environmental impact report; or
b) they have been examined at a sufficient level of detail in the prior environmental impact report to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.

Here, as noted above, the City anticipates preparing a written checklist or similar device whenever landowners within the Specific Plan area submit applications for site-specific approvals (i.e. tentative maps, conditional use permits, or other discretionary entitlements). The checklist would serve in part as a consistency checklist to determine if the application for site specific approval is consistent with the General Plan, Specific Plan, Conditions of Approval, and Mitigation Measures, and it would also include a review of the project details relative to what was anticipated and analyzed in the program EIR (i.e. have all significant environmental impacts identified been "adequately addressed" in the program EIR). Thus, if a new analysis is required for these site-specific actions, it would focus on impacts that cannot be "avoided or mitigated" by mitigation measures that either (i) were adopted in connection with the Specific Plan or (ii) were formulated based on information in this EIR.

In addition, because the EIR addresses the effects of rezoning the land within the proposed Specific Plan area, future environmental review can also be streamlined pursuant to Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183. These provisions, which are similar but not identical to the tiering provisions, generally limit the scope of necessary environmental review for site-specific approvals following the preparation of an EIR for a "zoning action." For such site-specific approvals, CEQA generally applies only to impacts that are "peculiar to the parcel or to the project" and have not been previously disclosed, except where "substantial new information" shows that previously identified impacts would be more significant than previously assumed. Notably, impacts are considered not to be "peculiar to the parcel or to the project" if they can be substantially mitigated pursuant to previously adopted, uniformly applied development policies or standards. As noted above, the City anticipates that, in assessing the extent to which the Specific Plan EIR has previously addressed significant impacts that might occur with individual projects, the City may conclude that in some instances (e.g., with respect to agricultural resources, cultural resources, geology, soils, and paleontological resources), no further analysis beyond that found in the program EIR will be necessary.

Finally, for purely residential projects consistent with the Specific Plan, the City intends to preserve its ability to treat such projects as exempt from CEQA pursuant to Government Code section 65457. Subdivision (a) of that statute provides that "[a]ny residential development project, including any subdivision, or any zoning change that is undertaken to implement and is consistent with a specific plan for which an [EIR] has been certified after January 1, 1980, is exempt from the requirements of [CEQA]." The statutes go on to say, moreover, that "if after adoption of the specific plan, an event as specified in Section 21166 of the Public Resources Code occurs, the exemption provided by this subdivision does not apply unless and until a supplemental [EIR] for the specific plan is prepared and certified in accordance with the provisions of [CEQA]. After a supplemental [EIR] is certified, the exemption … applies to projects undertaken pursuant to the specific plan." (See also CEQA Guidelines section 15182.)

When purely residential projects are proposed, the City will consider whether they qualify for this exemption or whether the West Area Specific Plan EIR must be updated through a supplement to this EIR or a subsequent EIR as required by Public Resources Code section 21166 and CEQA Guidelines sections 15162 and 15163.

1.3 RESPONSIBLE AND TRUSTEE AGENCIES

As required by CEQA, this EIR defines lead, responsible, and trustee agencies. The City of Salinas is the "Lead Agency" for the project because it holds principal responsibility for approving the project. The term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the project or an aspect of the project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California. CEQA Guidelines Section 15386 recognizes four particular trustee agencies: (a) the California Department of Fish and Wildlife with regard to the fish and wildlife of the State, to designated rare or endangered native plants, and to game refuges, ecological reserves, and other areas administered by the department; (b) the State Lands Commission with regard to State owned "sovereign" lands such as the beds of navigable waters and State school lands; (c) the State Department of Parks and Recreation with regard to units of the State Park System; and (d) The University of California with regard to sites within the Natural Land and Water Reserves System.

The following agencies are considered Responsible Agencies for this project, and may be required to issue permits or approve certain aspects of the proposed project:

- California Department of Fish and Wildlife – Lake and Streambed Alteration Agreement (1600 permit);
- Cal Water – Approval of SB 610 Water Supply Assessment, Approval to serve the Plan Area;
- Central Coast Region - Regional Water Quality Control Board – Clean Water Act Section 401 Water Quality Certification, National Pollution Discharge Elimination System (NPDES) general construction permit;

- Comcast/AT&T/SBC/Other – Approval to serve the Plan Area, approval of telecommunications utility plans, Encroachment Permits;
- Johnson Canyon Landfill – Approval to serve the Plan Area.
- Monterey Bay Air Resources District – Authority to Construct; Demolition permit;
- Monterey Bay Community Power – Approval to serve the Plan Area;
- Monterey One Water – Approval to serve the Plan Area, Encroachment Permit;
- Monterey County Health Department - Well demolition permit; Well construction permit;
- Monterey County Water Resources Agency – Approval to serve the Plan Area, Encroachment Permit;
- Monterey-Salinas Transit – Approval to serve the Plan Area, approval of bus stop locations and design;
- Pacific Gas and Electric Company (PG&E) – Approval to serve Plan Area, approval of relocation plans, approval of electric and gas utility plans, Encroachment Permit;
- Salinas Valley Solid Waste Authority – Approval to serve the Plan Area; and
- Santa Rita Union School District – Approval of site for the construction of two new elementary schools and one middle school.

The California Department of Fish and Wildlife will also function as a trustee agency with respect to the proposed project. The City is unaware of any other trustee agency, as the proposed project would not affect any State owned "sovereign" lands, any units of the State Park System, or any sites within the University of California's Natural Land and Water Reserves System.

The project will also require a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE). As a federal agency not subject to California law, USACE, strictly speaking, is neither a responsible agency nor a trustee agency. Instead, as a federal agency, it is subject to the National Environmental Policy Act (NEPA) rather than CEQA.

1.4 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION

The City circulated a Notice of Preparation (NOP) of an EIR for the proposed project on October 14, 2015 to responsible and trustee agencies, the State Clearinghouse, and the public. A public scoping meeting was held on October 29, 2015 at 6:30 p.m., at McKinnon Elementary School in Salinas to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and responses to the NOP by interested parties are presented in **Appendix A** of this EIR.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. Upon completion of the Draft EIR, the City has filed the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period.

PUBLIC NOTICE/PUBLIC REVIEW

The City has provided a public notice of availability for the Draft EIR, and invites comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA, the review period for this Draft EIR is forty-five (45) days. Public comment on the Draft EIR or questions regarding the Draft EIR should be addressed to:

Jill Miller, Senior Planner
City of Salinas
Community Development Department
65 West Alisal Street Salinas, CA 93901
jill.miller@ci.salinas.ca.us

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to significant environmental issues raised either in written comments received during the public review period or in oral comments received at a public hearing during such review period.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

CEQA Guidelines Section 15090 requires lead agencies to certify the final EIR prior to approving a project. The lead agency decisionmaking body shall certify that (i) the final EIR has been completed in compliance with CEQA; (ii) that the final EIR was presented to the decision-making body, which reviewed and considered the information contained in the final EIR prior to approving the project; and (iii) that the final EIR reflects the lead agency's independent judgment and analysis.

For the proposed project, the City Council City shall be the City's ultimate decisionmaking body. The Council will therefore review and consider the Final EIR and make a determination regarding whether the document is "adequate and complete." In general, a Final EIR meets this standard if:

1) The EIR shows a good faith effort at full disclosure of environmental information; and

2) The EIR provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of environmental considerations.

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines and recent court decisions, which provide the standard of adequacy on which this document is based. The Guidelines state as follows:

> *"An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."*

Following review and consideration of the Final EIR, the City may take action to approve, modify, or reject the project. As part of project approval, the City also is also required to adopt a Mitigation Monitoring and Reporting Program, as described below, prepared in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097. This Mitigation Monitoring and Reporting Program must include all of the mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment, and would be designed to ensure that these measures are actually carried out during project implementation.

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include or address a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Discussion of the environmental issues addressed in the Draft EIR was established through review of environmental and planning documentation developed for the project, environmental and planning documentation prepared for recent projects located within the City of Salinas, applicable local and regional planning documents, and responses to the Notice of Preparation (NOP).

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the proposed project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the project's environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the proposed project.

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, and identifies the scope and organization of the Draft EIR.

CHAPTER 2.0 – PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the proposed project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, related infrastructure improvements, and a list of related agency action requirements.

CHAPTER 3.0 - ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of each environmental topic area as identified below. Each subchapter addressing a topical area is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the project.

Impacts and Mitigation Measures. Identification of the significance criteria (also referred to as "thresholds of significance" throughout this EIR) by which the significance of impacts are determined, a description of project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact after the incorporation of proposed mitigation measures.

The following environmental topics are addressed in this chapter:

- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gases and Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Population and Housing
- Public Services
- Transportation and Circulation
- Utilities

CHAPTER 4.0 – OTHER CEQA-REQUIRED TOPICS

Chapter 4.0 evaluates and describes the CEQA required topics as follows: cumulative and significant and unavoidable environmental effects under cumulative conditions. Chapter 4.0 also evaluates and describes the CEQA required topics as follows: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, and significant and unavoidable environmental effects.

CHAPTER 5.0 - ALTERNATIVES TO THE PROJECT

State CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the project. Chapter 5.0 provides a comparative analysis between the environmental impacts of the project and the selected alternatives.

CHAPTER 6.0 - REPORT PREPARERS

This chapter lists all authors and agencies that assisted in the preparation of the EIR, by name, title, and company or agency affiliation.

CHAPTER 7.0 - REFERENCES

This chapter lists all references used in the preparation of the EIR.

APPENDICES

This section includes all notices and other procedural documents pertinent to the EIR, as well as technical material prepared to support the analysis. The EIR appendices are available in electronic format. The appendices can be viewed online at: http://www.cityofsalinas.org/our-city-services/community-development/documents-public-review.

CD copies of the appendices are also available at the City of Salinas Community Development Department 65 West Alisal Street Salinas, CA 93901.

1.6 SIGNIFICANCE CRITERIA ("THRESHOLDS")

In general, CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial" adverse change in the physical environment. A potential impact is considered significant if a project would substantially degrade the environmental quality of land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance (CEQA Guidelines §§15360, 15382).

Definitions of significance vary with the physical condition affected and the setting in which the change occurs. The CEQA Guidelines set forth physical impacts that trigger the requirement to make "mandatory findings of significance" (CEQA Guidelines §15065).

This CEQA document relies on three levels of impact significance:

1. Less-than-significant impact, for which no mitigation measures are warranted;

2. Significant impact that can be mitigated to a level that is less than significant; and,

3. Significant impact that cannot be mitigated to a level that is less than significant. Such impacts are referred to as significant and unavoidable.

Each resource area uses a distinct set of significance criteria (also referred to as "thresholds of significance" throughout the EIR). The significance criteria are identified at the beginning of the impact discussion for each resource area. These significance criteria promote consistent evaluation of impacts for all alternatives considered, even though significance criteria are necessarily different for each resource considered. When criteria for significance determinations relative to a specific environmental resource are not identified in the CEQA Guidelines, specific criteria have been developed for this Draft EIR consistent with the past pattern and practice of the City of Salinas.

1.7 CEQA GUIDELINES SECTION 15183 EXEMPTIONS

California Environmental Quality Act (CEQA) Guidelines Section 15183 allow a streamlined environmental review process for projects that are consistent with the densities established by existing zoning, community plan or general plan policies for which an Environmental Impact Report (EIR) was certified. As described in Chapter 2.0 (Project Description), the proposed project is consistent with the land uses and densities in the North of Boronda Future Growth Area (FGA) as established by the Salinas General Plan, for which an EIR was certified *[Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) and *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007)].

Under section 15183 and the statute on which it is based, Public Resources Code section 21083.3, CEQA generally applies only to the impacts that are "peculiar to the parcel or to the project" and have not been previously disclosed, except where "substantial new information" shows that previously identified impacts would be more significant than previously assumed. Notably, impacts are considered not to be "peculiar to the parcel or to the project" if they can be substantially mitigated pursuant to previously adopted, uniformly applied development policies or standards. Moreover, lead agencies need not revisit impacts previously addressed as significant effects in the prior EIR. As is discussed in Section 1.8 below, the City has determined that, in light of the extensive coverage of particular topics in the General Plan EIR, this EIR need not revisit particular environmental topics.

It is noted that the Specific Plan provides a very high level of design detail for certain components of the project. To the extent that sufficient detail is available in the Specific Plan, a full project-level analysis is provided in this EIR. Examples of a full project level analysis would include topics that are related to the physical acreage affected (i.e. the project footprint), as opposed to the number of units, land uses/zoning, or other design parameters. Topics such as Biological Resources, Cultural Resources, and Hydrology/Water Quality are analyzed at a project-level analysis in this EIR given that these are physical environmental resources, and the area of impact is fully defined. Additionally, the Specific Plan includes a substantial level of detailed information that allows for a

project-level analysis of topics including Air Quality, Greenhouse Gases and Climate Change, Noise, Population and Housing, Transportation and Circulation, and Utilities. The analysis for these topics is driven by the number of units and square footage of development, which is detailed in the land use design and development projections. In some cases, there may be specific commercial uses that have design details developed at a later date that cannot reasonably be analyzed at a project-level at this time. Additionally, the design of the school facilities and other public facilities are not known at this time, so they cannot be analyzed at a project-level.

The provisions contained in Section 15183 of the CEQA Guidelines are presented below.

15183. PROJECTS CONSISTENT WITH A COMMUNITY PLAN OR ZONING

(a) CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.

(b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:

> *(1) Are peculiar to the project or the parcel on which the project would be located,*
>
> *(2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,*
>
> *(3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or*
>
> *(4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.*

(c) If an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, as contemplated by subdivision (e) below, then an additional EIR need not be prepared for the project solely on the basis of that impact.

(d) This section shall apply only to projects which meet the following conditions:

> *(1) The project is consistent with:*
>
> > *(A) A community plan adopted as part of a general plan,*

(B) A zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or

(C) A general plan of a local agency, and

(2) An EIR was certified by the lead agency for the zoning action, the community plan, or the general plan.

(e) This section shall limit the analysis of only those significant environmental effects for which:

(1) Each public agency with authority to mitigate any of the significant effects on the environment identified in the planning or zoning action undertakes or requires others to undertake mitigation measures specified in the EIR which the lead agency found to be feasible, and

(2) The lead agency makes a finding at a public hearing as to whether the feasible mitigation measures will be undertaken.

(f) An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the City or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need not include an EIR. Such development policies or standards need not apply throughout the entire City or county, but can apply only within the zoning district in which the project is located, or within the area subject to the community plan on which the lead agency is relying. Moreover, such policies or standards need not be part of the general plan or any community plan, but can be found within another pertinent planning document such as a zoning ordinance. Where a City or county, in previously adopting uniformly applied development policies or standards for imposition on future projects, failed to make a finding as to whether such policies or standards would substantially mitigate the effects of future projects, the decision-making body of the City or county, prior to approving such a future project pursuant to this section, may hold a public hearing for the purpose of considering whether, as applied to the project, such standards or policies would substantially mitigate the effects of the project. Such a public hearing need only be held if the City or county decides to apply the standards or policies as permitted in this section.

(g) Examples of uniformly applied development policies or standards include, but are not limited to:

(1) Parking ordinances.

(2) Public access requirements.

(3) Grading ordinances.

(4) Hillside development ordinances.

(5) Flood plain ordinances.

(6) Habitat protection or conservation ordinances.

(7) View protection ordinances.

(8) Requirements for reducing greenhouse gas emissions, as set forth in adopted land use plans, policies, or regulations.

(h) An environmental effect shall not be considered peculiar to the project or parcel solely because no uniformly applied development policy or standard is applicable to it.

(i) Where the prior EIR relied upon by the lead agency was prepared for a general plan or community plan that meets the requirements of this section, any rezoning action consistent with the general plan or community plan shall be treated as a project subject to this section.

(1) "Community plan" is defined as a part of the general plan of a City or county which applies to a defined geographic portion of the total area included in the general plan, includes or references each of the mandatory elements specified in Section 65302 of the Government Code, and contains specific development policies and implementation measures which will apply those policies to each involved parcel.

(2) For purposes of this section, "consistent" means that the density of the proposed project is the same or less than the standard expressed for the involved parcel in the general plan, community plan or zoning action for which an EIR has been certified, and that the project complies with the density-related standards contained in that plan or zoning. Where the zoning ordinance refers to the general plan or community plan for its density standard, the project shall be consistent with the applicable plan.

(j) This section does not affect any requirement to analyze potentially significant offsite or cumulative impacts if those impacts were not adequately discussed in the prior EIR. If a significant offsite or cumulative impact was adequately discussed in the prior EIR, then this section may be used as a basis for excluding further analysis of that offsite or cumulative impact.

1.8 TOPICS FOUND IN INITIAL STUDY TO BE LESS THAN SIGNIFICANT OR TO HAVE BEEN ADEQUATELY ADDRESSED IN THE GENERAL PLAN EIR

CEQA Guidelines Section 15128 provides that "[a]n EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study."

As noted in Section 1.7 above, moreover, CEQA Guidelines section 15183 may be used to narrow the range of impacts addressed in an EIR for a project consistent with a local general plan for which an EIR was prepared.

Included below is a brief summary of findings from the Initial Study on environmental topics that were either found to have no impact or be less than significant, or would found to be sufficiently addressed in the General Plan EIR, and thus are not included within individual sections of the Draft EIR. For full Initial Study Findings and individual topics found to be less than significant through the Initial Study process refer to the Appendix.

AESTHETICS

The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) noted that General Plan buildout would allow development to occur in the City in both vacant and underdeveloped portions of the community, and that the introduction/expansion of urban uses into these areas has the potential to interrupt views of natural features, open space, the hillsides, and agricultural resources, reducing the aesthetic value of these resources. Additionally, new development in the City was found to increase the amount of light and glare in the community, particularly in areas planned for nonresidential development, such as retail and general commercial. It was also found that future development under the General Plan has the potential to change the visual character of the City.

To minimize and mitigate the impacts on aesthetics, the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) presented the following five mitigation measures: Mitigation Measure A1 requires the City to implement the City's Gateway Guidelines; Mitigation Measure A2 requires the City to strengthen and require compliance with the City's Design Guidelines; Mitigation Measure A3 requires the City to improve the Lighting Ordinance; Mitigation Measure A4 requires the City to implement landscaping requirements for all proposed projects; and Mitigation Measure A5 requires the City to review all discretionary projects for aesthetics impacts. The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) concluded that with the implementation of Mitigation Measures A1 through A5, the potential citywide aesthetics impact would be reduced to a **less than significant** level.

Subsequently, the *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007) indicated that aesthetic impacts associated with the FGAs, which includes the West Area Specific Plan, would not be different from those discussed in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002). Any future development under the approved General Plan, which includes all development under the proposed project, would be required to comply with the above referenced regulations, policies, and standards. Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed in the in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) and *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

AGRICULTURE AND FOREST RESOURCES

The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) noted that General Plan buildout would result in the conversion of 3,525 acres of agriculture lands

to urban uses. The *Final Environmental Impact Report,* also indicates that General Plan buildout would result in agricultural activity in proximity to residential and other urban uses, which may result in conflicts between the uses. It is noted that agricultural activity can cause nuisances related to air quality and noise that may disturb surrounding development. Urban activities may also negatively affect nearby agricultural uses, as increased vandalism often occurs and the introduction of domestic animals may disturb certain agricultural activities.

The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) concluded that with the implementation of Mitigation Measures AG1 through AG4, the impacts on potential compatibility issues would be reduced to a **less than significant** level; however, while the impacts on agricultural conversion would be reduced to the extent feasible, a **significant and unavoidable** impact would remain related to the loss of important farmland. Mitigation AG5 specifically addressed Agricultural Land Conservation Easement Program, which states that the City will work with the County of Monterey and other local jurisdictions to create and implement an agricultural land conservation easement program, including such measures as securing the dedication of easements or by paying a mitigation fee that could be used to purchase easements through a mitigation bank. Additionally, in 2006, the City Council adopted Resolution No. 19422, approving the Agricultural Land Preservation Program. The resolution adopted a $750.00 per acre mitigation fee for agricultural lands currently designated by the California Department of Conservation's Farmland Mapping Program as "Prime" or "of Statewide Importance."

The City of Salinas certified the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002), adopted a statement of overriding considerations relative to this significant and unavoidable impact, and approved the Salinas General Plan.

Subsequently, the *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007) indicated that agricultural impacts associated with the FGAs, which includes the Specific Plan, would not be different from those discussed in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002).

Any future development under the approved General Plan, which includes all development under the proposed project, would be required to comply with the above-referenced regulations, policies, and standards. Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) and *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

GEOLOGY AND SOILS

Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed in the Final Environmental Impact Report, Salinas General Plan (Cotton Bridges Associates 2002) and Final Supplemental for the Salinas General Plan Final Program EIR (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

HAZARDS AND HAZARDOUS MATERIALS

While the Draft EIR analyzes Hazards and Hazardous Materials, several topics were determined to not warrant additional analysis within the Chapter.

The land uses proposed within the Specific Plan Area would not be expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Additionally, these uses are not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Furthermore, the proposed project is not located in the vicinity of an airport or private airstrip; therefore, it would not result in a safety hazard related to air traffic for people residing or working in the Specific Plan Area. These topics do not warrant additional analysis and will not be addressed further in the EIR.

Separately, the City has adopted a Multi-hazard Emergency Plan, which serves as extensions of the California Emergency Plan and the Emergency Resource Management Plan. The purpose of the Multi-hazard Emergency Plan is to respond to emergency situations with a coordinated system of emergency service providers and facilities. The Emergency Operations Center (EOC) in City Hall serves as the center of the City's emergency operations. The Plan also addresses evacuation and movement of people in the event of an emergency. The proposed project does not impair implementation of or physically interfere with the Multi-hazard Emergency Plan. Implementation of the proposed project would have a less than significant impact relative to this environmental topic and will not be further analyzed or addressed further in the EIR.

Lastly, the proposed project is not located in an area that is considered a high risk for wildfires. The proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. Implementation of the proposed project would have a less than significant impact relative to this environmental topic and will not be further analyzed or addressed further in the EIR.

LAND USE AND PLANNING

The *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002) concluded that with the impacts would be reduced to a **less than significant** level with mitigation.

Subsequently, the *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007) indicated that impacts associated with the FGAs, which include the Specific Plan Area, would not be different from those discussed in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002).

The City certified the Final Supplemental EIR and approved annexation of the North of Boronda FGA, which includes the West Area Specific Plan. The project, as proposed, is consistent with the Greater Salinas Area Memorandum of Understanding (GSA-MOU). All development under the proposed project would be required to comply with the regulations, policies, and standards identifies in the *Final Environmental Impact Report, Salinas General Plan* (Cotton Bridges Associates 2002), and *Final Supplemental for the Salinas General Plan Final Program EIR*

(EDAW/AECOM 2007). Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed within these supporting documents. This topic does not warrant additional analysis and will not be addressed further in the EIR.

MINERAL RESOURCES

It was determined in the *Final Supplemental for the Salinas General Plan Final Program EIR* (EDAW/AECOM 2007) that development of the FGA, including the Specific Plan Area, would not have a significant impact on mineral resources or mining activities. As such, implementation of the proposed project would have no impact on mineral resources and this topic does not warrant additional analysis and will not be addressed further in the EIR.

POPULATION AND HOUSING

While the Draft EIR analyzes Population and Housing, several topics were determined to not warrant additional analysis within the Chapter.

The Final Environmental Impact Report, Salinas General Plan (Cotton Bridges Associates 2002) noted that the General Plan would not result in the displacement of substantial numbers of existing housing units or persons since the majority of the FGA designated for future development consist of vacant, agricultural, or redevelopment of nonresidential land. Additionally, any individual units that require removal would be offset by the increase in housing by the development of approximately 18,397 additional dwelling units at General Plan buildout.

The proposed project would necessitate the removal of some existing houses within the Specific Plan Area; however, removal of any individual units would be offset by the increase in housing by the development of approximately 4,340 additional dwelling units at Specific Plan buildout. As such, the proposed project would not displace substantial numbers of existing housing or people. Implementation of the proposed project would not result in any new significant adverse impacts beyond those addressed in the in the Final Environmental Impact Report, Salinas General Plan (Cotton Bridges Associates 2002) and Final Supplemental for the Salinas General Plan Final Program EIR (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

RECREATION

While the proposed project would increase the demand for parks and other recreational facilities based on the population growth, the amount of parkland and open space provided within the Specific Plan Area sufficiently meets the City's parkland requirements. Construction of the parks would not result in any new significant adverse impacts beyond those addressed in the Final Environmental Impact Report, Salinas General Plan (Cotton Bridges Associates 2002) and Final Supplemental for the Salinas General Plan Final Program EIR (EDAW/AECOM 2007). This topic does not warrant additional analysis and will not be addressed further in the EIR.

TRANSPORTATION AND CIRCULATION

While the Draft EIR analyzes Traffic and Circulation, several topics were determined to not warrant additional analysis within the Chapter.

The proposed project is not located in the vicinity of an airport or airstrip; therefore, it would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. Implementation of the proposed project would have no impact relative to this environmental topic.

1.9 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received nine written comment letters on the NOP for the proposed project Draft EIR. A copy of each letter is provided in **Appendix A** of this Draft EIR. A public scoping meeting was held on October 29, 2015 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR.

1. Northern Salinas Valley Mosquito Abetment District (October 21, 2015)
2. California Department of Transportation (October 28, 2015)
3. Monterey-Salinas Transit (November 16, 2015)
4. Monterey County Resource Management Agency (November 16, 2015)
5. California Natural Resource Agency Division of Land Resource Protection (November 10, 2015)
6. Salinas Union High School District (November 10, 2015)
7. Ohlone/Costanoan-Esselen Nation (January 11, 2016)
8. Santa Rita Union School District (January 29, 2016)
9. Transportation Agency of Monterey County (March 31, 2016)

1.10 AREAS OF CONTROVERSY

The following are topics of public concern or potential controversy that have become known to the City staff based on public input, known regional issues, and staff observations:

- Conversion of undeveloped land to urban use
- Traffic congestion
- Noise associated with project operations and traffic
- Project impact on public services and facilities, including schools
- Project contribution to global climate change/greenhouse gas emissions
- Project impact on cultural resources
- Project impact on regional stormwater

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2.1 PROJECT LOCATION AND SETTING

REGIONAL LOCATION AND SETTING

The City of Salinas is located in northern Monterey County, within the Salinas Valley between the Gabilan and Santa Lucia mountain ranges. Salinas is situated approximately 20 miles northeast of the City of Monterey, 60 miles south of San Jose, 100 miles south of San Francisco and 325 miles north of Los Angeles. Figure 2-1 displays the proposed project regional location. Several regional transportation routes are located within or near Salinas, including U.S. Highway 101 (U.S. 101), State Routes 68 (SR 68) and 183 (SR 183), the Union Pacific Railroad line and the Monterey Regional Airport in Monterey. Salinas Municipal Airport, a general aviation facility, is located in the southeastern portion of the city.

The Specific Plan Area is located within the incorporated boundary of the City of Salinas. It is bounded by San Juan Grade Road on the west, East Boronda Road (also referred to as "Boronda Road") on the south, Natividad Road on the east, and Rogge Road and the future extension of Russell Road on the north. Gabilan Creek is located east of the Specific Plan Area, while U.S. 101 and North Main Street are located to the west. Figure 2-2 displays the proposed project's vicinity. Unincorporated land under the jurisdiction of the County of Monterey abuts the Specific Plan Area on the north and northeast. The City and County General Plan land use designations for the surrounding areas are illustrated in Figure 2-3. Figure 2-4 displays the APNs and their acreages within the Specific Plan Area.

SPECIFIC PLAN AREA PHYSICAL CHARACTERISTICS

The topography of the Specific Plan Area is nearly flat, with little change in elevation. The overall slope from northeast to southwest is approximately 0.3%, and there are no natural streams or water bodies present. Predicted flood conditions in the vicinity of the Specific Plan Area are shown on FEMA FIRM panels 06053C0207G, 06053C0209G, 06053C0228G, and 06053C0226GG. Delineated flood zones are limited to a small area designated as shaded Zone X immediately east of San Juan Grade Road and south of Norman Way (in the northwest corner of the Specific Plan Area). Flood conditions in this area are classified as shaded Zone X ("Other Flooded Areas"), which are limited to flooding of less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. The parts of the Specific Plan Area outside of the shaded Zone X are designated unshaded Zone X - minimal flood hazard, and would not be expected to have a flood hazard up to the level of the 500-year event. Lands designated as unshaded Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

Although this area is currently being farmed, it also contains limited development. Most agricultural activity on-site and in the immediate vicinity has consisted of cultivation of various types of row crops. Figure 2-5 provides and aerial view of the Specific Plan Area. The site has been heavily disturbed for years from agricultural practices. None of the parcels have Williamson Act

contracts or other encumbrances protecting agricultural activities. According to maps produced by the State of California Farmland Mapping and Monitoring Program (FMMP), the site is considered prime farmland, or farmland of statewide importance. The loss of farmland has been previously addressed as part of the Environmental Impact Report for the Salinas General Plan and findings of overriding considerations were adopted by the City Council. The Specific Plan Area is not within an adopted Habitat Conservation Plan or other Natural Community Conservation Plan.

Existing urban development consists of McKinnon Elementary School, which is part of the Santa Rita Union School District. The school provides education to students in the north Salinas area from kindergarten to 5th grade. McKinnon Elementary School is located in the southwestern portion of the Specific Plan Area, near the intersection of East Boronda Road and McKinnon Street. A few residences and farm structures are clustered within the eastern portion of the area, adjacent to Natividad Road. Other residences with accessory farm structures are located in the northern portion, adjacent to Rogge Road, and in the western portion near the intersection of San Juan Grade Road and Boronda Road. This Salinas Union High School District approved a new high school facility located in the northern portion of the Specific Plan Area adjacent to Rogge Road. The site is approximately 38 acres and it has already been acquired by the Salinas Union High School District. The high school, which includes sports fields, a stadium and parking areas, would serve students both within and outside of the Specific Plan Area. The facility is currently under construction and is moving forward (separate from the West Area Specific Plan).

In addition, there is evidence of structures or development that formerly existed. Close to Natividad Road is an area of bare ground that could have served as a location for activities associated with agricultural operations. Along San Juan Grade Road in the western portion is an area of bare ground with some trees along its northern edge. This was likely at one time the location of a residence that no longer exists.

Existing infrastructure is currently located along Boronda Road including water, sewer, electricity (12kV underground primary line), storm drainage and dry utilities. PG&E also operates a 60-kV overhead power line transmission (easement) which runs generally in a north/south direction through the site. Monterey-Salinas Transit (MST) currently provides transit access to the site from existing bus stops located along Boronda Road.

Ambient noise levels are currently low with exception of those areas immediately adjacent to the surrounding arterial roadways. Additionally, there is intermittent noise associated with farming operations.

There is dust generated by farming activities such as tilling, and emissions associated with farming activities such as tractors and other motorized farming equipment at the site. The area is located in a nonattainment area for ozone and PM_{10} within the North Central Coast Air Basin.

SURROUNDING LAND USES

North: The Bolsa Knolls residential area is located to the north of the Plan Area on the northeastern corner of the intersection of Russell Road and San Juan Grade Road. Scattered residences and other non-residential uses are also located along Rogge Road to the north. Further to the north is a mix of agricultural land, rural residences, and the Club at Crazy Horse Ranch golf

course formerly known as the Salinas Golf and Country Club. Further north is the Butterfly Village planned community, County approved but not yet constructed. These land uses are all located in the unincorporated area of Monterey County.

East: Land to the east of the Specific Plan Area is currently used primarily for agricultural production and is zoned New Urbanism Interim (NI) with a Specific Plan Overlay. This area is located in the North of Boronda Future Growth Area (FGA) and a specific plan (referred to as the Central Area Specific Plan) has been submitted to the City and is currently being processed for this area. The Central Area Specific Plan proposes a mix of urban land uses, similar to those proposed for the West Area Specific Plan. The area northeast of the West Area Specific Plan is located in the County and is currently used for agricultural production.

South: Across East Boronda Road directly to the south, is the Harden Ranch Specific Plan Area. The portion of the Harden Ranch Specific Plan, which abuts the West Area is primarily residential. Most of the residences are of the type associated with low density residential uses, mainly single-family detached homes. However, some medium density and high density (multifamily) units are located in this area as well. These residential uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-1.8 (Residential High Density). Single-family detached homes (zoned R-L 5.5) are also located to the southeast of the Specific Plan (east of Natividad Road). Other land uses in the Harden Ranch Specific Plan Area include a commercial shopping center (Shaker Square) located at the southwest corner of Natividad Road and Boronda Road which is zoned Retail Commercial (CR) and the New Republic Elementary School (Santa Rita Union School District) which is zoned Public/Semipublic (PS). Extensive commercial development is located generally west and southwest of the Specific Plan Area, along both North Main Street and U.S. 101. This is the location of some of the major retail centers in Salinas, including the Northridge Shopping Center, Santa Rita Shopping Center and Harden Ranch Plaza. These areas are zoned Commercial Retail (CR).

West: The area directly to the west is residential consisting of low, medium and high density residential uses. These uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-2.1 (Residential High Density). Also located farther to the west is Santa Rita Elementary School (Santa Rita Union School District) which is zoned Public/Semipublic (PS). The Gateway Center Specific Plan is located at the northeast corner of San Juan Grade Road and E. Boronda Road.

The City and County General Plan land use designations for the above areas are illustrated on Figure 2-3.

GENERAL PLAN LAND USES

In accordance with the General Plan, each Specific Plan within the FGA must specify the ultimate distribution, location and intensity of land uses in the FGA in accordance with the total development capacities provided under the General Plan for these areas. The General Plan Land Use Designations shown for land located within the FGA boundaries on the General Plan Land Use and Circulation Policy Map are provided for generally illustrative purposes, provide no land use entitlements, and are subject to adjustment and refinement as part of the Specific Plan approval process.

The General Plan Land Use Designations for the proposed West Area Specific Plan includes Mixed Use, Residential Low Density, Residential Medium Density, Residential High Density, Public/Semipublic, Open Space and Park. These designations are consistent with the existing General Plan Land Use Designations for the site. Upon approval of the Specific Plan, the location distribution and intensity of these General Plan Land Use Designations shall be in accordance with the land use plan of the proposed Specific Plan. These Designations and the proposed Zoning Districts are described below and shown on the illustrative site plan (Figure 2-6).

2.2 PROJECT GOALS AND OBJECTIVES

The underlying purpose of the proposed project is the approval and subsequent implementation of the proposed West Area Specific Plan and related entitlements. Proposed land uses in the approximate 797-acre Specific Plan Area include residential, mixed use commercial, community park, neighborhood parks, small parks, schools and open space (including supplemental storm water detention/retention basins). Implementation will involve development of the site under the New Urbanism Zoning Districts of Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Low/Medium Density Residential, Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC) as well as the Public and Semipublic (PS), Parks (P), and Open Space (OS) Zoning Districts. A Specific Plan Overlay District will also apply to each of the Zoning Districts. These Zoning Districts are further described below.

QUANTIFIABLE OBJECTIVES

The quantifiable objectives of the proposed project include the development of up to 4,340 residential dwelling units (with a minimum of 3,553 required under the General Plan), up to 571,500 square feet of commercial/mixed use building area, and up to 177 acres of public facilities (including three elementary schools, a high school, a middle school, open space (including supplemental detention/retention basins) and 11 parks.

SPECIFIC PLAN GOALS/OBJECTIVES

The Specific Plan includes goals, which are a description of desired future conditions, as a basis for policies, implementation measures, and other tools used for achieving the goals. The goals for the Specific Plan are based on the Salinas General Plan, especially as it applies to the FGA and the principles of New Urbanism developed by the City. The design principles of Crime Prevention through Environmental Design (CPTED), Health in all Policies, Smart Growth and Green building/streets are also included to promote the creation of a vibrant, healthy, walkable, safe and sustainable community. The City's National Pollutant Discharge Elimination System (NPDES) Permit, Storm Water Development Standards (SWDA) and Storm Water Standard Plans (SWSP) are also addressed in the design.

The Specific Plan goals are summarized as follows:

- Create a community with a compact form that promotes sustainable neighborhood design and is pedestrian, bicycle, and transit friendly.

- Provide a variety of land uses in easy walking distance of housing including a mixed use village, parks, and schools to reduce vehicle miles traveled.
- Provide parks and other public green space in accordance with General Plan standards that are designed to be safe and easily accessible to residents.
- Provide a variety of low density, medium density, and high density housing to provide a variety of housing options for residents at various life stages.
- Provide public services and infrastructure improvements that achieve and maintain City service standards.
- Provide an inviting tree-lined street system which incorporates traffic calming and other measures.
- Establish an interconnected sidewalk/path and open space system throughout the development which links to the greater FGA and City as a whole.
- Create a sense of place and unique identity through the use of entry treatments, landscaping, streetscapes, public art, decorative street lighting, pedestrian amenities and other elements.
- Provide for a reasonable jobs/housing balance.
- Provide opportunities for senior housing.
- Provide for a site/parcel-based post-construction Stormwater Control Measures (SCMs)/LID to the maximum extent practicable.

These Specific Plan goals functionally represent project objectives as required by CEQA Guidelines section 15124, subdivision (b).

OVERARCHING PROJECT OBJECTIVES

It is noted that there are additional project objectives that are not specifically presented in the Specific Plan, but are more overarching and are a response to, and driven by, the policy direction from the State Legislature and the Salinas City Council.

The State Legislature has declared that "*California has a housing supply and affordability crisis of historic proportions. The consequences of failing to effectively and aggressively confront this crisis are hurting millions of Californians, robbing future generations of the chance to call California home, stifling economic opportunities for workers and businesses, worsening poverty and homelessness, and undermining the state's environmental and climate objectives*." Government Code section 65589.5. The legislature notes that "*California housing has become the most expensive in the nation. The excessive cost of the state's housing supply is partially caused by activities and policies of many local governments that limit the approval of housing, increase the cost of land for housing, and require that high fees and exactions be paid by producers of housing."* The legislature further found that "*Among the consequences of those actions are discrimination against low-income and minority households, lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration*." The legislative intent of Government Code section 65589.5 is to "*significantly increase the approval and construction of new housing for all economic segments of California's communities by meaningfully and effectively curbing the capability of local*

governments to deny, reduce the density for, or render infeasible housing development projects and emergency shelters. That intent has not been fulfilled." The State Legislature established their policy direction in the statute as follows: "*It is the policy of the state that this section should be interpreted and implemented in a manner to afford the fullest possible weight to the interest of, and the approval and provision of, housing*."

The City of Salinas has recognized the need for additional housing supply for its citizens for many decades. Dating back to 1986, the City entered into the Boronda Memorandum of Understanding (MOU) with the County of Monterey to preserve the best agricultural land and to provide certain areas for future urban growth. Twenty years later, in 2006, the Greater Salinas Area MOU was adopted to preserve agricultural lands within Monterey County, and to provide future growth areas (FGSs) for Salinas. A year later, in 2007, applications for an amendment to the City's Sphere of Influence (to include the FGAs) and Pre-Zoning and Annexation (for the majority of the North of Boronda FGA consisting of approximately 2,400 acres) were submitted to the Monterey County Local Agency Formation Commission (LAFCO) for consideration. A Supplemental EIR for the Salinas General Plan Final Program EIR (SCH#2007031055) was also submitted in conjunction with the applications. The applications were approved by LAFCO on May 19, 2008. The North of Boronda FGA (which includes the West Area Specific Plan) was formally annexed to the incorporated City of Salinas on September 8, 2008 and zoned New Urbanism Interim (NI) with a Specific Plan Overlay. The West Area Specific Plan is a reflection of over twenty years of planning for new development, which is reflected by the City Council's approval of the FGA, including annexation of the land into the City limits.

The following two overarching project objectives are presented here as a response to: 1) the State Legislature's declaration of a housing crisis in California, 2) the State Legislature's policy direction for the provision of more housing, 3) the Salinas City Council's more than 30 years of planning for urban development within the FGAs, which includes the West Area Specific Plan, and 4) the Salinas City Council's policy direction as provided in the approved FGAs and General Plan:

- Objective 1: Respond to the State Legislature's declaration of a housing crisis in California, and their policy direction that local governmental agencies provide more housing, by including provisions for the construction of new housing supply within the West Area Specific Plan.
- Objective 2: Respond to the Salinas City Council's long-term vision and policy direction for new urban development to be focused in the Future Growth Areas, by including provisions the construction of new urban development consistent with the City of Salinas General Plan.

2.3 PROJECT DESCRIPTION

INTRODUCTION

The proposed West Area Specific Plan (hereinafter also referred to as Specific Plan will establish the land use planning and regulatory guidance, including the land use and zoning designations and policies, development regulations and design standards, for the approximately 797-acre Specific

Plan Area. The Specific Plan will serve as a bridge between the Salinas General Plan and individual development applications in the Specific Plan Area, applying—and adding greater specificity to—the goals, policies and concepts of the General Plan for that area. The Specific Plan provides a complete blueprint for development of the Specific Plan Area, including:

- A description of proposed land uses,
- Policies, regulations and standards to support the Specific Plan,
- Infrastructure needed to support the Specific Plan, and
- Implementation and administrative processes needed for plan development.

The Specific Plan has been crafted to be consistent with overall community goals as expressed in the General Plan, as well as more specific policies and implementation measures contained in other documents. The City of Salinas Zoning Code requirements will apply to development applications and property within the Specific Plan Area unless specifically superseded by the development regulations or design standards contained in the Specific Plan.

The Specific Plan will establish the overall land use concept and development framework for the West Area. The specific planning process involves analyses of the following: planning, environmental, financial, and engineering. The process also includes public comment and contribution; developing a document that will guide the future development of the Specific Plan Area; and subsequent implementation measures recommended by the Specific Plan. The contents of the Specific Plan reflect the physical characteristics of the Specific Plan Area, as well as the City's goals for land use change in general and for the Specific Plan Area in particular. The Specific Plan establishes and/or identifies:

- The context for the Specific Plan by describing New Urbanism and other design principles, purpose, relationship to and conformance with the General Plan policies, the preparation process, and the content of the Plan.
- The proposed land use plan, General Plan Land Use and Zoning Designations, development intensities, and organization of land uses used to meet the objectives of the Specific Plan.
- The use classifications and development regulations to implement the land uses contained in the Specific Plan which will create a New Urbanism style community.
- The standards that guide design and planning of residential and mixed-use commercial development, as well as parks and other amenities.
- The location and classification of roadways and the circulation infrastructure needed to link the Specific Plan Area to the vicinity road network.
- Public services and provides a framework for expansion of infrastructure systems.
- The plans for low impact development features and supplemental storm water collection system that are being incorporated into the project to comply with the City's National Pollutant Discharge Elimination System (NPDES) Permit, Storm Water Development Standards (SWDS) and Storm Water Standard Plans (SWSP).
- The proposed financing plan, project phasing, public facility cost summaries, and funding sources.

- The project review process, actions, and approvals needed to implement and amend the Specific Plan.

BACKGROUND

SPHERE OF INFLUENCE AMENDMENT, PRE-ZONING AND ANNEXATION

In 1986, the City entered into the Boronda Memorandum of Understanding (BMOU) with the County of Monterey. The intent of the MOU was to preserve the best agricultural land located to the south and west of Salinas, and to provide certain areas for future urban growth. This future growth was to be predominantly in a northeasterly direction, between San Juan Grade Road to the northwest and Williams Road to the southeast.

In 2006, the Boronda MOU was replaced by the Greater Salinas Area MOU adopted jointly by the City Council and County Board of Supervisors. The intent of the GSA-MOU was to preserve agricultural lands within Monterey County, provide future growth areas for Salinas and provide adequate financing for services and facilities for the City and the County's Greater Salinas Area Plan area. Subsequent to the adoption of the GSA-MOU, the City of Salinas began the process of amending its Sphere of Influence to include the Future Growth Areas (FGAs), which are located generally to the north and east of the City. The portion of the FGA which is located generally north of Boronda Road, west of Williams Road, east of San Juan Grade Road and south of Rogge Road and the future extension of Russell Road is referred to as the North of Boronda FGA. As previously noted, in December 2007, applications for an amendment to the City's Sphere of Influence (to include the FGAs) and Pre-Zoning and Annexation (for the majority of the North of Boronda FGA consisting of approximately 2,400 acres) were submitted to the Monterey County Local Agency Formation Commission (LAFCO) for consideration. A Supplemental EIR for the Salinas General Plan Final Program EIR (SCH#2007031055) was also submitted in conjunction with the subject applications. The applications were approved by LAFCO on May 19, 2008.

The North of Boronda FGA (which includes the West Area Specific Plan) was formally annexed to the incorporated City of Salinas on September 8, 2008 and zoned New Urbanism Interim (NI) with a Specific Plan Overlay.

SPECIFIC PLAN INITIATION

Policy LU-4 of the Salinas General Plan requires the preparation of Specific Plans prior to development of any portion of the FGAs (which includes the North of Boronda FGA and the proposed West Area Specific Plan). The adoption of the West Area Specific Plan by the City is authorized by the California Government Code, Title 7, Division 1, Chapter 3, Article VIII, Section 65450 through 65457. The Specific Plan is also subject to the requirements of Article VI, Division 15: Specific Plans of the Salinas Zoning Code.

For planning purposes, the North of Boronda FGA was divided by the City into three separate proposed Specific Plan Areas – the West Area, the Central Area and East Area. Subsequently a fourth Specific Plan (consisting of approximately 20 acres) known as the Gateway Center Specific Plan (GCSP) was carved out of the proposed West Area Specific Plan to facilitate the development

of a large commercial center. The GCSP was approved by the City in 2011 and further details are provided under the heading of The Gateway Center Specific Plan, below.

These Specific Plan Areas are illustrated in Figure 2-3. To date, applications for Specific Plans have been submitted to the City for the West Area Specific Plan and the Central Area Specific Plan; no entitlement application has been submitted for the East Area Specific Plan. Infrastructure development and circulation improvements have been coordinated among the three unapproved Specific Plan Areas.

PLANNING PROCESS

A majority of the West Area Specific Plan property owners and developers have been involved with and worked in a collaborative fashion since approximately 2004 to plan the proposed Specific Plan. The General Plan identifies the level of development that would be allowable within the FGA (including the North of Boronda FGA and the West Area Specific Plan). Given this fact, the General Plan land uses, densities, goals and policies, the number of total housing units and mixed use/commercial floor areas and other factors were the starting point for the specific plan planning process.

The General Plan requires that new development in the FGA be based on New Urbanism as well as other design principles to promote walkability and the use of alternative modes of transportation, provide a variety of housing choices, ensure access to parks and open space, promote sustainability, etc. To ensure preservation of agricultural land and to achieve the other benefits of compact urban design, the General Plan mandates that new residential development have a minimum average density of 9 dwelling units per net developable residential acre and that this density not be achieved through an exclusive mix of low and high-density units. As a method of ensuring a diversity of housing choices, the General Plan further requires that 15% to 25% of the housing units fall within the density range of 16-24 units per net developable residential acre and 35% to 45% of the housing units fall within the density range of 7-14 units per net developable residential acre. These factors were also addressed in the planning of the Specific Plan.

The actual distribution of land uses within the Specific Plan is dependent on opportunities and constraints on the site and the relationship between the Specific Plan and surrounding developed and developing areas. Based on the above-stated factors, conceptual land use diagrams were prepared with the intent of implementing the General Plan within the West Area Specific Plan. More detailed maps and project description materials were then prepared to incorporate the City's direction and City staff review of the conceptual diagrams. The overall level of development in the Specific Plan has been planned to match the level and type of development for the area anticipated in the General Plan. It is intended that upon approval of the Specific Plan, the document will clearly direct all aspects of the physical development of the Specific Plan Area.

THE GATEWAY CENTER SPECIFIC PLAN

In 2011, the City of Salinas approved "The Gateway Center Specific Plan". This 20.23-acre specific plan is located at the northeast corner of Boronda Road and San Juan Grade Road. This area was originally envisioned to be part of the West Area Specific Plan but was subsequently removed and

approved as a separate Specific Plan Area. This area is not included as part of the proposed West Area Specific Plan and is shown as "Not a Part" on the figures and maps. The Gateway Center Specific Plan included approximately 207,500 square feet of commercial/retail; this square footage has been deducted from the amount of mixed use development allowed within the West Area Specific Plan. However, the GCSP has been coordinated with the West Area Specific Plan with respect to buffers, path connections, supplemental storm water detention/retention basin design, and other plan features.

LAND USE COMPONENTS

The above-noted goals, design principles and requirements are reflected in the following key features of the Specific Plan, which are summarized below:

- Four neighborhoods, each organized around a neighborhood park to provide a public gathering space for residents, and paths that connect from residential areas to these parks.
- Each neighborhood contains a mix of residential densities meeting General Plan requirements (for medium and high densities) and housing types.
- Location of parks such that all residents will be within an approximately five-minute walking time of a neighborhood or small park and ten minutes from the community park.
- A central core of public facilities and services that serve all four neighborhoods and residents of the surrounding area. The central core comprises the Village Center with retail and professional services, a community park, a middle school, a high school, and medium and high density residential uses located between these public facilities.
- A network of paths and pedestrian-friendly streets that connect all of the public facilities in the Specific Plan Area including the neighborhood centers, parks and schools. An east/west off-street pedestrian and bicycle shared-use paths will be provided along the entire length of the Specific Plan to link the West Area Specific Plan to the remainder of the North of Boronda FGA (including the proposed Central Area Specific Plan) and to other areas of the City.
- A Village Center that is easily accessible to the surrounding residential neighborhoods by local streets and pedestrian paths as well as to vehicular traffic on Boronda Road.
- The Village Center includes housing and a central green space/plaza that will be one of the primary focus points in the area and is connected by paths to the surrounding neighborhoods.
- The vehicular circulation system makes the maximum number of connections to the surrounding arterial street system consistent with safety and maintenance of the traffic-carrying capacity of these roadways while fostering the best distribution of traffic trips. Traffic calming has been provided at key intersections and other locations near parks, schools, and other areas to calm traffic and enhance pedestrian and bicycle safety.
- The vehicular circulation system also maintains connectivity through the neighborhoods and to surrounding existing and future neighborhoods.

- Decorative street lighting and pedestrian amenities have been incorporated throughout the Specific Plan Area.
- Major street thoroughfares are fronted by a variety of setbacks, natural areas, landscaping, path and pedestrian connections, and development orientation to create a parkway theme for these roadways. Driveways for individual units are prohibited along the southerly and northerly collector streets. Driveways for multifamily dwellings may be permitted in limited locations on these streets where approved by the City Planner and the City Engineer.
- LID features have been incorporated throughout the development. Site/parcel-based SCMs to the maximum extent practicable (MEP) have been included which reduce and or eliminate the need for traditional "Grey" infrastructure such as large, unattractive, industrial-looking supplemental detention/retention basins. Instead, supplemental storm water facilities, where provided or needed, will include varied slopes through grading and the use of plants and trees and other elements to create a more natural appearance in accordance with the City's Storm Water Development Standards.
- Accommodation of child-care facilities and pre-schools in a variety of Zoning Districts within walking distance of schools and homes.
- Provision of employment opportunities within the development that are accessible to residents of the Specific Plan and others within the city.
- Inclusion of Leadership in Energy and Environmental Design (LEED) measures and design principles.

The quantifiable objectives of the proposed project include the development of up to 4,340 residential dwelling units (with a minimum of 3,553 required under the General Plan), up to 571,500 square feet of commercial/mixed use building area, and up to 177 acres of public facilities (including three elementary schools, a high school, middle school, open space areas (with supplemental storm water detention/retention basins) and 11 parks. It is anticipated that the Specific Plan Area will have up to 15,928 residents at project build-out.

Tables 2-1 and 2-2 (below) summarize the net acreages of each land use, the maximum and minimum number of units, average residential density by neighborhood/district and the maximum mixed use/commercial square footage.

The Specific Plan proposes housing in a variety of densities that correspond with residential land use designations included in the General Plan as shown below. Residential development will include single-family dwellings in relatively low densities of 6 to 8 (minimum 6 du) dwelling units per net residential acre (du/nra) (Neighborhood Edge), medium density housing in the range of 9 to 15 (minimum 9) du/nra (Neighborhood General-1), and relatively high density multifamily development in the range of 16 to 24 (minimum 16) du/nra (Neighborhood General-2). The Village Center (VC) will include residential units, offices, retail, and professional services. As used in the Specific Plan "net residential acres" are the private lands zoned for residential uses exclusive of streets, parks, and all other uses." In addition, to encourage affordable housing choices, it is proposed that certain portions of the planning area surrounding the Village Center may be allowed a minimum density of 30 du/nra to a maximum density of 40 du/nra with the conversion of

commercial floor area by the New Urbanism zoning district and Salinas General Plan, as long as the required percentage of medium and high-density units meet General Plan requirements.

As previously indicated, the Specific Plan Area is currently zoned New Urbanism Interim (NI) with a Specific Plan Overlay. In conjunction with the approval of the Specific Plan, the site would be rezoned to the following Districts: The corresponding General Plan Land Use Designations are also indicated.

Proposed Zoning Districts*	**Existing General Plan Land Use Designations**
Neighborhood Edge (NE)	Residential Low Density
Neighborhood General 1 (NG-1)	Residential Medium Density
Neighborhood General 2 (NG-2)	Residential High Density
Village Center (VC)	Mixed Use
Open Space (OS)	Open Space
Park (P)	Park
Public/Semipublic (PS)	Public/Semipublic

*****A Specific Plan overlay applies to each Zoning district.

The proposed residential land uses and Zoning Districts are further described below:

Neighborhood Edge (NE)

The NE residential areas provide for the development of single-family detached as well as duplex and triplex dwellings in limited locations. The designation allows a minimum of 6.0 dwelling units per net residential acre and a maximum density of 8.0 dwelling units per net residential acre.

Neighborhood General 1 (NG-1)

The NG-1 district provides for the development of a variety of single-family detached and attached dwellings, duplex and triplex dwellings, and multifamily dwellings in limited locations. Allowable multifamily uses include condominiums, as well as apartment units. The designation allows a minimum of 9.0 dwelling units per net residential acre and a maximum of 15.0 dwelling units per net residential acre. The conversion of commercial floor area to residential units is permitted in the eastern five-acre portion of subarea 1-7.

Neighborhood General 2 (NG-2)

The NG-2 district provides for the development of small-lot single-family detached and single-family attached dwellings, duplex and triplex dwellings, and multifamily dwellings. The designation allows a minimum of 16.0 dwelling units per net residential acre and a maximum of 24.0 dwelling units per net residential acre, or up to a maximum of 40.0 dwelling units per net acre (in the sub areas surrounding the Village Center), as long as percentage of medium- and high-density units meets General Plan requirements. Projects with a minimum of 30 dwelling units per acre are considered affordable by the State of California and the City of Salinas, as indicated in the City's Housing Element.

Village Center (VC)

The Village Center is the focal point of the community and provides for higher density residential uses, mixed use buildings, stand-alone retail, office, and employment uses in an office-type building, live-work units, and public and semipublic facilities.

DESCRIPTION OF NEIGHBORHOODS

The Specific Plan proposes four residential neighborhoods, each with an identifiable public gathering place, a mix of land uses, and a mix of residential densities (Figure 2-6). The neighborhoods are each centered around a distinct neighborhood center or public gathering place. The neighborhood centers are located in easily accessible locations for both local pedestrians and the automobile circulation system. The neighborhood centers, and the Specific Plan as a whole, are designed to provide convenient and easy access for pedestrians and bicyclists, while accommodating vehicular trips.

As of the writing of this document, the neighborhoods and neighborhood subareas did not have names; therefore, they are referenced by number below.

Neighborhood 1

Neighborhood 1 is proposed in the southwestern portion of the Specific Plan Area. It is located in proximity to the existing McKinnon Elementary School, which is not proposed to be altered as a part of the Specific Plan. McKinnon Elementary School currently serves residential areas south of Boronda Road and west of San Juan Grade Road. McKinnon Elementary School, as well as the neighborhood park, would provide a central public gathering space for Neighborhood 1. The Specific Plan also proposes one small park within Neighborhood 1. This neighborhood has an estimate of 961 housing units.

Adjacent to the southwest corner of Neighborhood 1 is the GCSP. This area was subject to a separate planning process and the specific plan for that property was approved by the City of Salinas in 2011; therefore, it is not a part of the West Area Specific Plan. However, the plans for both Specific Plans are integrated in two important ways: (1) a path connects the two areas, allowing West Area Specific Plan residents to access the retail services in the GCSP by walking and bicycling; and (2) a supplemental storm water detention/water quality and retention basin, designed as part of the GCSP, is planned to be expanded to provide additional capacity to support the West Area Specific Plan development to supplement the site/parcel based LID requirements per the City Storm Water Development Standards (SWDS). Additionally, an 80-foot wide noise attenuation setback (to residential units), including a 10-foot landscaped area and park connection to San Juan Grade Road, is provided along the southern boundary of the GCSP.

Neighborhood 2

Neighborhood 2 is proposed in the northwestern portion of the Specific Plan Area. The neighborhood is focused on a linear park oriented roughly east to west. The linear park extends through the neighborhood and connects the community park in the center of the Specific Plan Area with the neighborhood park proposed in the northwestern portion of the neighborhood. This

neighborhood has an estimate of 1,328 housing units. Most of the neighborhood's medium and higher density residential areas are near the proposed linear park/community park areas. This neighborhood also includes an elementary school, a middle school, and a second small park.

Neighborhood 3

Neighborhood 3 will encompass the southeastern portion of the Specific Plan Area. The neighborhood includes an elementary school, a neighborhood park, and one small park, which together are the focal points of the neighborhood. This neighborhood has an estimate of 1,504 housing units.

Neighborhood 4

Neighborhood 4 will encompass the northeastern portion of the Specific Plan Area. The neighborhood includes a neighborhood park that is connected to the surrounding residential units and the other neighborhoods by paths and safe crossings at key intersections. The high school is located within this neighborhood. This neighborhood has an estimate of 540 housing units.

The Village Center

The proposed Village Center is the mixed use commercial and activity focus of the entire Specific Plan Area. The mix of neighborhood-serving commercial and entertainment opportunities are intended to help the Specific Plan Area to function as a mostly self-reliant community, with many necessary goods and services being available within walking or bicycling distance of residences. The mix of uses in the Village Center may include a grocery store, and a complement of shops, restaurants, residential units, offices, live-work units, retail, mixed use buildings, and professional services. On the north side of the Village Center is the town square or public plaza. The Village Center may have a development intensity of up to a 1.0 floor-area ratio (FAR) plus 10 dwelling units per net acre. Conversion of commercial floor area (a maximum of 250,000 square feet) to residential units is also permitted in accordance the General Plan and Zoning Code to increase the number of residential units. In addition to the 571,500 square feet of mixed use commercial floor area, a minimum of 91 dwelling units will also be provided. Housing over commercial is encouraged, but not required, within the Village Center, and the Village Center as currently proposed, would be surrounded by higher density housing types, such as multifamily (apartments, condominiums), single-family attached (townhomes, rowhouses) and live/work units.

Table 2-1 depicts the proposed estimated residential development program for the West Area Specific Plan. Table 2-2 depicts the proposed estimated non-residential development program for the West Area Specific Plan.

TABLE 2-1: WEST AREA SPECIFIC PLAN RESIDENTIAL DEVELOPMENT PROGRAM

	PLANNING AREA NET ACRES	AVERAGE RESIDENTIAL DENSITY (UNITS/ACRE)	PROJECTED RESIDENTIAL UNITS				TOTAL
			NE	VC	NG-1	NG-2	
Neighborhood 1	101.77	9.4	211	31	563	156	961
Neighborhood 2	154.39	8.5	471	0	415	442	1,328
Neighborhood 3	151.09	9.9	400	60	601	443	1,504
Neighborhood 4	72.30	7.5	272	0	224	44	540
Others	1.00	7.0	7	0	0	0	7
Total	**480.55**	**9.0**	**1,361**	**91**	**1,803**	**1,085**	**4,340***

*The minimum number of residential units required in the West Area is 3,553 (on approximately 385 net residential acres).

TABLE 2-2: WEST AREA SPECIFIC PLAN NON-RESIDENTIAL DEVELOPMENT PROGRAM

MIXED USE COMMERCIAL SUMMARY	
DESCRIPTION	MAXIMUM COMMERCIAL SQUARE FEET
Village Center (Cloverfield)	171,500*
Village Center (Harden)	400,000*
Total Square Feet	**571,500***
PUBLIC FACILITIES SUMMARY	
DESCRIPTION	NET ACRES
High School	38.97
Middle School	20.78
Elementary School (1)	10.98
Elementary School (2)	10.00
Elementary School (3)	10.00
Community Park	30.83
Neighborhood Parks	12.52
Small Parks	6.41
Supplemental Det./Ret. Basins	35.03
Water Wells/Water Treatment	1.5
Total Acres	**177.02**

*The Mixed Use Commercial areas (Village Center) are located on approximately 24.7 net acres.

Public Facilities Summary

Public land uses are those uses that serve the general public and are operated and maintained by public or quasi-public agencies. Land designated for public or semipublic uses such as schools, parks, open space and utility systems are crucial to the Specific Plan land use concept, and will be subject to the requirements of Article III, Division 7-Public/Semipublic (PS) District of the Salinas Zoning Code except for Parks and Open Space which are subject to the requirement of the Parks (P) and Open Space (OS) Districts, respectively or as otherwise required by the Specific Plan or

State Law. Public and semipublic land uses in the Specific Plan Area include five schools and three domestic water well sites. Parks and Open Space are further addressed below.

SCHOOLS

A total of five schools are to be located within the Specific Plan – three elementary schools, one middle school and one high school. The elementary and middle schools are located within the boundaries of the Santa Rita Union School District (a K-8th grade District). The high school is located within the boundaries of the Salinas Union High School District (a 7th to 12th grade District).

One of the three elementary schools—McKinnon Elementary School—has already been constructed in Neighborhood 1. The second elementary school is to be located on a 10.0-acre site in Neighborhood 2, while the other will be located on a 10.0-acre site in Neighborhood 3. McKinnon Elementary School currently serves residents of the Harden Ranch area south of Boronda Road and may continue to do so in the future. The two new elementary schools would be expected to serve students residing in the Specific Plan area and adjacent areas. However, attendance areas will ultimately be adopted by the Santa Rita Union School District Board of Trustees.

A site is also provided for one middle school in the West Area Specific Plan. The middle school site, approximately 20 acres in size, is proposed adjacent to and north of the community park. The middle school is expected serve students residing in the Specific Plan Area, as well as adjacent areas as determined by attendance areas which are ultimately adopted by the Santa Rita Union School District Board of Trustees.

The high school site is located in the northern portion of the Specific Plan Area adjacent to Rogge Road. The site is approximately 38 acres and it has already been acquired by the Salinas Union High School District. The District is currently constructing a new high school facility at the site. The high school, which would include sports fields, a stadium and parking areas, would serve students both within and outside of the Specific Plan Area.

WATER WELL SITES

Three domestic water well sites (including a treatment facility) are proposed within the West Area Specific Plan. The expected well site locations are denoted on Figure 2-6. These proposed facilities will be subject to the approval of a Conditional Use Permit by the City and will be subject to further environmental review and permitting from the Monterey County Health Department.

PARKS AND OPEN SPACE LAND USE

A total of 11 parks consisting of a total of 49.76 net acres of public parkland are proposed within the Specific Plan. This acreage slightly exceeds the City's Parkland (State Quimby Act) requirements of 3 acres per 1,000 persons which equates to approximately 47.78 net acres.[1] Three types of public parks are proposed: community, neighborhood, and small parks.

[1] Quimby Act requires a minimum of 3.0 acres of park per 1,000 of population. Population is calculated at 3.67 persons per dwelling unit in accordance with the Salinas General Plan and the 2000 Census.

Except as otherwise provided in the Specific Plan, the parks and open space land uses shall be subject to the requirements of Article III, Division 6 – Parks (P) and Open Space (OS) District of the Salinas Zoning Code, respectively. Further details of the proposed parks are described below:

Community Park: The approximately 30-acre community park will be the focal point of the residential neighborhoods and the entire Specific Plan and would provide a wide variety of amenities and significant open space to both residents of the community and surrounding areas. As the largest park in the North of Boronda FGA, it would contain a significant concentration of sports fields as well as passive recreational amenities. The community park would be adjacent to an approximately 10-acre open space area for periodic supplemental storm water detention and retention. This combined area of park and open space totals approximately 40 acres.

Neighborhood Parks: Four neighborhood parks, which vary from approximately 2.35 acres to 3.63 acres in size are proposed. They would serve as focal points within each of the four residential neighborhoods and would provide a variety of amenities and open space to the residents of the West Area Specific Plan and surrounding areas. Proposed features of these parks would include open space for active recreation and areas for passive recreation. Special features may be located within these parks to further enhance the character and identity of the neighborhood that each park serves.

Small Parks: Six small parks, which are 1.86 acres or less in size, and average approximately 1.1 acres, are proposed. These parks will not be characterized by large sports fields that may be found in the community park and some neighborhood parks, but they would provide passive open space and active recreation, and would include seating areas, picnic areas, sports courts, children's tot lots, playgrounds, and other amenities.

INFRASTRUCTURE, PUBLIC SERVICES, AND UTILITIES

Circulation Network

The West Area Specific Plan circulation system includes a roadway network, a pedestrian and bicycle network, and public transit. Emphasis would be placed on ensuring connectivity between uses and on creating a safe and efficient circulation system that complies with City and/or Specific Plan designs and policies. City street standards adopted for use in development of the FGA are to be the basis for street development standards in the West Area Specific Plan. However, the plan would also emphasize facilitating increased daily pedestrian trips by connecting residential neighborhoods to public facilities such as schools and parks, and to retail and employment areas. As such, the street standards for the FGA are supplemented in the Specific Plan with wide paths (sidewalks), landscaped parkways, and other pedestrian-friendly circulation features.

The circulation system is designed to link with existing City and regional systems. In this regard, three roundabouts will be constructed along Boronda Road at McKinnon, El Dorado, and Natividad Road along the frontage of the Specific Plan. A fourth roundabout will be located further east of the Plan Area, at Independence Boulevard. All of the roundabouts will be constructed as part of the Boronda Road Improvement Project (also called the East Boronda Road Widening Project).

It would also provide standards for potential connections to development in the Central Area Specific Plan located to the east of the Specific Plan Area and the extension of existing vehicular, pedestrian, and bicycle circulation systems to the south, west, and north.

Figure 2-7 depicts the proposed vehicular circulation plan for the Specific Plan.

Storm Drainage

The West Area Specific Plan storm water drainage system is required to meet a number of requirements from the City of Salinas, the County of Monterey, and the State of California. These requirements include Low Impact Development (LID) requirements, water quality treatment requirements, and hydro-modification mitigation requirements. In addition, the approach to mitigating storm water impacts will utilize site/parcel- based Post Construction Best Management Practices (PCBMPs) to the maximum extent practicable (MEP) to maximize infiltration and groundwater recharge, filter any storm water runoff to meet water quality requirements, reduce the cost of "gray" infrastructure in favor of "green" infrastructure and mitigate both the post-project peak storm water runoff rates and the post-project storm water runoff volumes, in order to not have a negative impact on any downstream facility.

The storm water conveyance and retention system would include an integrated network of open waterways and drains, underground storm drain pipes, supplemental detention/water quality and retention basins, and a wide range of PCBMPs and LID features.

Water Supply

The California Water Company (Cal Water) is a private water company that supplies water to portions of the City of Salinas. The Plan Area has been annexed into the Cal Water system by the California Public Utilities Commission (CPUC). As such, Cal Water will supply potable water to the entire West Area Specific Plan properties. Cal Water is a California Public Utilities Commission (CPUC) regulated water utility which has been providing water service in the area since 1962. A single distribution system provides services to the City of Salinas and Bolsa Knolls while small hydraulically-isolated distribution systems provide services to the other communities. In compliance with Senate Bill (SB) 610, Cal Water has prepared a SB 610 Water Supply Assessment for the West Area Specific Plan (see **Appendix G** of the Draft EIR) and has submitted a "Will Serve" letter indicating that it can provide water service to the proposed Specific Plan Area. As development of the Specific Plan occurs, existing agricultural wells will be taken out of production.

The project proposes to construct three new wells with a minimum capacity of 1.72 million gallons per day (mgd) each to meet a maximum day demand at full plan development of 2,257.6-acre feet/year (AFY) with two wells in operation and one well in reserve as a backup (this capacity greatly exceeds the projected demand of the Specific Plan of approximately 1,373 AFY, as provided in greater detail below). Well locations are chosen on the basis of water quality and potential production capabilities. According to Cal Water SB 610 Water Supply Assessment, it is expected that the proposed wells within the West Area Specific Plan have a high probability of meeting drinking water quality standards. As a hedge against possible future changes in water quality, Cal Water may make provisions for on-site treatment with the design of the wells for the West Area Specific Plan development.

The proposed on-site water distribution system is to be looped to maintain water quality and would be sized for minimum system pressures of 20 pounds per square inch (psi) at maximum day demand plus fire flow. The fire flow requirement for the West Area Specific Plan is 1,500 gallons per minute (gpm) for a minimum of two hours. Under peak day demand, the system would deliver the required flows with a minimum of 40 pounds per square inch (psi) residual pressure. The proposed system ties into Cal Water's existing system on San Juan Grade Road, Russell Road, Rogge Road, Natividad Road, and East Boronda Road. The West Area is to be served by 12-inch diameter and 16-inch diameter main trunk lines and 8-inch diameter distribution lines branching off the trunk lines and serving individual streets.

Utilizing site/parcel-based post construction BMPs to enhance storm water infiltration to the maximum extent practicable will enhance groundwater recharge and in turn, future available supply of potable water. Extensive use of native and naturalizing species is proposed where appropriate to reduce water demands and adapt well to the soil and wind conditions. The West Area Specific Plan will implement a Water Conservation program requiring the use of low-flow toilets and shower heads, demand-controlled irrigation systems, and other measures as required by the City. All landscaping and irrigation in the West Area Specific Plan would comply with the State Model Efficient Landscape Ordinance, and all other City requirements. Table 2-3 provides a total average annual water demand estimate for the proposed project. As discussed in detail in Section 3.11, conversion of the Plan Area from agricultural to urban land use could result in an estimated reduction of consumptive groundwater use (or increase in groundwater storage) of 2,078 AFY (Cal Water, 2015).

TABLE 2-3: WATER DEMAND ESTIMATE (AFY)

USE	*CALCULATION(1)*	*ACRE FEET PER YEAR*
Retail/Services	480,000 s.f. x 0.75 @ 0.3425 gal/s.f./day = 123,300 gpd	138.2
Residential	4,340 du x 3.66 persons/du x 59.2 gpcd = 940,333 gpd	1,054.1
Schools	90.73 acres @ 988 gal/acre/day = 89,641 gpd	100.5
Parks	44.8 irrigated acres @ 1.8 AFY/acre	80.6
TOTAL		**1,373.4**

SOURCE CAL WATER, 2015, PGS. 6-7

NOTE: THE TOTAL ESTIMATED AVERAGE ANNUAL WATER DEMAND ESTIMATE (1,373.4 AFY) DIFFERS SLIGHTLY FROM WHAT IS PROVIDED IN THE CAL WATER SB 610 WATER SUPPLY ASSESSMENT (WSA) (1,368 AFY), DUE TO A WSA CALCULATION ERROR.

Sanitary Sewer System

The City of Salinas is responsible for sewer collection facilities and maintenance. The Monterey One Water (M1W) provides regional wastewater conveyance, treatment, disposal, and wastewater recycling services to customers in northern Monterey County including the City of Salinas. The M1W serves the City with the Salinas Pump Station and the Salinas interceptor. Sewage trunk line conveyance, treatment, and disposal for the West Area is provided by the M1W.

The sewer collection system for the Specific Plan Area will be connected to the existing 24-inch sewer trunk line on McKinnon Street at the intersection with East Boronda Road. However, the elevation at the connection point on McKinnon Street and the lowest point of the northwest area of the Specific Plan Area are very similar, making it difficult to connect the proposed sewer

collection system for the northwest area to the existing 24-inch sewer system on McKinnon Street. Therefore, the proposed sewer collection system for the northwest area of the Specific Plan Area may need to be connected to the existing 10-inch sewer system on Van Buren Avenue near San Juan Grade Road, which is tributary to the Santa Rita Pump Station. Connection to this line will require further analysis to the affected sewer lines, and the Santa Rita Pump Station. The proposed sewer collection system for the remainder of the Specific Plan Area would connect to the aforementioned existing 24-inch sewer trunk line on McKinnon Street. The City would provide and maintain sewer collection once the West Area development is established. Except for the northwest area of the Plan Area, all the proposed sanitary sewer collection system would convey flow to the City's existing sewers by gravity without the need of any sewer pump station. Table 2-4 provides a sewer generation estimate for the proposed project.

TABLE 2-4: SEWER GENERATION ESTIMATE

USE	CALCULATION	ACRE FEET PER YEAR	AVERAGE GPD
Retail/Services	214.4 af/yr. @ 90%[(1)]	193.0	172,321
Residential	1,562.3 af/yr. @ 50%[(2)]	781.2	697,464
Schools	356.5 af/yr. @ 50%[(2)]	178.3	159,188
TOTAL		**1,152.5**	**1,028,973**

[(1)] A typical estimate for retail/services sewer demand is 90% of water demand

[(2)] A typical estimate for residential and school sewer demand is 50% of water demand. Approximately 50% of residential and school water is used for landscape irrigation.

Monterey Salinas Transit (MST)

It is anticipated that MST will continue to provide transit service to the Plan Area via bus stops located within the Specific Plan and along its perimeter. Existing bus stops along Boronda Road currently provide service to the site and are anticipated to do so in the future.

Electricity and Natural Gas

Monterey Bay Community Power (MBCP) was formed in February 2017 to provide locally-controlled, carbon-free electricity to residents and businesses in Monterey, San Benito and Santa Cruz Counties through the Community Choice Energy (CCE) model established by the State of California. PG&E customers within the Tri-County area were automatically enrolled with MBCP in 2018. MBCP provides a savings over PG&E through its rebate delivered as a credit on customer's PG&E bill. Currently available PG&E programs, such as energy efficiency programs, have continued to be accessible by MBCP customers. The primary electrical service provider for the Specific Plan Area is expected to be MBCP.

In addition, Pacific Gas and Electric Company (PG&E) also provides electrical services to the City of Salinas and will provide services if users in the Plan Area elect to opt-out of MBCP. PG&E indicates that sufficient primary line power service exists in proximity of the proposed site. A 12kV underground primary line exists along Boronda Road which will be extended into the project. PG&E also currently operates a 60kV overhead power line easement that extends through the West Area Specific Plan area.

PG&E provides natural gas service for the City and will provide gas service to the site. PG&E will need to extend their existing gas service from existing lines located on Boronda Road into the project. Table 2-5 provides an electricity demand estimate for the proposed project. Table 2-6 provides a natural gas demand estimate for the proposed project.

TABLE 2-5: ESTIMATED ELECTRICITY DEMAND

USE	USAGE FACTOR (KWY/MONTH)	PROJECT	ESTIMATED MONTHLY USAGE (KWH)
Retail/Services	1.35 kwh/sq. ft./month.[(1)]	571,500 s.f.	771,525
Residential	867 kwh/unit/month[(2)]	4,340 du	3,762,780
Schools	17,736 per acre[(3)]	90.95 acres	1,613,089
TOTAL			**6,147,394**

(1) 2012 U.S. Energy Information Administration Commercial Building Energy Consumption Survey
(2) Average annual electricity consumption per residential customer, U.S. Energy Information Administration, 2017
(3) SUHSD New High School #5 Construction, Subsequent EIR

TABLE 2-6: ESTIMATED NATURAL GAS DEMAND

USE	USAGE FACTOR (THERMS)	PROJECT	ESTIMATED MONTHLY USAGE (THERMS)
Retail/Services	0.0225/s.f./month[(1)]	571,000	12,848
Residential	40.25/unit/month[(2)]	4,340	174,685
Schools	0.0225/s.f./month[(3)]	495,000(3)	11,138
TOTAL			**198,671**

(1) 2003 U.S. Energy Information Administration, Commercial Building Energy Consumption Survey
(2) California Residential Natural Gas Consumption, California Energy Commission
(3) School Estimated square feet: 85,000 s.f. for Elementary School, 125,000 s.f. for Middle School and 200,000 s.f. for High School

Telecommunications

Extension of existing underground networks adjacent to the Specific Plan Area will be required to provide cable television, internet and telecommunication service to the site. Dark fiber conduit will be installed at a minimum along and within all arterial streets within or fronting the Specific Plan Area. All utilities will be placed underground, in public right of way, and not allowed through parks or other public properties). Additionally, conduit for fiber will be laid in the trench when appropriate, once the federal "Dig Once" policy is enforced (the federal Dig Once policy, passed on 2018, that requires fiber conduit installation during many federally funded road projects).

Solid Waste Management and Recycling

Solid waste generated within the Specific Plan Area is collected by Republic Services of Salinas and delivered to the Salinas Valley Solid Waste Authority (SVSWA) Transfer Station that then transports the collected refuse to the Johnson Canyon Landfill, which SVSWA owns and operates by contract. It is estimated that the landfill has 30 years of disposal capacity to meet the need of current jurisdiction served by the landfill. SVSWA has proposed a comprehensive approach to providing for solid waste disposal needs of its member jurisdictions for approximately 70 years, which includes increased waste division and materials recovery as well as the application of advanced technologies for processing solid waste. In addition to providing sufficient long-term capacity, the SVSWA facility improvements would increase the ability of SVSWA's member jurisdictions to

achieve their Assembly Bill (AB) 939 solid waste diversion mandates. In December, the City of Salinas provided a one-year notice of termination of its membership in SVSWA. This time will provide the City the opportunity to evaluate other potential options and to discuss services with the SVSWA. Table 2-7 provides a solid waste generation estimate for the proposed project.

TABLE 2-7: ESTIMATED SOLID WASTE GENERATION

LAND USE	GENERATION FACTOR[1]	PROJECT	ESTIMATED SOLID WASTE GENERATION (LB./DAY)
Retail/Services	6 lb./1,000 s.f./day	571,000 s.f.	3,426
Residential	10 lb./unit/day	4,340 units	43,400
Schools	0.5 lb./student/day	4,191 students	2,096
TOTAL			**48,922**

[1] Cal Recycle

PHASING

The Specific Plan Area is owned by various individuals and entities. Two of the owners are school districts, the remaining are individual private owners. All of the ownerships border one or more existing public streets that contain, or are planned to contain, most of the utility infrastructure necessary to support development. The Specific Plan is designed such that each current institutional or individual owner may develop their property independent of development by other property owners. An agreement among the property owners allows for this independent development by permitting any developing ownership to obtain from adjoining ownerships the access and easements necessary for roadways or utilities to support development of their individual property.

The public schools and public facilities will be constructed based on projections of the need for these facilities as the Specific Plan Area and surrounding area develop. The applicable school district will determine the appropriate phasing of their facilities, which is anticipated to be driven by increased demand/enrollment. Similarly, the Village Center will be constructed based on local and regional market demand for such retail and commercial services.

In general, phasing of residential development within these individual ownerships is projected to proceed from the surrounding arterial and collector streets toward the center of the Specific Plan Area. However, exceptions to this can occur for the development of a school, initiation of the community park, or development of a specific residential property. In such instances, roads and utility infrastructure would be extended into more central areas of the Specific Plan Area to serve those projects.

Each phase of the development will be graded and all erosion control measures will be required to be installed in accordance with a stormwater pollution prevention plan (SWPPP). Infrastructure improvements required for each phase will include, but are not limited to, all frontage improvements, storm drainage, sanitary sewer, water line, wet and dry utilities, and other improvements as determined by the City to serve the needs of the subject phase and/or comply with the Mitigation Monitoring and Reporting Program (MMRP). The phasing of the small and neighborhood parks and certain public improvements could also be subject to a Development Agreement.

PLAN ADOPTION AND REGULATION

The Salinas General Plan requires the approval of Specific Plans prior to development of any land in the North of Boronda FGA. The West Area Specific Plan includes certain development regulations and design standards that are intended to be specific to the Specific Plan Area. Where there is a matter or issue not specifically covered by the Specific Plan development regulations and design standards, the Salinas Zoning Code would apply. Where there is a conflict between the Specific Plan and the Zoning Code, the Specific Plan would prevail.

The Specific Plan is intended to be adopted by the City Council and to serve as a tool for the City of Salinas to implement. The Specific Plan is to be used by designers, developers, builders, and planners, to guide development of the Project Area. The land use, development standards, and design guidelines are provided to ensure that all proposed developments remain consistent with the vision established by the Specific Plan as the Project is built over time. The Specific Plan development concepts, design guidelines, and standards are in accordance with the City's General Plan, Municipal Ordinances, and City Specifications. The Specific Plan shall be used to review, process, and approve development proposals for the Project site including but not limited to site specific development applications and site improvement plans.

PROJECT ENTITLEMENTS

The City of Salinas will be the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050. Actions that would be required from the City include, but are not limited to the following:

- Certification of the Environmental Impact Report (EIR) and adoption of the Mitigation Monitoring and Reporting Program (MMRP);
- Approval of the Draft West Area Specific Plan;
- Approval of the rezoning of the Specific Plan area from New Urbanism Interim (NI) with a Specific Plan Overlay to Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Medium Density Residential), Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC), Public/Semipublic (PS), Parks (P) and Open Space (OS). A Specific Plan Overlay is also applicable to each Zoning District; and
- Approval of the Development Agreement.

The EIR analyzes the impacts of the West Area Specific Plan and the anticipated subsequent filing of maps and other development applications in the future. Therefore, the EIR analyzes the total impacts of the West Area Specific Plan, including these applications yet unfiled, so that future filings will not require separate environmental analysis, as long as development proposed does not substantially deviate from the approved Specific Plan.

2.4 USES OF THE EIR AND REQUIRED AGENCY APPROVALS

The City of Salinas will be the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of the California Environmental Quality Act (CEQA), Section 15050.

Actions that would be required from the City include, but are not limited to the following:

- Certification of the Environmental Impact Report (EIR) and adoption of the MMRP;
- Approval of the Draft West Area Specific Plan;
- Approval of the rezoning of the Specific Plan area from New Urbanism Interim (NI) with a Specific Plan Overlay to Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Medium Density Residential), Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC), Public/Semipublic (PS), Parks (P) and Open Space (OS). A Specific Plan Overlay is also applicable to each Zoning District;
- Approval of the Development Agreement;
- Subsequent Approvals: Parcel Maps, tentative maps, Final Maps, Subdivision Improvement Plans, Site Improvement Plans, Grading Permits, Building Permits, Conditional Use Permits, Business Permits, Encroachment Permits, etc.

The following agencies are considered Responsible Agencies for this project, and may be required to issue permits or approve certain aspects of the proposed project:

- California Department of Fish and Wildlife – Lake and Streambed Alteration Agreement (1600 permit);
- Cal Water – Approval of SB 610 Water Supply Assessment, Approval to serve the Plan Area;
- Central Coast Region - Regional Water Quality Control Board – Clean Water Act Section 401 Water Quality Certification, National Pollution Discharge Elimination System (NPDES) general construction permit;
- Comcast/AT&T/SBC/Other – Approval to serve the Plan Area, approval of telecommunications utility plans, Encroachment Permits;
- Johnson Canyon Landfill – Approval to serve the Plan Area;
- Monterey Bay Air Resources District – Authority to Construct; Demolition permit;
- Monterey Bay Community Power – Approval to Serve the Plan Area;
- Monterey One Water – Approval to serve the Plan Area, and Encroachment Permit;
- Monterey County Health Department - Well demolition permit, Well construction permit;
- Monterey County Water Resources Agency – Approval to serve the Plan Area, Encroachment Permit;
- Monterey-Salinas Transit – Approval to serve the Plan Area, approval of bus stop locations and design;
- Pacific Gas and Electric Company (PG&E) – Approval to serve Plan Area, approval of relocation plans, approval of electric and gas utility plans, Encroachment Permit;
- Salinas Valley Solid Waste Authority – Approval to serve the Plan Area; and
- Santa Rita Union School District – Approval of site for the construction of two new elementary schools and one middle school.

The California Department of Fish and Wildlife will also function as a trustee agency with respect to the proposed project. The City is unaware of any other trustee agency, as the proposed project would not affect any state owned "sovereign" lands, any units of the State Park System, or any sites within the University of California's Natural Land and Water Reserves System.

The project will also require a Clean Water Act Section 404 permit from the United States Army Corps of Engineers. As a federal agency not subject to California law, the Corps of Engineers, strictly speaking, is neither a responsible agency nor a trustee agency. Instead, as a federal agency, it is subject to the National Environmental Policy Act (NEPA) rather than CEQA.

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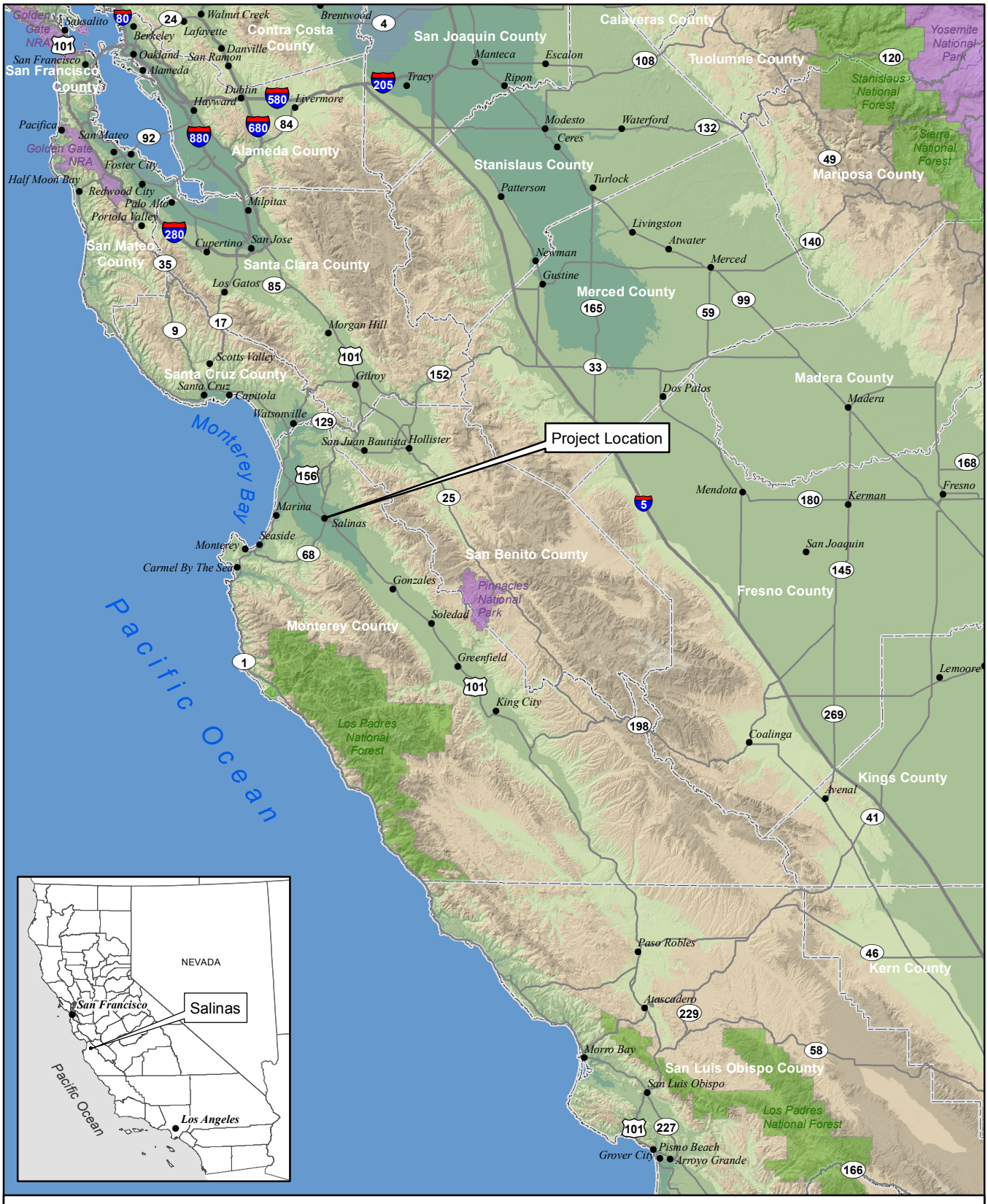

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-1: Regional Map

Sources: California Spatial Information Library; National Park Service. Map date: June 24, 2015.

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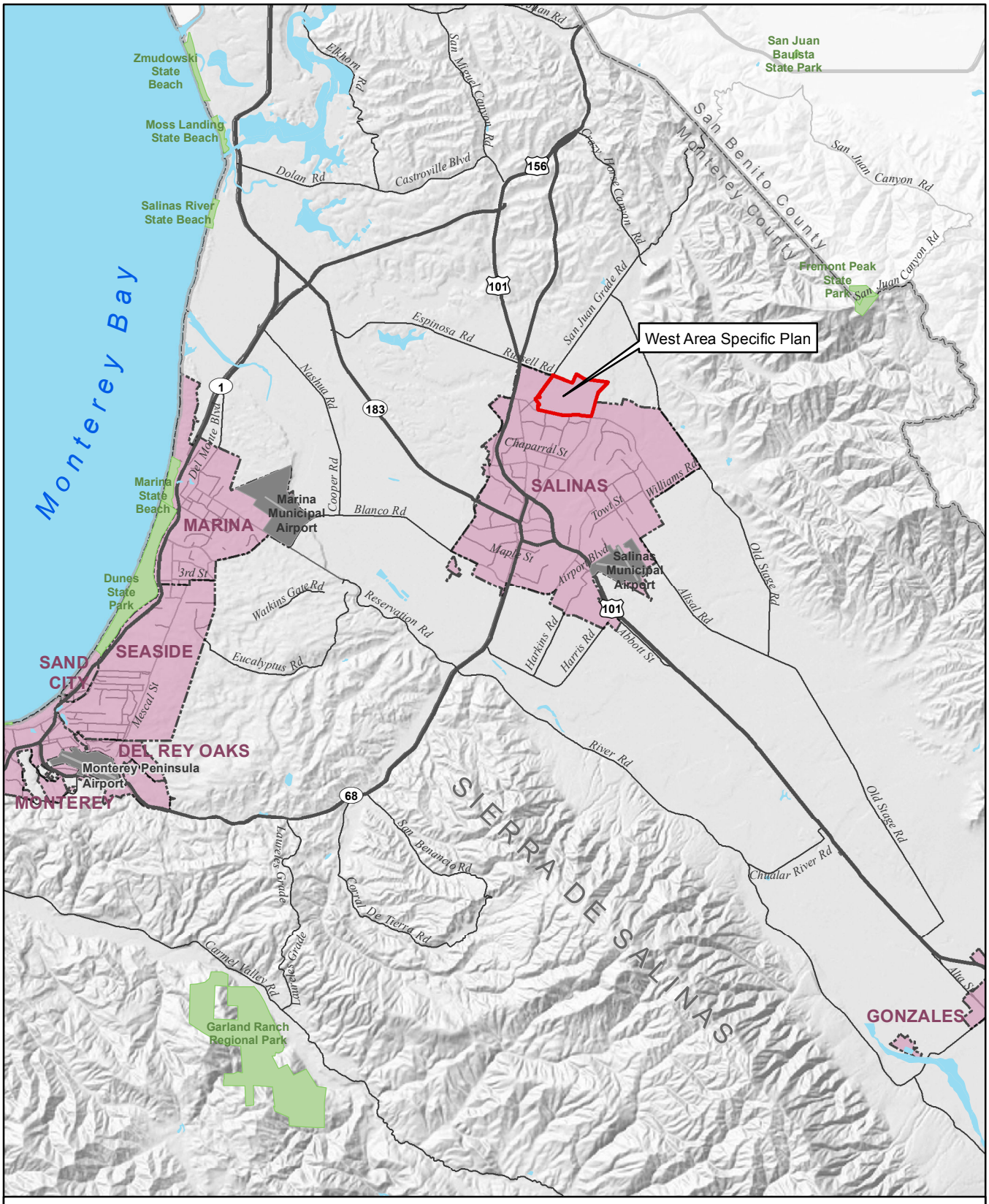

N

0 1 2

Miles

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-2: Vicinity Map

Sources: California Spatial Information Library; ESRI StreetMap North America; Monterey County GIS. Map date: June 25, 2015.

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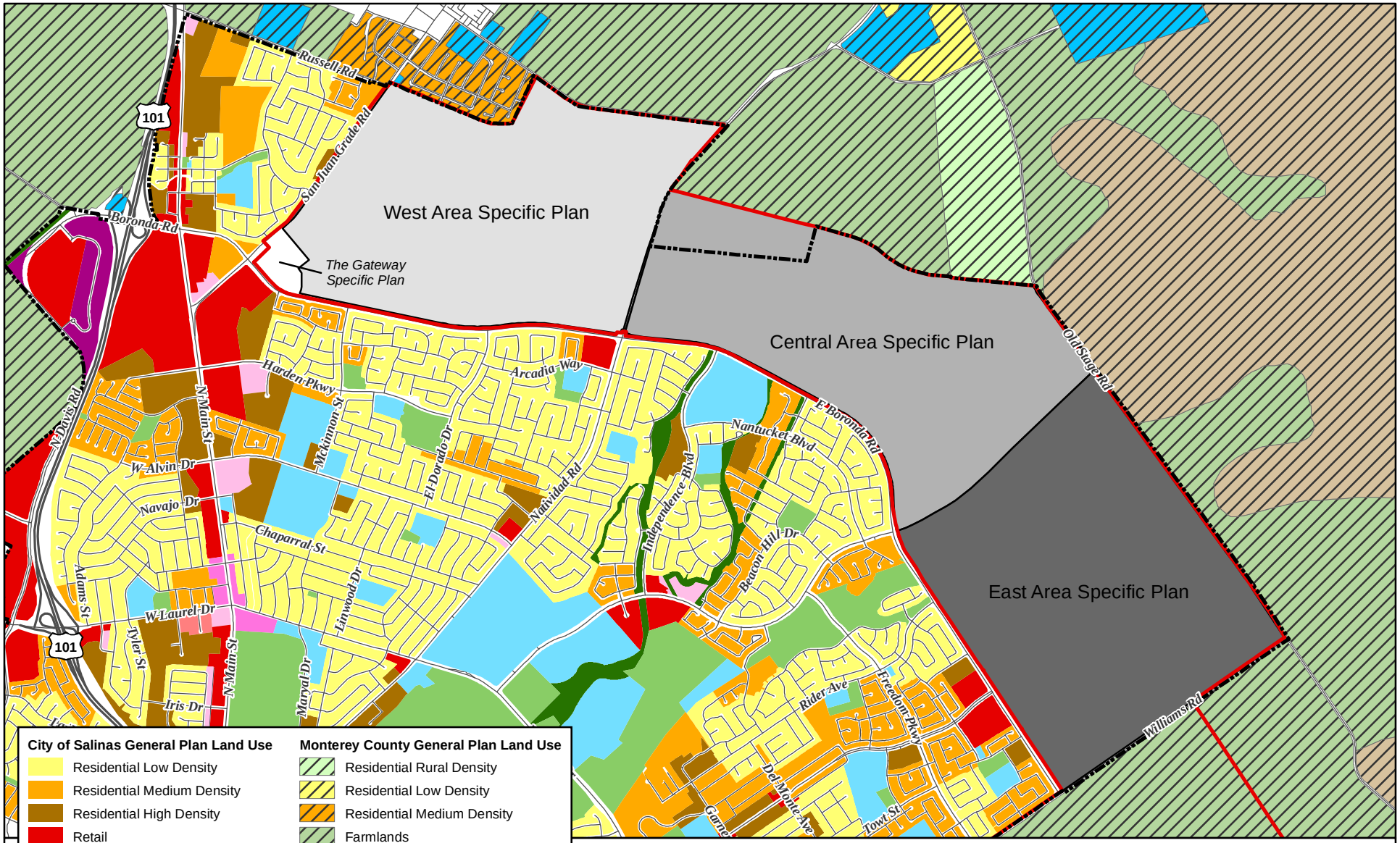

Sources: City of Salinas; Monterey County GIS. Map date: February 25, 2019.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-3: Adjacent Land Uses

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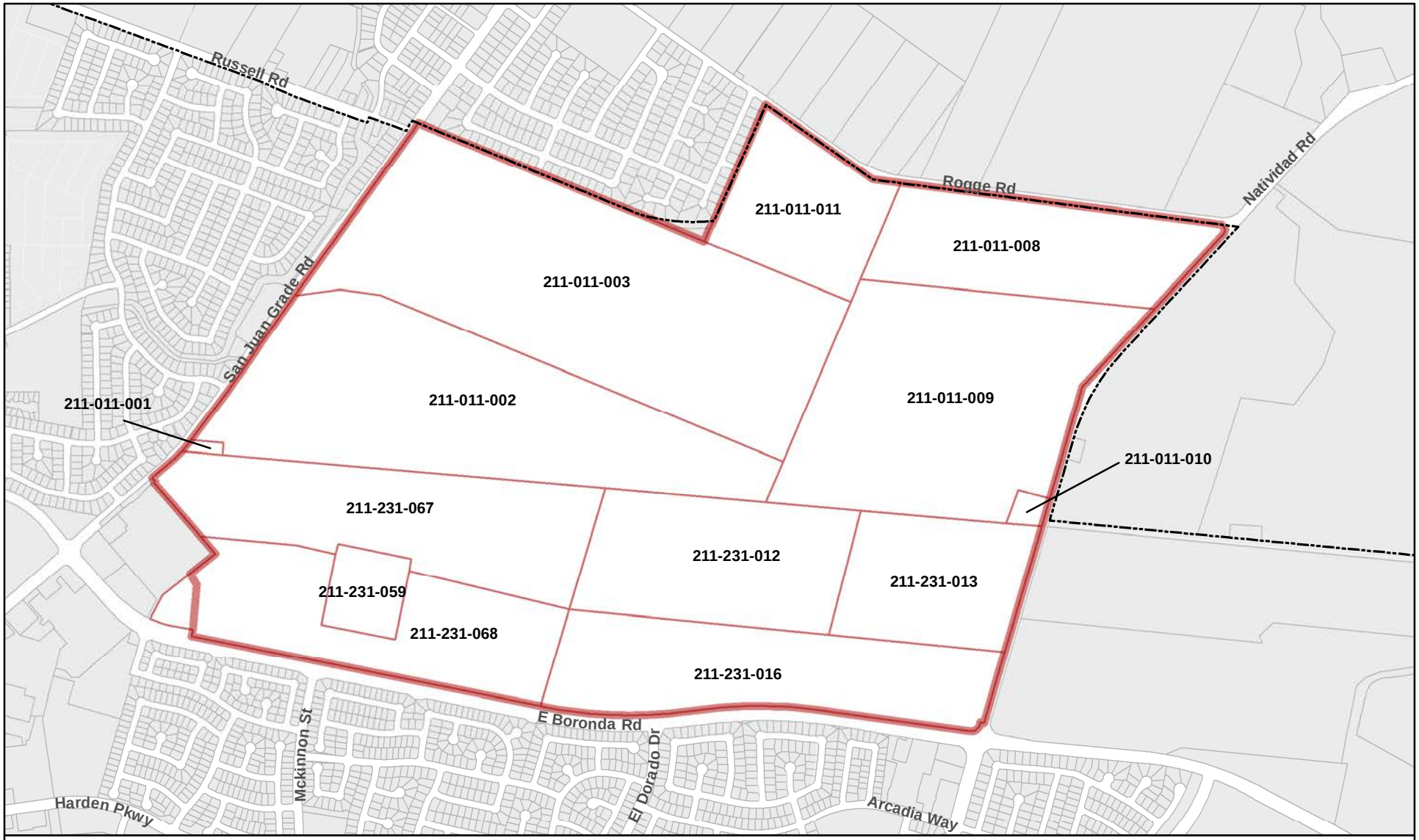

Legend

- West Area Specific Plan
- City of Salinas
- Assesor Parcels
- Assessor Parcels within the West Area Specific Plan

Source: Monterey County parcel database, December 14, 2018. Map date: February 25, 2019.

N

0 500 1,000

Feet

1:15,000

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-4: Assessor Parcel Map

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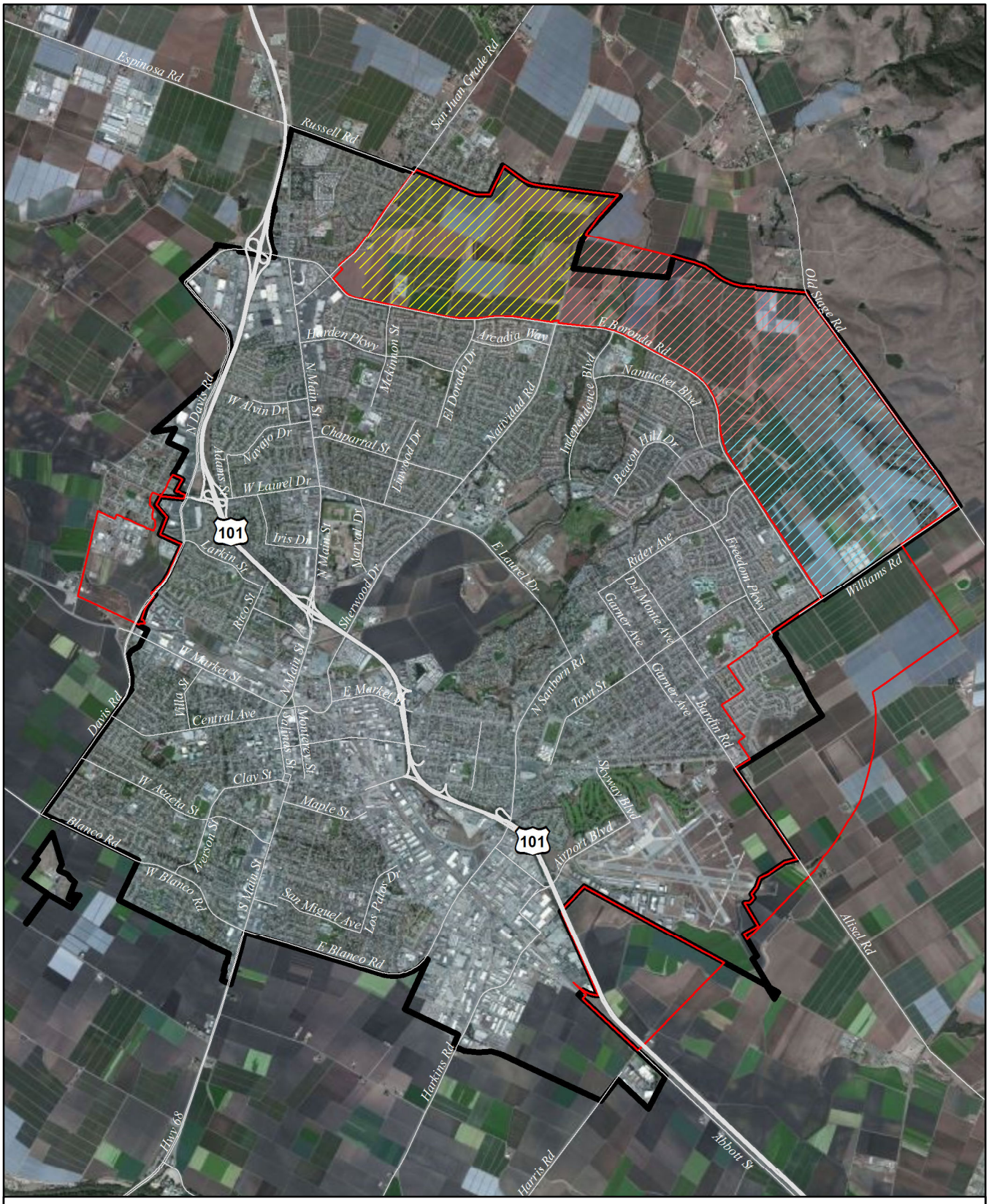

City of Salinas
Future Growth Area
West Area Specific Plan
Central Area Specific Plan
East Area Specific Plan

N

0 0.5 1
Miles

Sources: Monterey County GIS. Map date: June 30, 2015.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-5: Aerial View

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CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-6: Specific Plan/Illustrative Plan

Source: City of Salinas, AECOM.

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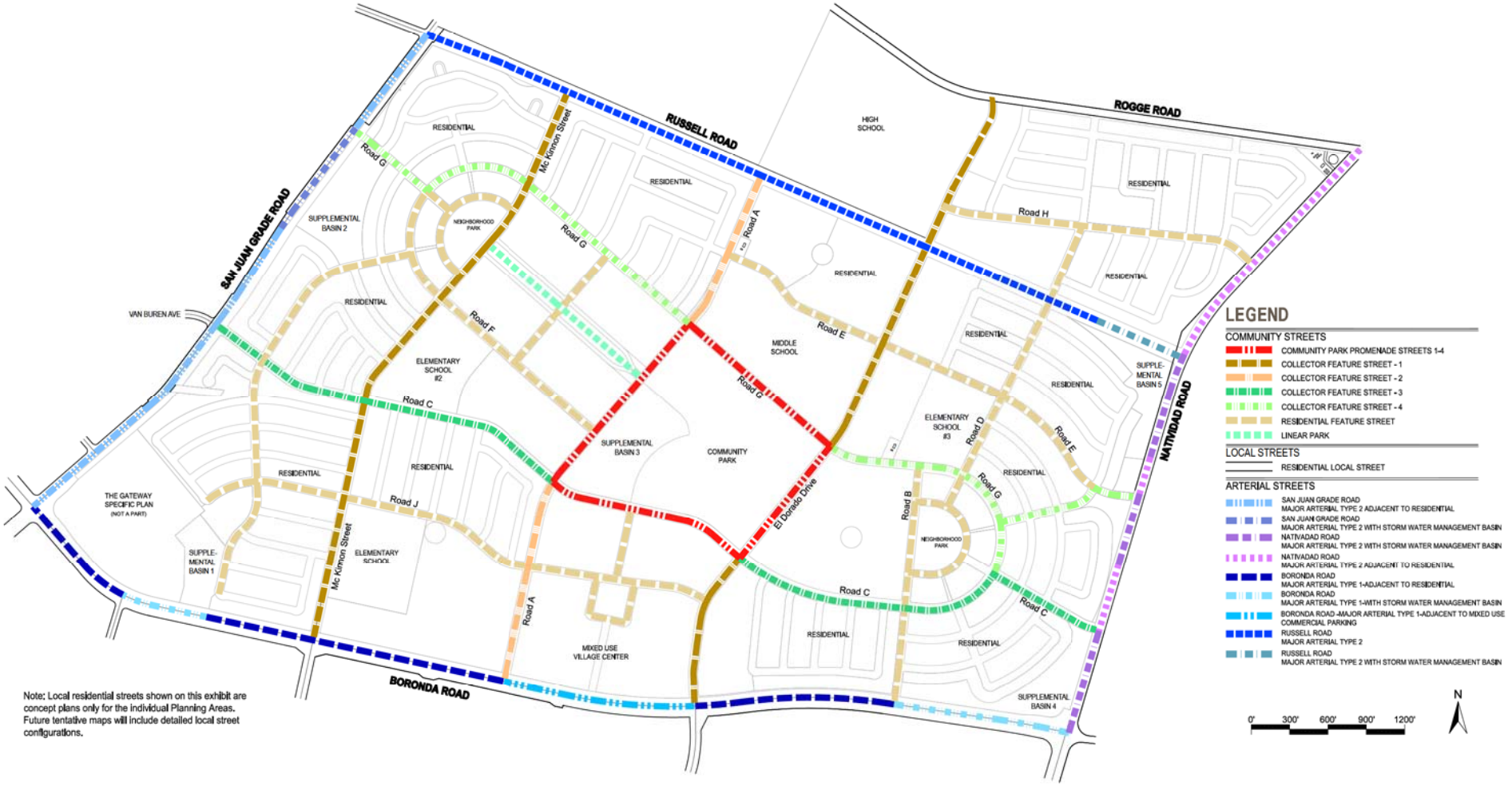

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 2-7: Vehicular Circulation Plan

Source: City of Salinas, AECOM.

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This section describes regional air quality, the current attainment status of the air basin, local sensitive receptors, emission sources, and the impacts that are likely to result from Specific Plan implementation. Following this discussion is an assessment of consistency of the Specific Plan with applicable policies and local plans. The Greenhouse Gases and Climate Change analysis is located in Section 3.4. It should be noted that the Monterey Bay Unified Air Pollution Control District (MBUAPCD) recently changed its name to Monterey Bay Air Resources District (MBARD). This section is based in part on the following technical studies: *Air Quality and Land Use Handbook: A Community Health Perspective* (California Air Resources Board, 2005)*, CEQA Air Quality Guidelines* (MBARD, 2008a), *Monterey Bay Unified Air Pollution Control District 2008 Air Quality Management Plan (2008 AQMP)* (MBARD, 2008b), *Monterey Bay Unified Air Pollution Control District Triennial Plan Revision 2009-2011* (MBARD, 2013), *2012-2015 Air Quality Management Plan (MBARD, 2017),* CalEEMod *(v.2016.3.2)* (CAPCOA, 2013), and the *Salinas West Area Specific Plan Draft Transportation Impact Analysis* (Fehr & Peers, 2018).

No comment letters were received during the public review period for Notice of Preparation regarding this topic.

The documents listed above are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at the offices of the City of Salinas Community Development Department at 65 West Alisal Street, Salinas, California 93901.

3.1.1 EXISTING SETTING

NORTH CENTRAL COAST AIR BASIN

The North Central Coast Air Basin (NCCAB) consists of three counties: Santa Cruz County, San Benito County, and Monterey County. The air basin is bounded by mountains the north and east. San Joaquin Air Basin lies to the east, separated by the Diablo Coastal range, with gaps such as Pacheco Pass. The San Francisco Bay Air Basin lies to the north. Figure 3.1-1 illustrates the location of the Monterey County within the NCCAB. Figure 3.1-1 also illustrates the location of the MBARD boundaries in relation to neighboring air districts.

The air basin includes portions of several mountain ranges: the Santa Lucia and Gabilan Ranges in Monterey and San Benito Counties, the southern portion of the Santa Cruz Mountains in Santa Cruz County, and the Diablo Range in the eastern half of San Benito County. The coastal terraces in the Santa Cruz area, the flat plains surrounding Watsonville, Salinas, and King City, and the southern Santa Clara Valley are sharply defined by the various mountain ranges.

The NCCAB covers an approximately 5,159 square mile area located within the central coast of California. With Monterey County covering approximately 3,320 square miles and Santa Cruz County covering only 445 square miles (with San Benito County covering the remainder), the air basin consists of one of the largest and one of the smallest counties in the state. Neighboring air basins include the San Francisco Bay Area Air Basin (SFBAAB), the San Joaquin Valley Air Basin (SJVAB), and the San Luis Obispo Air Basin (SLOAB).

Climate and Air Movement

Regional meteorology in the vicinity of the Plan Area is largely dominated by a persistent high-pressure area which commonly resides over the eastern Pacific Ocean. Mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. The City of Salinas lies close enough to the Pacific Ocean to receive this moderating influence; the difference in average high and low daily temperatures within the City between winter and summer months typically does not change by more than approximately 15 degrees Fahrenheit.

The semi-permanent high-pressure cell in the eastern Pacific is the basic controlling factor in the climate of the Basin. Monterey Bay is an inlet 25 miles wide, which allows marine air at low levels to penetrate the interior. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. At Salinas, near the northern end of the Valley, west and northwest winds occur about one-half the time during the entire year. Air descends in the Pacific High forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer air aloft acts as a lid to inhibit vertical air movement (MBARD, 2008a). During the winter, the Pacific High migrates southward and has less influence on the air basin. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and morning hours. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

In the fall, surface winds become weak, and the marine layer grows shallow, dissipating altogether on some days. The air flow is occasionally reversed in a weak offshore movement, and the relatively stationary air mass is held in place by the Pacific High-pressure cell, which allows pollutants to build over a period of a few days. It is most often during this season that the north or east winds transport pollutants from either the San Francisco Bay area or the Central Valley into the NCCAB.

CRITERIA POLLUTANTS

The United States Environmental Protection Agency (EPA) uses six "criteria pollutants" as indicators of air quality, and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). Each criteria pollutant is described below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While O_3 in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O_3 at ground level are a major health and environmental concern. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO_x) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O_3 levels occur typically during the warmer times of the year. Both VOCs and NO_x are emitted by transportation and industrial sources. VOCs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents. Relatedly, reactive

organic compounds (ROG) are defined as the subset of VOCs that are reactive enough to contribute substantially to atmospheric photochemistry.

The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Carbon monoxide (CO) is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. When CO enters the bloodstream, it reduces the delivery of oxygen to the body's organs and tissues. Health threats are most serious for those who suffer from cardiovascular disease, particularly those with angina or peripheral vascular disease. Exposure to elevated CO levels can cause impairment of visual perception, manual dexterity, learning ability and performance of complex tasks.

Nitrogen oxides (NO_x) are an important precursor both to ozone and acid rain, and may affect both terrestrial and aquatic ecosystems. NO_x plays a major role, together with VOCs, in the atmospheric reactions that produce O_3. NO_x forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. Nitrogen dioxide (NO_2), a form of NO_x is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO). NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections.

Sulfur dioxide (SO_2) affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and VOCs are also considered particulate matter.

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense

systems against foreign materials, damage to lung tissue, carcinogenesis and premature death. Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural activities (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

Fine particulate matter ($PM_{2.5}$) consists of fine particles, which are less than 2.5 microns in size. Similar to PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the EPA created new Federal air quality standards for $PM_{2.5}$.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials, and is a major cause of visibility impairment.

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

AMBIENT AIR QUALITY STANDARDS

Both the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and State ambient air quality standards are summarized in Table 3.1-1 for important pollutants. The federal and State ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the federal and State standards differ in some cases. In general, the California standards are more stringent. This is particularly true for ozone, $PM_{2.5}$, and PM_{10}. The U.S. EPA signed a final rule for the federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, and was effective as of December 28, 2015 (equivalent to the California state ambient air quality eight-hour standard for ozone).

TABLE 3.1-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	*AVERAGING TIME*	*FEDERAL PRIMARY STANDARD*	*STATE STANDARD*
Ozone	1-Hour 8-Hour	-- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 0.075 ppm	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	-- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	12 ug/m^3 35 ug/m^3	12 ug/m^3 --
Lead	30-Day Avg. 3-Month Avg.	-- 0.15 ug/m^3	1.5 ug/m^3 --

Notes: ppm = parts per million, ug/m3 = Micrograms per Cubic Meter
SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2017A.

In 1997, new national standards for fine particulate matter diameter 2.5 microns or less ($PM_{2.5}$) were adopted for 24-hour and annual averaging periods. The existing PM_{10} standards were retained, but the method and form for determining compliance with the standards were revised.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Existing air quality concerns within Monterey County and the entire NCCAB are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of

the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone, carbon monoxide, and nitrogen dioxide as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Monterey County has a State designation of nonattainment for ozone and PM_{10}, and is either Unclassified or Attainment for all other criteria pollutants. Monterey County has a national designation of either Unclassified or Attainment for all criteria pollutants. Table 3.1-2 presents the state and nation attainment status for Monterey County.

TABLE 3.1-2: STATE AND NATIONAL ATTAINMENT STATUS

CRITERIA POLLUTANTS	*STATE DESIGNATIONS*	*NATIONAL DESIGNATIONS*
Ozone (O_3)	Nonattainment-Transitional	Unclassified/Attainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Attainment	Unclassified/Attainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Unclassified
Sulfates	Attainment	
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCES: CALIFORNIA AIR RESOURCES BOARD, 2017B.

Northern Central Coast Air Basin Monitoring

The NCCAB consists of three counties: Santa Cruz County, San Benito County, and Monterey County. The MBARD and the CARB maintain numerous air quality monitoring sites throughout each county in the Air Basin to measure ozone, $PM_{2.5}$, and PM_{10}. It is important to note that while the State retains the one-hour standard, the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards. Data obtained from the monitoring sites throughout the NCCAB between 2015 and 2017 (latest year of data available) is summarized in Table 3.1-3, Table 3.1-4, and Table 3.1-5.

TABLE 3.1-3 NCCAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - OZONE

YEAR	DAYS > STANDARD				1-HOUR OBSERVATIONS			8-HOUR AVERAGES				YEAR COVERAGE	
	STATE		NATIONAL			STATE	NAT'L	STATE		NATIONAL			
	1-HR	8-HR	1-HR	8-HR	MAX.	D.V.[1]	D.V.[2]	MAX.	D.V.[1]	MAX.	D.V.[2]	MIN	MAX
2017	0	1	0	1	0.084	0.08	0.086	0.075	0.0745	0.075	0.068	98	100
2016	1	5	0	5	0.101	0.08	0.086	0.078	0.077	0.078	0.069	98	100
2015	0	0	0	0	0.079	0.08	0.079	0.068	0.076	0.068	0.068	89	100

NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. THE NATIONAL 1-HOUR OZONE STANDARD WAS REVOKED IN JUNE 2005 AND IS NO LONGER IN EFFECT. STATISTICS RELATED TO THE REVOKED STANDARD ARE SHOWN IN ITALICS. D.V. [1]= STATE DESIGNATION VALUE . D.V. [2]= NATIONAL DESIGN VALUE.

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES

TABLE 3.1-4 NCCAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY - $PM_{2.5}$

YEAR	EST. DAYS > NAT'L '06 STD.	ANNUAL AVERAGE		NAT'L ANN. STD. D.V.[1]	STATE ANNUAL D.V.[2]	NAT'L '06 STD. 98TH PERCENTILE	NAT'L '06 24-HR STD. D.V.[1]	HIGH 24-HOUR AVERAGE		YEAR COVERAGE	
		NAT'L	STATE					NAT'L	STATE	MIN.	MAX.
2017	2.2	7.1	6.4	6.1	7	20.8	28	47.3	47.3	93	100
2016	11.9	6.8	6.8	6.5	7	56.6	27	104.7	104.7	96	99
2015	1.0	6.3	6.2	6.3	7	19.8	13	43.2	43.2	98	100

NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. D.V. [1] = STATE DESIGNATION VALUE . D.V. [2]= NATIONAL DESIGN VALUE

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES

TABLE 3.1-5: NCCAB AMBIENT AIR QUALITY MONITORING DATA SUMMARY – PM_{10}

YEAR	EST. DAYS > STD.		ANNUAL AVERAGE		3-YEAR AVERAGE		HIGH 24-HR AVERAGE		YEAR COVERAGE
	NAT'L	STATE	NAT'L	STATE	NAT'L	STATE	NAT'L	STATE	
2017	0	ND*	29.3	ND	27	ND*	95.3	ND	
2016	0	ND*	26.0	ND	25	ND*	71.4	ND	0
2015	0	ND*	24.5	ND	26	ND*	72.6	ND	0

NOTES: THE NATIONAL ANNUAL AVERAGE PM_{10} STANDARD WAS REVOKED IN DECEMBER 2006 AND IS NO LONGER IN EFFECT. AN EXCEEDANCE IS NOT NECESSARILY A VIOLATION. STATISTICS MAY INCLUDE DATA THAT ARE RELATED TO AN EXCEPTIONAL EVENT. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. NATIONAL STATISTICS ARE BASED ON STANDARD CONDITIONS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. ND=THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE.

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES

Monterey County Air Quality Monitoring

The MBARD and the CARB maintain three air quality monitoring sites in Monterey County that collect data for ozone and $PM_{2.5}$. These include the Carmel Valley - Ford Road, King City - 415 Pearl

Street, and Salinas - #3 (855 East Laurel Drive) monitoring sites. The King City – 415 Pearl St. location also collects data for hourly standard PM_{10}. It is important to note that while the State retains the one-hour standard, the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards. Data obtained from the monitoring sites between 2015 and 2017 (latest year of data available) is shown in Table 3.1-6, Table 3.1-7, and Table 3.1-8.

TABLE 3.1-6: AMBIENT AIR QUALITY MONITORING DATA (CARMEL VALLEY – FORD ROAD)

POLLUTANT	CAL. PRIMARY STANDARD	FED. PRIMARY STANDARD	YEAR	MAX CONCENTRATION	DAYS EXCEEDED STATE/FED STANDARD
Ozone (O_3) (1-hour)	0.09 ppm for 1 hour	NA	2017 2016 2015	0.073 0.078 0.071	ND / 0 ND / 0 ND / 0
Ozone (O_3) (8-hour)	0.07 ppm for 8 hour	0.075 ppm for 8 hour	2017 2016 2015	0.067 0.061 0.066	0 / 0 0 / 0 0 / 0
Fine Particulate Matter ($PM_{2.5}$)	No 24 hour State Standard	35 ug/m^3 for 24 hours	2017 2016 2015	43.6 104.7 43.2	ND / 1.0 ND / 11.9 ND / 1

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES. NOTE: ND=THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE.

TABLE 3.1-7: AMBIENT AIR QUALITY MONITORING DATA (KING CITY – 415 PEARL STREET)

POLLUTANT	CAL. PRIMARY STANDARD	FED. PRIMARY STANDARD	YEAR	MAX CONCENTRATION	DAYS EXCEEDED STATE/FED STANDARD
Ozone (O_3) (1-hour)	0.09 ppm for 1 hour	NA	2017 2016 2015	0.073 0.075 0.079	0 / ND 0 / ND 0 / ND
Ozone (O_3) (8-hour)	0.07 ppm for 8 hour	0.075 ppm for 8 hour	2017 2016 2015	0.068 0.067 0.067	0 / 0 0 / 0 0 / 0
Particulate Matter (PM_{10})	50 ug/m3 for 24 hours	150 ug/m^3 for 24 hours	2017 2016 2015	95.3 71.4 72.6	ND / 0 ND / 0 ND / 0
Fine Particulate Matter ($PM_{2.5}$)	No 24 hour State Standard	35 ug/m^3 for 24 hours	2017 2016 2015	36.0 27.9 22.2	ND / 1 ND / 0 ND / 0

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES. NOTE: ND=THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE.

TABLE 3.1-8: AMBIENT AIR QUALITY MONITORING DATA (SALINAS - #3)

POLLUTANT	CAL. PRIMARY STANDARD	FED. PRIMARY STANDARD	YEAR	MAX CONCENTRATION	DAYS EXCEEDED STATE/FED STANDARD
Ozone (O_3) (1-hour)	0.09 ppm for 1 hour	NA	2017 2016 2015	0.082 0.066 0.068	0 / 0 / ND 0 / ND
Ozone (O_3) (8-hour)	0.07 ppm for 8 hour	0.075 ppm for 8 hour	2017 2016 2015	0.070 0.059 0.062	0 / 0 / 0 0 / 0
Fine Particulate Matter ($PM_{2.5}$)	No 24 hour State Standard	35 ug/m^3 for 24 hours	2017 2016 2015	42.2 28.7 22.6	ND / 1 ND / 0 ND / 0

SOURCES: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES. NOTE: ND=THERE WAS INSUFFICIENT (OR NO) DATA AVAILABLE TO DETERMINE THE VALUE.

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals and schools. The closest sensitive receptors to the Plan Area are located to the West of Village Center portion of the Plan Area, at the existing McKinnon School, and the residential subdivisions located to the south, west, and north of the Plan Area. The high school site, currently under construction located to the north of Rogge Road, would also be a sensitive receptor.

3.1.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. CARB is the state agency that is responsible for preparing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the EPA adopted implementing regulations in 1997. See §176 of the FCAA (42 U.S.C. §7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas. Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the State. Rather than mandating the use of specific technology or the reliance on a specific fuel, CARB motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which require auto manufacturers to phase in less polluting vehicles.

California Clean Air Act

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the federal standards.

Air Quality Standards

National Ambient Air Quality Standards (NAAQS) are determined by the U.S. EPA. The standards include both primary and secondary ambient air quality standards. Primary standards are established with a safety margin. Secondary standards are more stringent than primary standards and are intended to protect public health and welfare. States have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards.

Federal and State ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10}) and lead. In addition, California has created standards for pollutants that are not covered by federal standards. The State and federal primary standards for major pollutants are shown in Table 3.1-1.

Tanner Air Toxics Act (TACs)

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technologies (BACT) to minimize emissions.

AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, CARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule.

LOCAL

Monterey Bay Air Resources District

The MBARD is the local agency with primary responsibility for ensuring compliance with both the federal and State standards that air quality conditions are maintained. The Air District does this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. There are three counties that make up the MBARD: Santa Cruz, San Benito, and Monterey Counties.

The mission of the MBARD is to "Protect Public and Environmental Health while balancing Economic and Air Quality Considerations".

The Air District is responsible for air monitoring, permitting, enforcement, long-range air quality planning, regulatory development, education and public information activities related to air pollution, as required by the California Clean Air Act and Amendments (HSC Section 40910 et seq.) and the federal Clean Air Act and Amendments (42 U.S.C. Section 7401 et seq.).

California Health and Safety Code Sections 39002, et seq. and 40000, et seq. require local districts to be the primary enforcement mechanism for air pollution control. Districts must have rules and

regulations for the implementation and enforcement for the attainment and maintenance of federal and State ambient air standards.

The MBARD has prepared the *2005 Particulate Matter Plan*, which fulfills the requirements of Senate Bill (SB) 656. SB 656 requires the CARB, in conjunction with local air pollution control districts, adopt a list of the most readily available, feasible and cost-effective control measures that could be implemented by air pollution control districts to reduce ambient levels of particulate matter in their air basins.

The MBARD also prepared the *2007 Federal Maintenance Plan for Maintaining the National Ozone Standard in the Monterey Bay Region*. This plan was prepared according to the U.S. E.P.A "Maintenance Plan Guidance Document for Certain 8-hour Ozone Areas under 110(a) (1) of the Clean Air Act", dated May 20, 2005. This document includes an attainment inventory, a demonstration of maintenance, a commitment to continue ambient air quality monitoring, a contingency plan, and verification of continued attainment.

In addition to the above listed plans, the MBARD has developed the *2012-2015 Air Quality Management Plan (2012-2015 AQMP)*. This report is an update to the elements included in the *2008 AQMP* and the *Triennial Plan Revision 2009-2011* and shows that the region continues to make progress toward meeting the ozone standard.

City of Salinas General Plan

The General Plan includes a number of policies that directly or indirectly relate to air quality. For example, policies relating to compact growth have the effect of reducing vehicle miles travelled, and therefore reducing mobile source air emissions. The Salinas General Plan establishes the following policies directly or indirectly related to air quality emissions in the General Plan [It should be noted that the Monterey Bay Unified Air Pollution Control District (MBUAPCD) recently changed its name to Monterey Bay Air Resources District (MBARD); therefore, any references to the Monterey Bay Unified Air Pollution Control District currently refers to the Monterey Bay Air Resources District]:

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-6.1: Cooperate with the Monterey Bay Unified Air Pollution Control District [now Monterey Bay Air District] to implement the Air Quality Plan.

Policy COS-6.2: Implement measures to protect air quality that may be required to mitigate the effects of population growth.

Policy COS-6.3: Encourage development design that maintains air quality and reduces direct and indirect emissions of air contaminates.

Policy COS-6.4: Support alternative modes of transportation, such as walking, biking and public transit, and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.

Policy COS-8.1: Enforce State Title 24 building construction requirements.

Policy COS-8.2: Apply standards that promote energy conservation in new and existing

development.

Policy COS-8.3: Work with energy suppliers and distributors to implement energy conservation programs and help inform the public of these programs.

Policy COS-8.4: Participate in programs that promote energy conservation.

Policy COS-8.5: Encourage land use arrangements and densities that facilitate the use of energy efficient public transit.

Policy COS-8.6: Encourage the creation and retention of neighborhood-level services (e.g., family medical offices, dry cleaners, grocery stores, drug stores) throughout the City in order to reduce energy consumption through automobile use.

SAFETY ELEMENT

Policy S-3.1: To reduce the risk posed by air pollution, work with responsible federal, state, and county agencies to decrease air pollution emissions occurring within the air basin.

LAND USE ELEMENT

Policy LU-1.1: Achieve a balance of land uses to provide for a range of housing, jobs, libraries, and educational and recreational facilities that allow residents to live, work, shop, learn, and play in the community.

Policy LU-2.4: Utilize well-designed in-fill development, and selectively increase density with Focused Growth Areas to maintain compact city form.

CIRCULATION ELEMENT

Policy C-1.1 Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics and corresponding circulation systems. Specifically, the street network should have the following characteristics:

- Individual blocks should have average less than 600 feet in length and less the 1,800 feet in perimeter;
- Streets should be organized in a comprehensive hierarchical network that manifests the structure of the neighborhoods;
- Cul-de-sacs should be avoided unless natural conditions demand them;
- The street network should be interconnected; and
- Transit access, passenger safety, and transit facilities should be included in the street design network.

Policy C-1.9: Use traffic calming methods within residential areas where necessary to create a pedestrian-friendly circulation system.

Policy C-1.10: Encourage car-pooling, at government offices, business, schools, and other facilities, to reduce the number of vehicles using the roadway system.

Policy C-2.5: Work with Caltrain and Amtrak to provide commuter rail service to the Silicon Valley and other major destinations to provide alternative to automobile use.

Policy C-2.6: Promote a regional job-housing balance to reduce vehicle miles travelled and congestion on the regional circulation system.

Policy C-2.7: Support continued maintenance and expanded use of the City's Intermodal Transportation Center.

Policy C-3.2 Design development and reuse/revitalization projects to be transit-oriented to promote the use of alternative modes of transit and support higher levels of transit service.

Policy C-4.1: Continue to develop a network of on- and off-street bicycle routes to encourage and facilitate the use of bicycles for commute, recreational, and other trips. Eliminate gaps and provide connections between existing bicycle routes.

Policy C-4.4: Improve the biking environment by providing safe and attractive cut-throughs, bike lanes, and bike paths for both recreational and commuting purposes.

Policy C-5.1: Increase availability of safe and well-maintained sidewalks in all areas of the City.

Policy C-5.5 Improve the walking environment by providing safe and attractive sidewalks, cut-throughs, and walkways, for both recreational and commuting purposes.

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the 2018 version of the CEQA Statute and Guidelines, the Specific Plan will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people.

CRITERIA POLLUTANT EMISSIONS CALCULATIONS

California Emission Estimator Model (CalEEMod)™ (v.2016.3.2), developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with California air districts, was used to estimate emissions for the Specific Plan. Given the size and complexity of the proposed project, it was assumed that full project buildout would not occur until 2040. The Specific Plan assumes that buildout would occur over a 20 to 30-year timeframe; that is, buildout may not occur until 2048. A buildout year of 2040 is assumed for the purposes of the air quality modelling and analysis provides a highly conservative estimate, because criteria pollutant emission rates are reduced over time (due to state and federal mandates) and would be expected to be even lower then reported in this analysis by 2048.

The land use assumptions for the modeling include: Single-Family Detached Housing – 1,361 dwelling units; Apartments Mid-Rise – 91 dwelling units; Condo/Townhouse – 2,888 dwelling units; General Office Building – 143,000 square feet; Regional Shopping Center – 371,000 square feet; Supermarket – 57,000 square feet; High School – approximately 38 acres; Junior High School/Middle School – approximately 20 acres; Elementary School – approximately 30 acres; and City Park – approximately 50 acres. These assumptions are consistent with those made in the Transportation Impact Analysis developed for the proposed project by Fehr & Peers (Fehr & Peers, 2018).

OPERATIONAL ACTIVITIES

Mobile-source based criteria pollutant emissions were estimated using the emission factors provided within CalEEMod; an estimate of proposed project-generated VMT developed as part of this analysis was provided by the traffic consultant, Fehr & Peers, as provided in **Appendix I** of this EIR. Average trip lengths by trip type were modified in CalEEMod to ensure consistency with the average trip length as provided by Fehr & Peers. Criteria pollutant emissions from consumer products, landscape maintenance activities, and other sources of operational energy usage (e.g. electricity and natural gas) were estimated using the default emission factors provided in CalEEMod.

Operation emissions from all sources were estimated for both buildout of the Specific Plan, which is conservatively anticipated to occur by 2040, and for an interim period when 20 percent of the proposed land uses become operational, which could occur as early as 2020 (the actual start may be later; however, the 2020 start is used for this air quality modelling to provide conservative emissions estimates). This second scenario responds to the maximum potential project development of 20 percent of the overall project in a single year (another conservative assumption), and assumes that, as a worst-case scenario, this could occur in the first year of project development (also a conservative assumption). The initial year 2020 is examined because, for some pollutants

such as NOx, emission factors from motor vehicles would be highest in 2020 as compared with later years, as NOx emissions are expected to decline over time through the period when full buildout under the Specific Plan takes place. [1]

Maximum daily emissions were estimated for both peak summer day and peak winter day. The highest value for each criteria pollutant was used for the purposes of this analysis. The potential for Specific Plan-generated traffic to result in concentrations of CO that exceed NAAQS and State AAQS for this pollutant was evaluated using MBARD-recommended criteria. Health risks from project-generated, construction- and operation-related emissions of TACs were assessed qualitatively. This assessment is based on the location from which construction- or operation-related TAC emissions would be generated by land uses developed under the Specific Plan relative to off-site sensitive receptors, as well as the duration during which TAC exposure would occur. Similarly, the assessment of odor-related impacts is based on the types of odor sources associated with the land uses that would be developed under the Specific Plan and their location relative to off-site receptors.

CONSTRUCTION ACTIVITIES

Construction activities were assumed take place over the course of approximately 20 years, from 2020 to 2040. These construction activities can be described as site improvements (grading, underground infrastructure, and topside improvements) and vertical construction (building construction and architectural coatings).

Site Improvements: The construction of site improvements may be performed as one task, but may be broken into two or more separate phases. The exact construction schedule is largely dependent on the economic conditions of the region and the ability for the market to absorb the proposed residential and commercial buildings.

The site improvement phase of construction will begin with site preparation. This step will include the use of dozers, backhoes, and loaders to strip (clear and grub) all organic materials and the upper half-inch to inch of soil from the Plan Area. This task will include vehicle trips from construction workers.

After the site is stripped of organic materials, grading would begin. This activity will involve the use of excavators, graders, dozers, scrappers, loaders, and backhoes to move soil around the Plan Area to create specific engineered grade elevations and soil compaction levels.

The next step involves the installation of underground infrastructure. This step will involve the use of excavators to dig trenches, place pipe and conduit, bury pipe and conduit, and compact trench soil. Grading the Plan Area and underground installation of infrastructure would include vehicle trips from construction workers.

[1] Assuming the commencement of construction as early as 2020 is conservative not only because, in general, emissions from motor vehicles will be decreasing over time due to pollution control improvements in newer vehicles, but also because construction equipment will also become cleaner over time due to federal and State regulations require ongoing improvements in diesel engines in coming years.

The last task is to install the topside improvements, which includes pouring concrete curbs, gutters, sidewalks, and access aprons and then paving of all streets and parking lots. This task will involve the use of pavers, paving equipment, and rollers and will take approximately three months and will include vehicle trips from construction workers.

Building Construction/Architectural Coatings: Building construction involves the vertical construction of structures and landscaping around the structures. This task will involve the use of forklifts, generator sets, welders and small tractors/loaders/backhoes. The exact construction schedule is largely dependent on the economic conditions of the region and the ability of the market to absorb the residential and commercial buildings. Architectural coatings involve the interior and exterior painting associated with the structures. This task generally begin after construction begins on the structure and will generally be completed for each building around the time of the completion of each building. Building construction and the application of architectural coatings will include vehicle trips from construction workers, and building construction will also include vehicle trips from vendors.

MITIGATION

Air quality-related mitigation measures developed for the proposed project were developed using CalEEMod, with default emission factors generally as provided by CalEEMod. CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* guidance was utilized as a reference document, as necessary. See **Appendix B** to this EIR for further detail. The results from CalEEMod for operational and construction emissions are described under *Impacts and Mitigation Measures*, below.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: The project has the potential to conflict with or obstruct implementation of the applicable air quality plan (Less than Significant)

In May 2017, the MBARD adopted the *2012-2015 Air Quality Management Plan (2012-2015 AQMP)*, which assesses and updates elements of the *2008 AQMP and the Triennial Plan Revision 2009-2011*, including the air quality trends analysis, emission inventory, and mobile source programs. The *2012-2015 AQMP* builds on information developed in past AQMPs.

The *CEQA Air Quality Guidelines* (MBARD, 2008a) provides a list of actions that are intended to ensure consistency with the applicable air quality plan. The most applicable action from the *CEQA Air Quality Guidelines* (MBARD, 2008a) is "*Ensure that the jurisdiction's population forecasts are updated in the next AQMP by working with AMBAG or the appropriate local agency*." This action will be used as the threshold for this consistency analysis.

Population and changes in population are important factors affecting the air quality of a region. Regions with high population tend to have higher levels of ozone while regions with lower population tends to have lower levels of ozone. Population data are used in the *2012-2015 AQMP* to help develop the emission inventory. In the tri-county MBARD region, population forecasts and other demographic information are developed by AMBAG. These are periodically updated to reflect the region's latest growth factors affecting current and future population levels. The latest

population forecasts were adopted by the AMBAG Board in June 2018 and is called the 2018 Regional Growth Forecast. The 2018 Regional Growth Forecast projects the region's population, housing and employment out to the year 2040. The growth forecast is used to support regional planning efforts such as the Regional Travel Demand Model and the Metropolitan Transportation Plan as well as local long-range planning efforts such as General Plans and Specific Plans.

AMBAG, in consultation with the City of Salinas, included the North of Boronda Future Growth Area (inclusive of the West Area Specific Plan) within the AMBAG 2018 Regional Growth Forecast. The 2018 Regional Growth Forecast provides the region's population, housing, and employment forecasts for inclusion for AMBAG's 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) as well as for the future version of the AQMP.

The City of Salinas has worked closely with AMBAG to ensure that City population estimates are included within AMBAG's 2018 Regional Growth Forecast, which will feed into the next AQMP. The population estimates for the West Area Specific Plan are included in these growth forecasts. As such, the City has met the action recommended by MBARD in the *CEQA Air Quality Guidelines* (MBARD, 2008a) to ensure consistency with the applicable air quality plan (i.e. "*Ensure that the jurisdiction's population forecasts are updated in the next AQMP by working with AMBAG or the appropriate local agency*.").

CONCLUSION

The proposed project would not conflict with or obstruct the latest air quality plan. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.1-2: Project operation has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation (Significant and Unavoidable)

The West Area Specific Plan would be a direct and indirect source of air pollution, in that it would generate and attract vehicle trips in the region (mobile source emissions) and it would increase area source emissions and energy consumption. The mobile source emissions would be entirely from vehicles, while the area source emissions would be primarily from the use of natural gas fuel combustion, landscape fuel combustion, consumer products, and architectural coatings.

MBARD *CEQA Air Quality Guidelines* (MBARD, 2008a) provides a list of applicable construction and operation air quality emissions thresholds, as well as a list of mitigation measures to incorporate in circumstances where emissions are above applicable thresholds. Additionally, the *2012-2015 AQMP* provides guidance on how the AAQS for ozone would be met.

CalEEMod was used to model operational emissions upon full buildout of the Plan Area. Table 3.1-9 shows proposed project buildout emissions as provided by CalEEMod, which include mobile, area source, and energy emissions of criteria pollutants that would result from operations of the Specific Plan under the provided assumptions. It should be noted that the values shown in the tables represent the largest daily level of operational emissions expected from the proposed project. Table 3.1-10 provides operational project emissions under the conservative scenario of 20% buildout of

the Plan Area occurring by 2020, after a single year of construction activity. It should be noted that individual category emissions may not equal total emissions due to rounding. Additionally, it should be noted that, given the complexity of calculating the aggregate effect of mitigation on the proposed project's criteria pollutant emissions, the mitigated values presented in Table 3.1-9 and Table 3.1-10 do not provide the total effect of mitigation on the proposed project, and therefore represent a conservative estimate of mitigated emissions.

TABLE 3.1-9: OPERATIONAL PROJECT GENERATED EMISSIONS AT FULL BUILDOUT

	ROG		***NOx***		***PM_{10}***		***SOx***	
Threshold	**≤ 137 lbs/day**		**≤ 137 lbs/day**		**≤ 82 lbs/day**		**≤ 150 lbs/day**	
Category	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated
Area	1,170.9	246.4	31.5	25.3	168.4	3.7	2.3	0.2
Energy	5.1	5.1	44.7	44.7	3.5	3.5	0.3	0.3
Mobile	50.4	48.1	286.9	277.0	203.6	174.1	2.1	1.8
Total	**1,226.4**	**299.6**	**363.1**	**347.0**	**375.6**	**181.3**	**4.6**	**2.2**
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**

SOURCES: CALEEMOD (V.2016.3.2)

TABLE 3.1-10: OPERATIONAL PROJECT GENERATED EMISSIONS (YEAR 2020 WITH 20% OF BUILDOUT)

	ROG		***NOx***		***PM_{10}***		***SOx***	
Threshold	**≤ 137 lbs/day**		**≤ 137 lbs/day**		**≤ 82 lbs/day**		**≤ 150 lbs/day**	
Category	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated
Area	234.2	49.4	6.3	5.1	33.7	0.7	0.5	<0.1
Energy	1.0	1.0	8.9	8.9	0.7	0.7	0.1	0.1
Mobile	29.1	28.0	104.8	97.4	41.5	35.5	0.6	0.5
Total	**264.4**	**78.3**	**120.1**	**111.4**	**75.9**	**36.9**	**1.1**	**0.6**
Threshold Exceeded?	**Yes**	**Yes**	**No**	**No**	**No**	**No**	**No**	**No**

SOURCES: CALEEMOD (V.2016.3.2)

The MBARD, in its *CEQA Air Quality Guidelines* (MBARD, 2008a), has established operations-related emissions thresholds of significance as follows: 137 pounds per day of oxides of nitrogen (NOx), 137 pounds per day of reactive organic gases (ROG), 82 pounds per day of particulate matter of 10 microns or less in size (PM_{10}), and 150 pounds per day of SOx. There is no established threshold for $PM_{2.5}$ other then the PM_{10} threshold. A discussion of the impact of CO is provided under Impact 3.1-3. If the Specific Plan emissions will exceed the MBARD' thresholds of significance for operational-generated emissions, the Specific Plan will have a significant impact on air quality and all feasible mitigation are required to be implemented to reduce emissions to the extent feasible.

As shown in Table 3.1-9 above, daily emissions of ROG, NOx, and PM_{10} at full buildout would exceed the MBARD thresholds of significance during full buildout of the Specific Plan. The main sources of pollution can be attributed to area source emissions for ROG, mobile source emissions for NOx, and area source and mobile source emissions for PM_{10}. Fugitive dust is the primary cause of the PM_{10} exceedance. Additionally, as shown in Table 3.1-10, daily emissions of ROG at 20% of Plan Area buildout would exceed the MBARD thresholds of significance, although the MBARD emission thresholds for the other criteria pollutants would not be exceeded.

Even though the Specific Plan, viewed in the context of the City of Salinas, appears to cover a substantial land area, the emissions of ozone precursors such as ROG and NOx attributable to the Specific Plan would not be substantial enough on a regional basis for the City to be able, with currently available technical tools, to predict how the emissions of such pollutants would translate into either physical environmental changes, such as measurable effects on ambient ozone concentrations within the NCCAB, or health effects, such as increased respiratory problems, within any discrete population within the City or the region. Such an analysis is not reasonably feasible within the meaning of CEQA.

The development of the Plan Area would include a variety of features that would limit criteria pollutant emissions. For example, bus transit access to the Plan Area would be such that anyone within the Plan Area would be within approximately ½ mile (i.e. walking distance) of a bus stop. Monterey-Salinas Transit currently provides bus service provided along Boronda Road, adjacent to the Plan Area, and may provide transit service within the interior of the Plan Area in the future, as funding becomes available. Public sidewalks would be adjacent to all proposed public streets, and there would be pavement and striping for bike lanes and/or paths within portions of the Plan Area. In addition, a variety of pedestrian connections would be provided; the proposed parks would provide additional walking paths between various portions of the Plan Area, as well as to adjacent off-site areas. Further, a variety of traffic calming measures would be included in the Plan Area (e.g. speed bumps and/or traffic circles). Bicycle parking would also be provided within the Plan Area (according to the Specific Plan, bicycle racks are included in the expected facilities program for the small parks, Neighborhood Parks, and Community Park. Bicycle racks will also be provided in the Village Center in the vicinity of the main street and the Town Square, and along the southerly greenway path as required by the City Engineer). Overall, given that the Plan Area is designed in accordance with New Urbanism principles, non-automobile transportation choices are accorded a high priority in the development of the Plan Area. Land uses have also been located to ensure a 5 to 10 minute walk to the Village Center portion of the Plan Area, parks, and other uses.

CONCLUSION

As shown in Table 3.1-9 and Table 3.1-10, buildout of the Plan Area is expected to exceed some of the MBARD operational criteria pollutant emissions thresholds, as modelled. Mitigation measures are provided below to reduce emissions to the maximum extent feasible. As shown in Table 3.1-9, upon full buildout, the Specific Plan would exceed the MBARD thresholds of significance for operations for ROG, NO_x, and PM_{10}, even after mitigation. As such, operation of the Specific Plan would have a ***significant and unavoidable*** impact related to causing a violation of an air quality standard or contributing to an existing or projected air quality violation.

The proposed project is required to implement the following mitigation measures.

MITIGATION MEASURES

Mitigation Measure 3.1-1: *Prior to approval of development review permits including tentative maps, the project applicant(s) shall incorporate the following features into project plans and specifications, as directed by the City of Salinas:*

- *Provide traffic calming measures wherever feasible, within the Plan Area;*
- *Provide preferential carpool/vanpool parking spaces;*
- *Provide electric-vehicle parking spaces;*
- *Require the use of low-VOC paint for all new building architectural coatings within the Plan Area, consistent with or better than, what is required by the City's Municipal Code.*

Mitigation Measure 3.1-2: *Prior to approval of development review permit(s), the project applicant(s) shall incorporate effective methods to encourage the use of cleaner alternative fuel vehicles and carpooling within the Plan Area. Effective methods may include the installation of alternative fuel (e.g. electric) charging stations at locations spaced throughout the Plan Area, consistent with or better than what is required by the City's Municipal Code and Specific Plan. Additionally, this can be achieved by providing preferential parking for alternatively-powered vehicles, including electric cars, and/or by providing carpool/vanpool parking spaces.*

Mitigation Measure 3.1-3: *Prior to approval of development review permit(s), the project applicant(s) shall incorporate the use of alternative energy for the residential and mixed-use/commercial developments, including by implementing alternative energy (e.g. PV solar) building requirements, consistent with or better than, what is required by the City's Municipal Code. Project applicant(s) shall also ensure that pre-installed electrical hookups and/or charging stations, as applicable, are incorporated into all project plans and specifications.*

Mitigation Measure 3.1-4: *Prior to the issuance of building permits, the project applicant(s) shall provide plans that demonstrate that low-flow (high-efficiency) indoor water fixtures will be installed throughout the Plan Area, including for bathroom and kitchen faucets, toilet fixtures, and showers, in both residential and non-residential buildings, in compliance with or better than the standards required within the most recent version of the California Green Building Standards Code.*

Mitigation Measure 3.1-5: *Prior to the issuance of building permits, the project applicant(s) shall provide plans that demonstrate that water-efficient irrigation systems will be installed throughout the Plan Area, consistent with or better than the requirements contained within the State's Model Water Efficient Landscape Ordinance, the City's Water Conservation Ordinance and the Salinas Zoning Code Landscaping and Irrigation requirements.*

Mitigation Measure 3.1-6: *Prior to approval of improvement plans or development review permits, as applicable, the project applicant(s) shall ensure that pedestrian/bicycle facilities (e.g. pedestrian paths, outdoor bike racks, etc.) are provided within the Plan Area, in coordination with and subject to approval by the City of Salinas. The project proponent shall also provide covered bicycling parking near the entrance to commercial establishments within the Plan Area, consistent with or better than the requirements contained within the City's Municipal Code.*

Mitigation Measure 3.1-7: *Prior to the issuance of development review permit(s), the project applicant(s) shall incorporate of one or more of the following additional Plan Area requirements, as determined by the City of Salinas:*

- *Install secured bicycle storage facilities (bike lockers, cages, interior space, or similar as approved by the City Engineer) at all commercial and public facilities with 50 employees or more;*
- *Incorporate park-and-ride lots.*

Impact 3.1-3: Project construction has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation (Less than Significant with Mitigation)

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. Air quality impacts can nevertheless be acute during construction periods, resulting in significant localized impacts to air quality. Construction-related activities would result in project-generated emissions of PM_{10} from site preparation, grading, installation of underground utilities, grading, and building construction. Fugitive dust emissions are associated primarily with site preparation and vary as a function of soil silt content, soil moisture, wind speed, and area of disturbance. Ozone precursor emissions of ROG and NOx are associated primarily with exhaust from construction equipment, haul truck trips, and worker trips. ROG emissions are also generated during asphalt paving and application of architectural coatings.

The air basin is in nonattainment for the State ambient air quality standard for PM_{10}. Based on analysis conducted by the Air District, projects that include earthmoving activities on over 2.2 acres per day or general construction activities on over 8.1 acres per day are correlated with the emission of greater than the Air District threshold of 82 pounds of particulate matter per day. It is possible that future individual projects proposed within the Plan Area could involve grading that exceeds 2.2 acres per day. Therefore, fugitive dust from construction could exceed particulate matter emissions standards, and result in a significant impact.

According the *CEQA Air Quality Guidelines* (MBARD, 2008a), construction activities that directly generate 82 pounds per day or more of PM_{10} would have a significant impact on local air quality when they are located nearby and upwind of sensitive receptors. The proposed Plan Area would be located adjacent to existing potential residential sensitive receptors (e.g. to the south of Boronda Road and east of San Juan Grade Road). It should be noted that construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (ROG and NO_x) are accommodated in the emission inventories of State- and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone AAQS. Therefore, only the MBARD construction air emissions threshold for PM_{10} is applicable for the purposes of this impact analysis.

According MBARD *CEQA Air Quality Guidelines*, if a project were to exceed the 82 pounds per day threshold for PM_{10}, there are several feasible mitigation measures that address the many sources of PM_{10} during the construction phase of a project (e.g., grading, wind erosion, entrained dust). Common measures include watering, chemical stabilization, or reducing surface wind speeds with windbreaks. These measures are provided in more detail below.

CalEEMod (v.2016.3.2) was used to estimate construction emissions for the Specific Plan. Construction of the land uses proposed under the Specific Plan would occur over an approximately 20-year period, with construction expected to start as early as 2020, continuing through 2040, with buildout occurring by approximately 2040. Construction activities would be market-driven, and are therefore expected to wax and wane over the course of the expected 20-year buildout timeframe. Table 3.1-11, below, provides the unmitigated and mitigated construction PM_{10} emissions, as modelled within CalEEMod (v.2016.3.2).

TABLE 3.1-11: PM_{10} CONSTRUCTION EMISSIONS

	Unmitigated	*Mitigated*
MBARD Threshold	*≤ 82 lbs/day*	*≤ 82 lbs/day*
Maximum Daily	20.6	10.7
Threshold Exceeded?	**No**	**No**

SOURCES: CALEEMOD (V.2016.3.2)

As shown in Tables 3.1-11, the Specific Plan maximum daily unmitigated emissions during construction of the Plan Area buildout in a single year is not expected to exceed the MBARD threshold of significance (82 pounds per day) for construction-generated PM_{10}. Nevertheless, since it is possible that future development proposed within the Plan Area could involve grading that exceeds 2.2 acres per day, MBARD recommends the implementation of the following mitigation measures.

CONCLUSION

Compliance with pre-existing requisite federal, State, MBARD, and other local regulations and requirements, and with implementation of the mitigation measures provided by the MBARD for construction-related PM_{10} emissions, the proposed project would not cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation, with respect to the construction of the proposed project. As such, construction of the Specific Plan would have a ***less than significant*** impact related to causing a violation of an air quality standard or contributing to an existing or projected air quality violation.

MITIGATION MEASURES

Mitigation Measure 3.1-8*: Prior to the issuance of grading permits, the project applicant shall prepare a grading plan subject to review and approval by the City. In the event that ground-disturbance exceeds 2.2 acres per day for initial site preparation activities that involve extensive earth-moving activities (e.g., grubbing, excavation, rough grading), and 8.1 acres per day for activities that involve minimal earth-moving (e.g., finish grading), the required grading plans shall include the following measures to be implemented as needed to prevent visible dust emissions:*

- *Water all active construction sites to prevent visible dust emissions. Frequency should be based on the type of operation, soil, and wind exposure;*
- *Prohibit grading and earthmoving activities, and cover stock piles, during periods of high wind (over 15 mph);*

- *Limit vehicle speed on construction sites to 15 mph.*
- *Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);*
- *Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area;*
- *Maintain at least 1-foot of freeboard in each haul truck;*
- *Provide windbreaks on the windward perimeter of construction projects where adjacent to open land;*
- *Cover inactive storage piles;*
- *Sweep streets if visible soil material is carried out from the construction site; and/or*
- *Post a publicly visible sign written in English and Spanish which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Air Resources District (MBARD) shall be visible to ensure compliance with Rule 402 (Nuisance). The sign shall be in accordance with MBARD and/or City requirements, as applicable*

Impact 3.1-4: The proposed project has the potential to have carbon monoxide hotspot impacts (Less than Significant)

The Plan Area is located in a State attainment area and a federal attainment-unclassified area for carbon monoxide. Proposed project traffic would increase concentrations of carbon monoxide (CO) along streets and intersections that provide access to the Plan Area. Carbon monoxide is a local pollutant (i.e., high concentrations are normally only found very near sources), and can form local elevated concentrations under specific conditions. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations (i.e., hotspots), therefore, are usually only found near areas of high traffic volume and congestion. Nevertheless, given the limited volume of traffic along nearby affected roadways, intersections, and highway off-ramps (see Section 3.10: Transportation and Circulation for further detail), and given existing environmental conditions, it is highly unlikely that the proposed project would generate a carbon monoxide hotspot of concern (as per phone and email conversations with MBARD Air Quality Planners Alan Romero and David Frisbey on 1/27/2017) (MBARD, 2017).

Several factors combine to make substantial concentrations of carbon monoxide unlikely. Existing physical constraints such as high-density, high-profile buildings or other obstructions that could prevent dispersion of carbon monoxide are largely absent. Predominant weather conditions in the area include air movement that would help facilitate carbon monoxide dispersion. Congested traffic conditions that otherwise could result in concentration of carbon monoxide would be of short duration. Further, under existing regulatory and legislative mandates, emissions volumes from all

vehicles classes will continue to decline. Given these factors, substantial concentrations of carbon monoxide are not expected at or along any affected roadways or intersections.

The MBARD is updating its *CEQA Air Quality Guidelines*. Therefore, the MBARD has recommended that the guidance provided in Section 3.1 of the most recent Caltrans' *SER Air Quality Conformity Analysis Annotated Outline* (last published in 2014) should be used for analysis of this potential impact for the proposed project (MBARD, 2017). ("SER" stands for Standard Environmental Reference.) Section 3.1 of the *SER Air Quality Conformity Analysis Annotated Outline* advises that, if a project is located in an area that is designated attainment-unclassified for CO, no project-level conformity analysis is necessary for CO (Caltrans, 2014).

CONCLUSION

This project is located in an area that is designated attainment-unclassified for carbon monoxide. Therefore, no project-level conformity analysis is necessary for CO. Substantial concentrations of carbon monoxide are not expected at or along any streets or intersections affected by the development of the Plan Area. Impacts associated with carbon monoxide hotspots would be ***less than significant,*** and no additional mitigation is required.

Impact 3.1-5: The proposed project has the potential for public exposure to toxic air contaminants (Less than Significant with Mitigation)

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the State and federal governments have set ambient air quality standards.

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. Environmental Protection Agency (EPA) regulate 188 air toxics, also known as hazardous air pollutants. The U.S. EPA has assessed this expansive list in its latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources. In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment. These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter.

The 2007 EPA rule requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA MOBILE6.2 model, even if vehicle activity (VMT) increases by 145 percent, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050. California maintains stricter standards for clean fuels and emissions compared to the national

standards; therefore it is expected that MSAT trends in California will decrease consistent with or more than the U.S. EPA's national projections.

The CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial, commercial and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to State air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. These mobile source air toxics are largely associated with freeways and high traffic roads. Non-mobile source air toxics are largely associated with industrial and commercial uses. Table 3.1-12 provides the California Air Resources Board minimum separation recommendations on siting sensitive land uses.

TABLE 3.1-12: CARB MINIMUM SEPARATION RECOMMENDATIONS ON SITING SENSITIVE LAND USES

Source Category	*Advisory Recommendations*
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.[1]
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

SOURCES: AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE" (CARB 2005)

The Plan Area is not located adjacent to a rail yard, port, refinery, chrome plater, dry cleaner, or gasoline dispensing facility. The closest gasoline dispensing facility (the Shell-Harden Ranch Gas Station, 1764 N. Main St.) is located approximately 0.13 miles to the southwest of the Plan Area, at its closest point. This gas station is not is unlikely to have a throughput of 3.6 million gallons per year or greater, given its size; therefore, this would not be considered a "large" gas station by the CARB.

The closest dry cleaner (Harden Ranch Dry Cleaners) is located approximately 0.44 miles southwest of the Plan area, at its closest point.

The Plan Area is also located approximately 0.5 miles from Highway 101. Air toxics are considered a concern along Highway 101 because it is a major transportation corridor for large diesel trucks that are known to emit diesel particulates. However, given the distance from the Plan Area, there are no sensitive land uses proposed within the Plan Area that would be significantly affected by Highway 101.

There are sensitive residential land uses located to the south, west, and north of the Plan Area. Additionally, McKinnon Elementary School, which is currently located within the Plan Area and would remain after buildout of the proposed project, is located within the southern portion of the Plan Area. A high school is also under construction north of Rogge Road, north of the Plan Area. There is the potential that sensitive land uses could potentially be affected by the commercial uses within the Plan Area and/or by the potential increase in diesel trucks travel to and from commercial uses within the Plan Area.

The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. The Air Toxics "Hot Spots" Act requires air districts to prioritize facilities to determine which facilities must perform a health risk assessment. These facilities, for purposes of risk assessment, are ranked into high, intermediate, and low priority categories. Each air district is responsible for establishing the prioritization score threshold at which facilities are required to prepare a health risk assessment. In establishing priorities, the air districts are to consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors that the air district determines may indicate that the facility may pose a significant risk.

In order to assist the air districts with this prioritization requirement, the CAPCOA Toxics Committee, in cooperation with the Office of Environmental Health Hazard Assessment and the California Air Resources Board, developed the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990). The purpose of the guideline is to provide air districts with suggested procedures for prioritizing facilities. However, districts may develop and use prioritization methods which differ from the CAPCOA guidelines.

The MBARD prioritizes facilities based on the quantity and toxicity of the emissions, and their proximity to areas where the public may be exposed. Facilities put in the significant risk category are required by the MBARD to prepare a comprehensive, facility-wide health risk assessment. However, the proposed project is a Plan-level document and does not include facility-specific detail that would enable the analysis of the quantity and toxicity of emissions, if any. It is noted, however, that the closest sensitive receptors are located to the west of Village Center portion of the Plan Area, at the existing McKinnon Elementary School, and the residential subdivisions located to the south of the Plan Area. Nevertheless, given that the commercial uses within the Plan area (located within the

proposed Village Center) would be made up of mixed use commercial uses, including a grocery store and a complement of shops, restaurants, residential units, offices, retail, and professional services, it is unlikely significant generation of toxic emissions would occur. The only feasible users/businesses/facilities that are expected to have the potential to generate TACs within the Plan Area are dry cleaners and gas stations. However, perchloroethylene (the primary TAC historically generated by dry cleaners) is currently regulated by the U.S. EPA (under the Clean Air Act), and is also regulated by the State of California; California banned the installation of new perchloroethylene dry cleaning machines in 2007, and perchloroethylene machines are expected to be banned completely in California by 2023. Separately, any gas stations that would be developed within the Plan Area would be small-scale, and would be located adjacent to Boronda Road, within the Village Center land use. Still, until an actual user/business/facility is proposed within the Plan Area, the quantity and toxicity of emissions, and proximity to sensitive receptors, cannot be assessed with any level of certainty.

It should also be noted that there is a lime quarry located approximately 1.2 miles from the northeast edge of the Specific Plan, at its closest point. According to the MBARD, this mine is located a distance far enough away from the new receptors within the Plan Area that risk of toxics from the mine to the Plan area is not of major significance (as per a phone conversation with MBARD Planner David Craft on 2/29/2016) (MBARD, 2016b).

CONCLUSION

Overall, while implementation of the West Area Specific Plan, in and of itself, would not result in an increased exposure of sensitive receptors to localized concentrations of TACs, there is a potential for future commercial business activity, as permitted under the West Area Specific Plan, to result in increased exposure of sensitive receptors to localized concentrations of TACs. The emission sources could be stationary sources and/or mobile source (i.e. diesel truck traffic). Because, at the Specific Plan level of land use planning, the City does not yet know the precise locations, configurations, and sizes of any future land uses within the Specific Plan that uses may generate sufficient levels of TACs to create the possibility of adverse health effects, it is premature, at the Specific Plan stage, to undertake an overall health risk assessment for the Specific Plan. Future health risk assessments will be performed where warranted, as required by Mitigation Measure 3.1-9 below.

The following mitigation measure would ensure that each future business is assessed for TACs in accordance with the requirements of the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990). Implementation of this measure would ensure that impacts related to public exposure to TACs would be ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.1-9: *Prior to issuance of building permits or commencing operation of any commercial building/use that would emit toxic air contaminants (such as gas stations or dry cleaning operations), the project applicant shall, at a minimum, perform prioritization screening in accordance with the Air Toxics "Hot Spots" Program, Facility Prioritization Guidelines (July 1990) and the Air Toxics "Hot Spots" Information and Assessment Act. The prioritization screening shall be*

performed in accordance with the California Air Pollution Control Officers Association Air Toxic "Hot Spots" Program guidance. The prioritization screening shall also be conducted consistent with the guidance provided by the Monterey Bay Air Resources District, which will be responsible for determining which facilities based on their prioritization screening score, must perform a health risk assessment. In determining the need to prepare a health risk assessment, the Monterey Bay Air Resources District considers the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors specific to the facility that indicate that it may pose a significant health risk.

If a health risk assessment is warranted for a facility based on its prioritization score, the project applicant shall assess the facilities for the potential to expose the public to toxic air contaminants in excess of the applicable thresholds (utilizing an air dispersion modelling program such as AERMOD). As of the time of this writing, the commonly accepted threshold for cancer risk is 10 in a million for carcinogens, and the reference exposure level for non-carcinogens (HI = 1). Facilities that exceed the applicable threshold(s) have the potential to expose the public to toxic air contaminants levels that would be considered significant. Facilities that exceed the applicable threshold(s) must incorporate mitigation to reduce the risks from emission of toxic air contaminants to an acceptable level (i.e., to a level that does not exceed the applicable threshold[s]). Potential mitigation includes: reducing the size of the facility area; rearranging the site to reduce the potential for impacts on the nearest sensitive receptors; and utilizing products that reduce the level of toxic air contaminants, or removal of such products from the operational phase of the project.

Impact 3.1-6: The proposed project has the potential for exposure to odors (Less than Significant)

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the MBARD. The general nuisance rule (California Health and Safety Code §41700) and Air District Rule 402 is the basis for the threshold.

Examples of facilities that are known producers of odors include: wastewater treatment facilities, chemical manufacturing, sanitary landfill, fiberglass manufacturing, transfer station, painting/coating operations (e.g. auto body shops), composting facility, food processing facility, petroleum refinery, feed lot/dairy, asphalt batch plant, and rendering plant. None of these facilities are permitted within the Specific Plan Area.

If a project proposes to locate receptors and known odor sources in proximity to each other, further analysis may be warranted. However, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The Specific Plan does not propose sensitive receptors that could be exposed to odors in the vicinity; nor does it propose uses that would create odors that could expose receptors in the area. Air district Rule 402 prohibits any mobile or stationary source generating an objectionable odor, with the exception of odors emanating from certain agricultural operations. The California Health and Safety Code §41700 and Air District Rule 402 prohibit emissions of air contaminants from any source that cause nuisance or annoyance to a considerable number of people or that present a threat to public health or cause

property damage. Compliance with these rules would preclude land uses proposed under the proposed project from emitting objectionable odors.

CONCLUSION

The Specific Plan does not propose sensitive receptors that could be exposed to odors in the vicinity; nor does it propose uses that would create odors that could expose receptors in the area. Therefore, operation of the proposed project would not result in significant objectionable odors. Impacts associated with exposure to odors would be ***less than significant.***

Impact 3.1-7: Cumulative impact on the region's air quality (Cumulatively Considerable and Significant and Unavoidable)

The cumulative setting for this analysis is the North Central Coast Air Basin (NCCAB), which consists of three counties: Santa Cruz County, San Benito County, and Monterey County. This area was chosen both because it forms a logical geographic unit to consider and a logical jurisdictional unit as well. The air basin is bounded by mountains the north and east. San Joaquin Air Basin lies to the east, separated by the Diablo Coastal range, with gaps such as Pacheco Pass. The San Francisco Bay Air Basin lies to the north.

Under buildout conditions within the NCCAB, criteria pollutants would continue to increase and efforts to improve air quality throughout the basin would be hindered. Unfortunately, much of the increase in criteria pollutants in the NCCAB are out of the control of the communities within NCCAB, since criteria pollutants generated in other air basins flow into the NCCAB (including from the San Francisco Bay Area and SFFAB). As described previously in this Section, Monterey County has a State designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. Table 3.1-2 in this section presents the State and federal attainment status for Monterey County.

As discussed under Impact 3.1-2, implementation of the Specific Plan would result in increased emissions primarily from vehicle miles travelled associated with project implementation and area sources. The MBARD has established operations-related emissions thresholds of significance and it was determined that the Specific Plan annual emissions of ROG, NOx, and PM_{10} at full buildout would exceed the MBARD's thresholds of significance for these pollutants, even with mitigation.

The main source of pollution are mobile source emissions for ROG, NOx, and PM_{10}. Area source emissions for ROG are also a major source of pollution resulting in the exceedance.

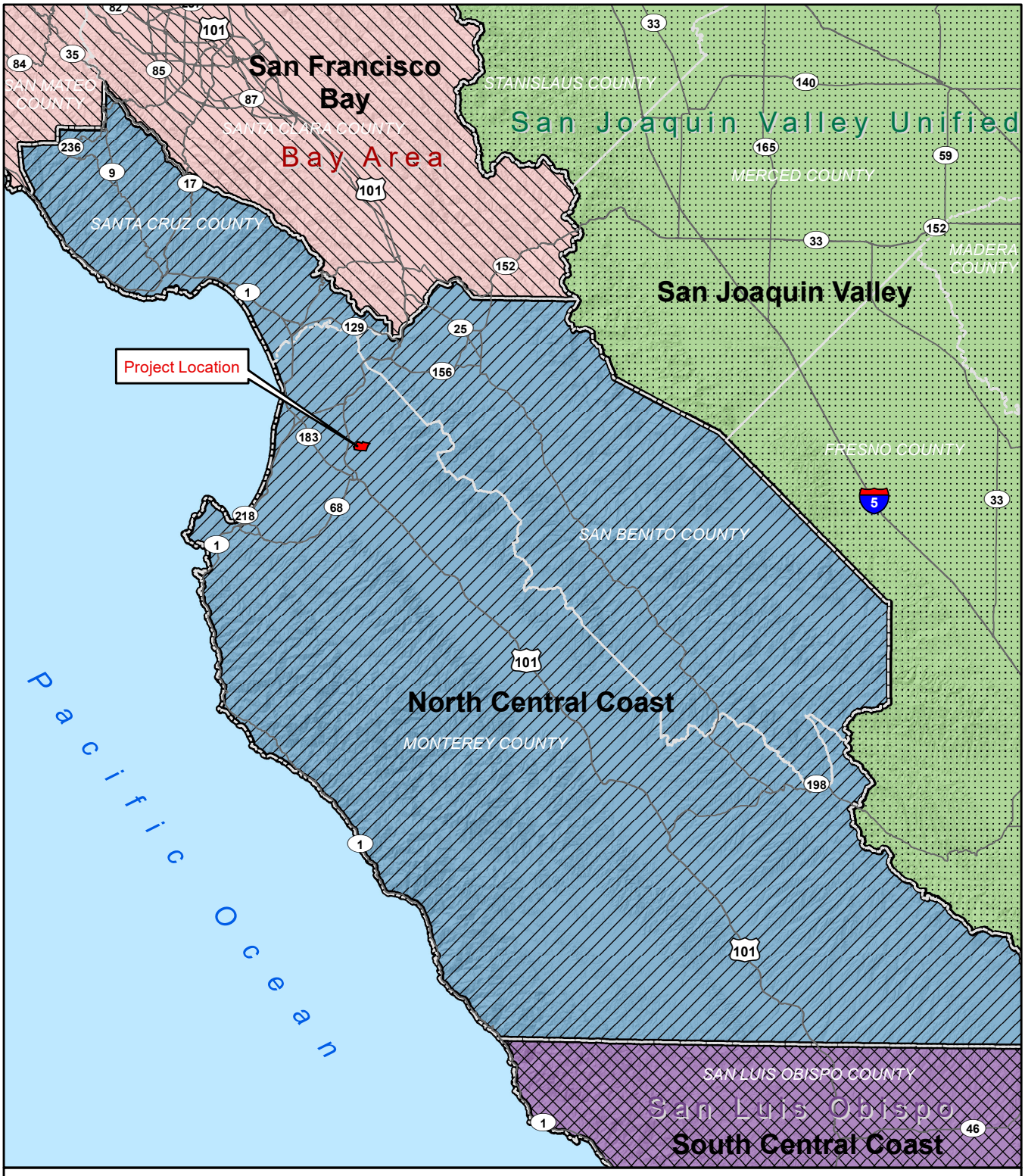
There are limited mitigation inputs available within the California Emission Estimator Model (CalEEMod)™ (v.2016.3.2) to quantify emission reductions for large-scale "plans". As shown in Tables 3.1-9 and 3.1-10, even with mitigation incorporated into the model, the Specific Plan would exceed several of the MBARD thresholds of significance for operations.

CONCLUSION

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD *2012-2015 AQMP*. The mitigation measures provided within this air quality discussion (i.e. throughout the impact analysis provided in Section 3.1: Air Quality) have been designed to be consistent with the mitigation measures provided in the MBARD *CEQA Air Quality Guidelines*, where applicable. As is currently proposed, the Specific Plan is expected to be built out under a staged approach, and all mitigation would be applicable to each stage. However, even with the application of mitigation measures, operational emissions levels would remain above the defined thresholds of significance. Exceedance of the threshold within an area designated as nonattainment would be a cumulatively considerable impact. As such, implementation of the Specific Plan would have a ***cumulatively considerable contribution*** and **a *significant and unavoidable*** impact on the region's air quality.

MITIGATION MEASURES

Implement Mitigation Measures 3.1-1 through 3.1-8.



Legend

County Boundaries

Air District

- BAAQMD
- MBARD
- SJVAPCD
- SLO County APCD

Air Basin

- North Central Coast
- San Francisco Bay
- San Joaquin Valley
- South Central Coast

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.1-1: Map of Air Basins And Districts

0 5 10
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Sources: California Environmental Protection Agencey Air Resources Board; CalAtlas. Map date: February 24, 2016.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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This section describes the regulatory setting, regional biological resources, and impacts that are likely to result from project implementation. This section is based in part on the following documents, reports and studies: *City of Salinas General Plan* (City of Salinas, 2002), *Final Environmental Impact Report, Salinas General Plan* (City of Salinas, 2002), *Salinas Annexation Project, Salinas, California – Existing Biological Resources Report* (Biotic Resources Group, 2005), and *Web Soil Survey* (NRCS, 2019). The field surveys and habitat evaluations that have been completed for the project are discussed in detail below.

The documents listed above are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at the offices of the City of Salinas Community Development Department at 65 West Alisal Street, Salinas, California 93901.

No comments were received during the public review period for the Notice of Preparation regarding environmental impacts associated with biological resources.

Methods

PREVIOUS INVESTIGATIONS

Field surveys and habitat evaluations were performed in 2004 by Biotic Resources Group: March (26th and 31st), April (14th and 30th), May (17th), June (17th), July (26th). These field investigations were performed in the study area to establish the existing conditions. This included identification of the habitat types, hydrologic features, topography, soil characteristics, vegetation. Field investigations were performed during the floristic period for species in the region. Field investigations also inspected for the presence, or potential for presence of wildlife. The area was inspected for its upland and aquatic habitat functions. The field investigations coincided with the optimal period for observing nesting birds, breeding amphibians, and active reptiles. The site was also examined for evidence of scat and tracks of mammals.

RECENT INVESTIGATIONS

Following the previous investigations by Biotic Resources Group in 2004, the project was placed on hold. In 2015, the investigations were reinitiated by De Novo Planning Group. Additional field surveys were performed by De Novo Planning Group's staff biologist, Steve McMurtry, in 2015 (September 11th) and in 2016 (April 18th). The surveys served several purposes. First, they served as reconnaissance of the site to establish the existing conditions of the site and to verify information gathered in the pre-field investigation and from previous investigations. This included identification of the habitat types, hydrologic features, topography, soil characteristics, vegetation. Field investigations were performed during the floristic period for species in the region. Field investigations were performed on foot using transects. Habitat was recorded, and the Plan Area was inspected for the presence, or potential for presence of wildlife. The site was also examined for evidence of scat and tracks of mammals.

PRE-FIELD INVESTIGATION

Prior to the field investigation, numerous maps, databases, and reports were reviewed including:

- U.S. Geological Survey (USGS) 7.5-minute Quadrangle
- USGS National Hydrography Data Set
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps
- National Resource Conservation Service (NRCS) Soil Survey
- California Wildlife Habitat Relationships (CWHR) maps
- California Natural Diversity Database (CNDDB)
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants
- U.S. Fish and Wildlife Service's (USFWS) IPac
- U.S. Fish and Wildlife Service's (USFWS) Official List

Field Tools/Equipment

Tools used during the field investigations included a Trimble GeoExplorer XH Handheld (sub-foot unit), 30-meter tape measure, diameter tape, spade, Munsell color chart, Vortex 20-60x80 spotting scope, and Bushnell 10x42 binoculars.

3.2.1 ENVIRONMENTAL SETTING

GEOMORPHIC PROVINCE AND BIOREGION

The City of Salinas is located in the middle portion of the Coast Range Geomorphic Province of California. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. The geologic strata dips beneath alluvium of the Great Valley to the east. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The City of Salinas lies within the southern range.

As shown in Figure 3.2-1, the City of Salinas is located in the northern portion of the Central Coast Bioregion. This Bioregion includes marine, freshwater, and terrestrial resources from the Santa Cruz Mountains on the north to Point Conception on the south. The edge of the continental shelf forms the western boundary; on the east the region borders the Central Valley Bioregion.[1]

The Central Coast Bioregion has a wide variety of habitats and vegetation, including coastal prairie scrub, chaparral, mixed hardwoods, oak woodlands, and redwood forests, among many other habitats. The climate in this Bioregion doesn't vary much with the seasons. The northern portion, and more coastal areas, experience relatively cool, often foggy summers, mild falls, and chilly, rainy winters. The southern and inland portions of this Bioregion have hot, dry summers and warm autumns that are followed by mild, wet winters. Snowfall is rare.

[1] USGS Western Ecological Research Center. 2016. Available: <http://www.werc.usgs.gov/researchtopicpage.aspx?id=20#5>

LOCAL SETTING

Location

The Specific Plan Area is located within the City of Salinas incorporated limits. It is bounded by San Juan Grade Road on the west, East Boronda Road (herein referred to as "Boronda Road") on the south, Natividad Road on the east, and Rogge Road and the future extension of Russell Road on the north. Gabilan Creek is located east of the Specific Plan Area, while U.S. Highway 101 (U.S. 101) and North Main Street are located to the west.

Topography

The topography of the Specific Plan Area is nearly flat, with little change in elevation. The overall slope from northeast to southwest is approximately 0.3%, and there are no natural streams or water bodies present on-site. Elevation ranges from approximately 103 to 156 feet above mean sea level.

Climate

The Salinas Valley is oriented northwest-southeast and is parallel to the Pacific Coast. The proximity of the ocean to the open valley mouth, along with prevailing northwesterly winds, tend to give Salinas a moderate climate year-round. The average temperature is 68.2 degrees Fahrenheit, with summer temperatures in the 70-degree range, dipping at night into the 50-degree range. Winter temperatures are generally in the low 60-degree range, dropping at night into the middle 30-degree range.

Rainfall in the project area and contributing watershed is relatively uniform across the area. Average annual rainfall is calculated to be approximately 15.5 to 16.1 inches. Average rainfall depths have been estimated to be 2.4 to 2.5 inches for the 10-year, 24-hour event and 4.0 to 4.2 inches for the 100-year, 24-hour event.

Existing Uses

The Specific Plan Area is currently being farmed and contains limited development. Most agricultural activity on-site and in the immediate vicinity has consisted of cultivation of various types of row crops. The site has been heavily disturbed for years from agricultural practices. Urban development consists of McKinnon Elementary School, which is part of the Santa Rita Union School District. McKinnon Elementary is located in the southern portion of the Specific Plan Area, near the intersection of Boronda Road and McKinnon Street. A high school, which is part of the Salinas Union High School District is currently under construction on Rogge Road located in the northern portion of the site. A few residences and farm structures are clustered within the eastern portion of the Specific Plan Area, adjacent to Natividad Road. Other residences with accessory farm structures are located in the northern portion, adjacent to Rogge Road, and in the western portion, near the intersection of San Juan Grade Road and Boronda Road.

In addition, there is evidence of structures or development that formerly existed on-site. An area of bare ground is located near Natividad Road that could have served as a location for activities associated with agricultural operations. Along San Juan Grade Road in the western portion is an

area of bare ground with some trees along its northern edge. This was likely at one time the location of a residence that no longer exists.

Existing infrastructure is currently located along Boronda Road, including water, sewer, electricity (12kV underground primary line), storm drainage, and dry utilities. PG&E also operates a 60kV overhead power line transmission (easement), which runs generally in a north/south direction through the Specific Plan Area.

Surrounding Uses

North: The Bolsa Knolls residential area is located to the north of the Specific Plan Area, on the northeastern corner of the intersection of Russell Road and San Juan Grade Road. Scattered residences and other non-residential uses are also located along Rogge Road to the north. Further to the north is a mix of agricultural land, rural residences, and the Club at Crazy Horse Ranch formerly known as the Salinas Golf and Country Club. These land uses are all located in the unincorporated area of Monterey County.

East: Land to the east of the Specific Plan Area is currently used primarily for agricultural production and is zoned New Urbanism Interim (NI) with a Specific Plan Overlay District. This area is located in the North of Boronda Future Growth Area (FGA) and a specific plan (referred to as the Central Area Specific Plan has been submitted to the City and is currently being processed for this area. The Central Area Specific Plan proposes a mix of urban land uses, similar to those proposed for the West Area Specific Plan.

South: Across Boronda Road directly to the south is the Harden Ranch Specific Plan Area. The portion of the Harden Ranch Specific Plan Area which abuts the Specific Plan Area is primarily residential. Most of the residences are of the type associated with low density residential uses, mainly single-family detached homes. However, some medium density and high density (apartment) units are located in this area as well. These residential uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density), and R-H-1.8 (Residential High Density). Single-family detached homes (zoned R-L 5.5) are also located to the southeast of the Specific Plan Area (east of Natividad Road). Other land uses in the Harden Ranch Specific Plan Area include a commercial shopping center (Shaker Square) located at the southwest corner of Natividad Road and Boronda Road, which is zoned CR (Commercial Retail), and the New Republic Elementary School (Santa Rita Union School District), which is zoned PS (Public/Semipublic). Extensive commercial development is located generally west and southwest of the Specific Plan Area, along both North Main Street and U.S. 101. This is the location of some of the major retail centers in Salinas, including the Northridge Shopping Center, Santa Rita Shopping Center and Harden Ranch Plaza. These areas are zoned CR. Also to the southwest of the Plan Area at the corner northeast of San Juan Grade Road and Boronda Road is the Gateway Center Specific Plan, zoned CR with a Specific Plan overlay (CR-SP-8).

West: The area directly to the west is residential consisting of low, medium and high density residential uses. These uses are zoned R-L-5.5, R-M-2.9, and R-H-2.1. Also located farther to the west is Santa Rita Elementary School (Santa Rita Union School District) which is zoned PS.

Vegetation

The Specific Plan Area primarily consists of vacant farm fields that have been leveled for agricultural use. This area is currently being farmed and contains limited development. Most agricultural activity on-site and in the immediate vicinity has consisted of cultivation of various types of row crops, with strawberries and lettuce being the most prevalent. Non-cultivated portions of the Specific Plan Area are vegetated with various non-native annual grassland species, such as oats (*Avena* sp.), soft chess brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), foxtail barley (*Hordeum murinum*), Bermuda grass (*Cynodon dactylon*), perennial ryegrass (*Lolium perenne*), fiddleneck (*Amsinckia menziesii*), black mustard (*Brassica nigra*), bull thistle (*Cirsium vulgare*), prickly lettuce (*Lactuca serriola*), pigweed (*Amaranthus albus*), dove weed (*Eremocarpus setigerus*), common mallow (*Malva neglecta*) and filaree (*Erodium botrys*).

There are a few trees located in the Specific Plan Area. All of the on-site trees are non-native landscape trees located in the western portion of the Specific Plan Area along San Juan Grade Road. A few scattered trees are located near the residence southeast of the San Juan Grade Road and Van Buren Avenue intersection, and a few are located further north at another private residence on San Juan Grade Road. The species of these trees are eucalyptus (*Eucalyptus* sp.) and other ornamental species types.

Wildlife

A limited number of wildlife species were observed during field surveys of the Specific Plan Area. The wildlife observations are shown in Figure 3.2-2. California horned lark (*Eremophila alpestris actia*) was observed on-site, and Yellow warbler (*Dendroica petechia*) was observed near Gabilan Creek, east of the Specific Plan Area.

Some of the more common birds found in the vicinity of the Specific Plan Area include: red-tailed hawk (*Buteo jamaicensis*), yellow-billed magpie (*Pica nuttalli*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), western scrub jay (*Aphelocoma coerulescens*) red-winged blackbird (*Agelaius phoeniceus*), killdeer (*Charadrius vociferous*), and yellow warbler (*Dendroica petechia*). Some of the more common mammals found in the vicinity include: ornate shrew (*Sorex ornatus*), pocket gopher (*Thomomys bottae*), western harvest mouse (*Reithrodontomys megalottis*), California meadow vole (*Peromyscus maniculatus*), California ground squirrel (*Spermophilus beecheyi*), black-tailed hare (*Lepus californicus*), American badger (*Taxidea taxus*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), fed fox (*Vulpes fulva*), raccoon (*Procyon lotor*). Some of the more common amphibians and reptiles in the vicinity include: coast horned lizard (*Phrynosoma coronatum*), western toad (*Bufo boreas*), common king snake (*Lampropeltis getulus*), gopher snake (*Pituophis melanoleucus*), and common garter snake (*Thamnophis sirtalis*).

Plant Communities

Agricultural and natural plant communities provide habitat for a variety of biological resources in the region. Sensitive habitats include those that are of special concern to resource agencies or those that are protected under a Habitat Conservation Plan, Natural Community Conservation Plan, the California Environmental Quality Act (CEQA), the Fish and Game Code, or the Clean Water Act

(CWA). Additionally, sensitive habitats are usually protected under specific policies from local agencies. Below is a brief description of the communities found in the Specific Plan Area. Figure 3.2-3 illustrates the plant communities in the Specific Plan Area (including agricultural fields, developed areas, landscape trees, and pond).

AGRICULTURAL FIELDS

Cropland: Croplands are established on the State's most fertile soils, which historically supported an abundance of wildlife unequalled in other sites. Croplands have greatly reduced the wildlife richness and diversity of California. Many species of rodents and birds have adapted to croplands and are controlled by fencing, trapping, and poisoning to prevent excessive crop losses (California Department of Food and Agriculture 1975). Croplands flooded for weed control, leaching, irrigation, or waterfowl hunting serve as freshwater wetlands for a variety of associated wetland wildlife, including shorebirds, wading birds, and gulls. Croplands are located on flat to gently rolling terrain. When flat terrain is put into crop production, it usually is leveled to facilitate irrigation. Rolling terrain is either dry farmed or irrigated by sprinklers. Soils often dictate the crops grown. Cropland habitat is a large portion of the Specific Plan Area.

Annual Grassland (Field Margins): Annual Grassland habitats are open grasslands composed primarily of annual plant species. Many wildlife species use Annual Grasslands for foraging, but some require special habitat features such as cliffs, caves, ponds, or habitats with woody plants for breeding, resting, and escape cover. Annual Grassland habitats are very sparse throughout the Specific Plan Area, only a few small areas are located along the edge/fringe of the cropland in areas that are not cultivated.

Barren: Barren habitat may be found in juxtaposition with many different habitats, depending on the region of the State. Where there is little or no vegetation, structure of the non-vegetated substrate becomes a critical component of the habitat. The physical settings for barren habitat represent extreme environments for vegetation or disturbance. Constant disturbance by either human or natural forces can contribute to a habitat being inhospitable to plants. Barren habitat is very sparse throughout the Specific Plan Area; only a few small areas are located along the farm roads and edge/fringe of the cropland in areas that are not cultivated. Some of the edge/fringe areas transition from annual grassland to barren depending on the frequency of disturbance.

DEVELOPED AREAS

Developed: Development has occurred within or adjacent to most other habitats in California, with the highest density at lower elevations. The majority of urban development exceeding 10,000 in population were developed in grassland or scrub (coastal sagebrush or chaparral) vegetation. Three urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. A heavily-developed downtown is usually at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover and is progressively increased toward the outer edge of urbanization. The urban residential zone is characterized by a denser and more varied mosaic of vegetation shade trees, lawns, hedges and planted gardens; approximately 40 percent of the land's surface is covered by impervious material.

Urban habitats surround the Specific Plan Area to the south and west, with very limited urban development within the Specific Plan Area.

Landscape Trees (Eucalyptus and others): Eucalyptus and other landscape trees generally adjoin a number of other wildlife habitats and are found at low elevations, where freezing is not a problem. Most eucalyptus and other landscape trees have been artificially established, usually in and around urban/rural areas. Characteristic species of this habitat include crow, raven, barn owl, red-tailed, and red-shouldered hawks. Landscape trees are important as roosts, perches, and nest sites for a number of bird species, particularly raptors. Eucalyptus bark and litter create micro habitats for a number of small vertebrate species, including alligator lizard, gopher snake, and woodrat. Eucalyptus habitats are not very prevalent within the Specific Plan Area, with one small location on the upper west portion of the Specific Plan Area.

OTHER

Pond (dry): There is an area located near the intersection of Natividad Road and Rogge Road that had a dry pond during previous surveys. The most recent surveys show that this dry pond is no longer present. Aerial photos show that the dry pond was converted back to agricultural use sometime around 2004 to 2005. This area has been farmed ever since.

Soils

The U.S. Department of Agriculture (USDA)/Natural Resource Conservation Service (NRCS) Web Soil Survey indicates the presence of five soil types occurring within the Specific Plan Area. Table 3.2-1 identifies the soils found in the Specific Plan Area.

TABLE 3.2-1: USDA SOIL SERIES INFORMATION

UNIT SYMBOL	*NAME*	*PERCENT OF AOI*
AsA	Arroyo Seco gravelly sandy loam, 0 to 2 percent slopes	3.0%
AvA	Arroyo Seco gravelly loam, 0 to 2 percent slopes	1.5%
CbA	Chualar loam, 0 to 2 percent slopes	80.4%
CbB	Chualar loam, 2 to 5 percent slopes	6.7%
PnA	Placentia sandy loam, 0 to 2 percent slopes, MLRA 14	8.4%

SOURCE: NRCS WEB SOIL SURVEY, 2019.

Arroyo Seco series. This series consists of well-drained soils on nearly level to moderately sloping floodplains and alluvial fans at elevations of 100 to 3,000 feet. The soils formed in alluvium dominantly from granitic sources, but include alluvium from schist, gneiss, sandstone, and siliceous shale. Slopes range from 0 to 2 percent. This series is characterized as having slow to medium runoff and moderately rapid permeability.

Chualar series. This series consists of well-drained soils on terraces and fans of the coastal areas. The soils formed in alluvial material from mixed rock source. Slopes range from 0 to 9 percent. This series is characterized as having slow to medium runoff and moderately slow permeability.

Placentia series. This series consists of well or moderately well drained soils on fans and terraces at elevations of 50 to 2,500 feet. The soils formed in alluvium from granite and other rocks of similar

composition and texture. This series is characterized as having slow to rapid runoff and very slow permeability.

Hydrogeomorphic Features

The City of Salinas is located in the Lower Salinas River Watershed. The Lower Salinas River Watershed area is characterized by both ephemeral and perennial stream reaches. The City's storm drainage system conveys runoff to the following major receiving waters: Reclamation Ditch, Carr Lake, Gabilan Creek, Natividad Creek, Santa Rita Creek, Markley Swamp, and Salinas River. Natividad Creek and Gabilan Creek originate north of the City, then flow south through the City and drain to the Carr Lake area. At Carr Lake, both Gabilan and Natividad Creeks are tributaries to the Reclamation Ditch. During major storms with high backwater in the Reclamation Ditch, these creeks overflow at their downstream end and inundate large areas of Carr Lake.

The Reclamation Ditch is a major drainage channel that flows from east to west through the City. Most of the City drains to the Reclamation Ditch, which was constructed in 1917 following formation of Reclamation District No. 1665. Carr Lake is a dry lakebed on the Reclamation Ditch that now functions as detention storage for the ditch during winter rainy periods.

There are numerous hydrogeomorphic features in the regional vicinity of the Specific Plan Area, but none are located on-site (see Figure 3.2-4). As noted previously, there is an area located near the intersection of Natividad Road and Rogge Road that had a dry pond during previous surveys. The most recent surveys show that this dry pond is no longer present. Aerial photos show that the dry pond was converted back to agricultural use sometime around 2004 to 2005. This area has been farmed ever since.

SPECIAL-STATUS SPECIES

The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants, and the U.S. Fish and Wildlife Service's (USFWS) endangered and threatened species lists. The background search was regional in scope and focused on the documented occurrences within a nine-quadrangle area (U.S. Geological Survey [USGS] 7.5-minute quadrangle maps). Table 3.2-2 provides a list of special-status plants and Table 3.2-3 provides a list of special-status animals that are found in the regional vicinity. Figure 3.2-5 shows the CNDDB occurrences within one mile of the Specific Plan Area, and Figure 3.2-6 shows all occurrences within the nine-quadrangle area.

TABLE 3.2-2: SPECIAL-STATUS PLANT SPECIES WHICH MAY OCCUR IN SPECIFIC PLAN AREA

SPECIES	*STATUS (FED./CA/CNPS)*	*GEOGRAPHIC DISTRIBUTION (COUNTIES)*	*HABITAT*	*BLOOMING PERIOD*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Hickman's Onion *Allium hickmanii*	--/--/1B.2	Monterey, San Luis Obispo	Closed-cone coniferous forest, chaparral, coastal scrub, coastal prairie, cismontane woodland. Sandy loam, damp ground and vernal swales; mostly in grassland though can be associated with chaparral or woodland. 5-200 m.	March-May	Specific Plan Area does not provide suitable habitat.
Toro manzanita *Arctostaphylos montereyensis*	--/--/1B.2	Monterey	Chaparral, cismontane woodland, coastal scrub. Sandy soil, usually with chaparral associates. 45-765 m.	Feb-Mar	Specific Plan Area does not provide suitable habitat.
Hooker's manzanita *Arctostaphylos hookeri ssp. hookeri*	--/--/1B.2	Monterey, Santa Cruz	Chaparral, coastal scrub, closed-cone coniferous forest, cismontane woodland. Sandy soils, sandy shales, sandstone outcrops. 30-550 m.	Jan-June	Specific Plan Area does not provide suitable habitat.
Pajaro manzanita *Arctostaphylos pajaroensis*	--/--/1B.1	Monterey, San Benito, Santa Cruz	Closed-cone coniferous forest, maritime chaparral, coastal scrub, coastal dunes. Sandy soils. 30-155 m.	Dec-March	Specific Plan Area does not provide suitable habitat.
Alkali milk-vetch *Astragalus tener var. tener*	--/--/1B.2	Alameda, Contra Costa, Merced, Monterey, Napa, San Benito, Santa Clara, San Francisco, San Joaquin. Solano, Sonoma, Stanislaus, Yolo	Alkali playa, valley and foothill grassland, vernal pools. Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-168 m.	March-June	Specific Plan Area does not provide suitable habitat.
San Joaquin saltbrush *Atriplex joaquiniana*	--/--/1B.2	Alameda, Contra Costa, Colusa, Fresno, Glenn, Merced, Monterey, Napa, San Benito, Santa Clara, San Joaquin, San Luis Obispo, Solano, Tulare, Yolo	Alkali grassland and alkali meadow, or on the margins of alkali scrub. Occurs on clay soils, often in areas of high alkalinity. 0-322 m.	April-October	Specific Plan Area does not provide suitable habitat.
Congdon's tarplant *Centromadia parryi ssp. congdonii*	--/--/1B.1	Alameda, Contra Costa, Monterey, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo, Solano	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 0-230 m.	May-November	Specific Plan Area does not provide suitable habitat.
Monterey spineflower *Chorizanthe pungens var. pungens*	T/--/1B.2	Monterey, Santa Cruz, San Luis Obispo	Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Sandy soils in coastal dunes or more inland within chaparral or other habitats. 0-170 m.	April-August	Specific Plan Area does not provide suitable habitat.
Robust spineflower *Chorizanthe robusta var. robusta*	E/--/1B.1	Alameda, Monterey, Marin, Santa Clara, Santa Cruz, San Francisco, San Mateo	Cismontane woodland, coastal dunes, coastal scrub, chaparral. Sandy terraces and bluffs or in loose sand. 9-245 m.	April-Sept	Specific Plan Area does not provide suitable habitat.
Contra Costa goldfields *Lasthenia conjugens*	E/--/1B.1	Alameda, Contra Costa, Mendocino, Monterey, Marin, Napa, Santa Barbara, Santa Clara, Solano, Sonoma	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland. Vernal pools, swales, low depressions, in open grassy areas. 1-450 m.	March-June	Specific Plan Area does not provide suitable habitat.
Marsh microseris *Microseris paludosa*	--/--/1B.2	Mendocino, Monterey, Marin, San Benito, Santa Cruz, San Francisco, San Luis Obispo, San Mateo, Solano, Sonoma	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 3-610 m.	April-July	Specific Plan Area does not provide suitable habitat.

SPECIES	STATUS (FED./CA/CNPS)	GEOGRAPHIC DISTRIBUTION (COUNTIES)	HABITAT	BLOOMING PERIOD	POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA
Yadon's rein orchid *Piperia yadonii*	E/--/1B.1	Monterey	Closed-cone coniferous forest, chaparral, coastal bluff scrub. On sandstone and sandy soil, but poorly drained and often dry. 10-505 m.	Feb-August	Specific Plan Area does not provide suitable habitat.
Santa Cruz clover *Trifolium buckwestiorum*	--/--/1B.1	Mendocino, Monterey, Santa Cruz, Sonoma	Coastal prairie, broad-leafed upland forest, cismontane woodland. Moist grassland. Gravelly margins. 30-550 m.	April-October	Specific Plan Area does not provide suitable habitat.
Saline clover *Trifolium depauperatum var. hydrophylum*	--/--/1B.2	Alameda, Contra Costa, Colusa, Lake, Monterey, Napa, Sacramento, San Benito, Santa Clara, Santa Cruz, San Joaquin, San Luis Obispo, San Mateo, Solano, Sonoma, Yolo	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 m.	April-June	Specific Plan Area does not provide suitable habitat.
Pacific Grove clover *Trifolium polyodon*	--/R/1B.1	Monterey	Closed-cone coniferous forest, meadows and seeps, coastal prairie, valley and foothill grassland. Along small springs and seeps in grassy openings. 5-260 m.	April-Jul	Specific Plan Area does not provide suitable habitat.
Monterey Pine *Pinus radiate*	--/--/1B.1	Monterey, Santa Cruz, San Luis Obispo, San Mateo	Closed-cone coniferous forest, cismontane woodland. Three primary stands are native to California. Dry bluffs and slopes. 60-125 m.	N/A	Specific Plan Area does not provide suitable habitat.
Eastwood's goldenbush *Ericameria fasciculate*	--/--/1B.1	Monterey	Closed-cone coniferous forest, chaparral (maritime), coastal scrub, coastal dunes. In sandy openings. 30-215 m.	July-October	Specific Plan Area does not provide suitable habitat.
Seaside bird's-beak *Cordylanthus rigidus ssp. Littoralis*	--/E/1B.1	Monterey, Santa Barbara	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes. Sandy, often disturbed sites, usually within chaparral or coastal scrub. 30-520 m.	April-October	Specific Plan Area does not provide suitable habitat.
Kellogg's horkelia *Horkelia cuneata var. sericea*	--/--/1B.1	Alameda, Monterey, Marin, Santa Barbara, Santa Cruz, San Francisco, San Luis Obispo, San Mateo	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m.	April-September	Specific Plan Area does not provide suitable habitat
Pink Johnny-nip *Castilleja ambigua var. insalutata*	--/--/1B.1	Monterey, San Luis Obispo	Coastal bluff scrub, coastal prairie. 0-100 m.	May-August	Specific Plan Area does not provide suitable habitat
legenere *Legenere limosa*	--/--/1B.1	Alameda, Lake, Monterey, Napa, Placer, Sacramento, Santa Clara, Shasta, San Joaquin, San Mateo, Solano, Sonoma, Stanislaus, Tehama, Yuba	Vernal pools. In beds of vernal pools. 1-880 m.	April-June	Specific Plan Area does not provide suitable habitat.
Menzies' wallflower *Erysimum menziesii*	E/E/1B.1	Humboldt, Mendocino, Monterey	Coastal dunes. Localized on dunes and coastal strand. 1-25 m.	March-September	Specific Plan Area does not provide suitable habitat.
Oregon meconella *Meconella oregaa*	--/--/1B.1	Contra Costa, Monterey, Santa Clara, San Luis Obispo	Coastal prairie, coastal scrub. Open, moist places. 60-640 m.	March-April	Specific Plan Area does not provide suitable habitat.
Vernal pool bent grass *Agrostis lacuna-vernalis*	--/--/1B.1	Monterey	Vernal pools. In mima mound areas or on the margins of vernal pools. 125-150 m.	April-May	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED./CA/CNPS)*	*GEOGRAPHIC DISTRIBUTION (COUNTIES)*	*HABITAT*	*BLOOMING PERIOD*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
San Francisco popcornflower *Plagiobothrys diffusus*	--/E/1B.1	Alameda, San Benito, Santa Cruz, San Francisco, San Mateo	Valley and foothill grassland, coastal prairie. Historically from grassy slopes with marine influence. 45-360 m.	March-June	Specific Plan Area does not provide suitable habitat.
Sandmat manzanita *Arctostaphylos pumila*	--/--/1B.2	Monterey	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal dunes, coastal scrub. On sandy soil with other chaparral associates. 3-210 m.	February-May	Specific Plan Area does not provide suitable habitat
Toro manzanita *Arctostaphylos montereyensis*	--/--/1B.2	Monterey	Chaparral, cismontane woodland, coastal scrub. Sandy soil, usually with chaparral associates. 45-765 m.	February-March	Specific Plan Area does not provide suitable habitat.
Hospital Canyon larkspur *Delphinium californicum ssp. Interius*	--/--/1B.2	Alameda, Contra Costa, Merced, Monterey, San Benito, Santa Clara, San Joaquin, Stanislaus	Cismontane woodland, chaparral, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. 195-1095 m.	April-June	Specific Plan Area does not provide suitable habitat.
Fragrant fritillary *Fritillaria liliacea*	--/--/1B.2	Alameda, Contra Costa, Monterey, Marin, San Benito, Santa Clara, San Francisco, San Mateo, Solano, Sonoma	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. 3-400 m.	February-April	Specific Plan Area does not provide suitable habitat.
Jolon clarkia *Clarkia jolonensis*	--/--/1B.2	Monterey	Cismontane woodland, chaparral, coastal scrub, riparian woodland. 10-1280 m.	April-June	Specific Plan Area does not provide suitable habitat.
Sand-loving wallflower *Erysimum ammophilum*	--/--/1B.2	Monterey, Santa Barbara, Santa Cruz, San Miguel Island, San Mateo	Chaparral (maritime), coastal dunes, coastal scrub. Sandy openings. 5-130 m.	February-June	Specific Plan Area does not provide suitable habitat.
Northern curly-leaved monardella *Monardella sinuata ssp. Nigrescens*	--/--/1B.2	Monterey, Marin, Santa Cruz, San Francisco	Coastal dunes, coastal scrub, chaparral, lower montane coniferous forest. Sandy soils. 10-245 m.	Apr-Sept	Specific Plan Area does not provide suitable habitat.
Monterey gilia *Gilia tenuiflora ssp. Arenaria*	E/T/1B.2	Monterey, Santa Cruz	Coastal dunes, coastal scrub, chaparral (maritime), cismontane woodland. Sandy openings in bare, wind-sheltered areas. Often near dune summit or in the hind dunes; two records from Pleistocene inland dunes. 5-245 m.	April-June	Specific Plan Area does not provide suitable habitat.
Woodland woollythreads *Monolopia gracilens*	--/--/1B.2	Alameda, Contra Costa, Monterey, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo	Chaparral, valley and foothill grassland, cismontane woodland, broad-leafed upland forest, North Coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns, but may have only weak affinity to serpentine. 120-975 m.	Feb-Jul	Specific Plan Area does not provide suitable habitat.
Pine rose *Rosa pinetorum*	--/--/1B.2	Monterey, Santa Cruz	Closed-cone coniferous forest, cismontane woodland. 5-1090 m.	May-July	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED./CA/CNPS)*	*GEOGRAPHIC DISTRIBUTION (COUNTIES)*	*HABITAT*	*BLOOMING PERIOD*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Carmel Valley bush-mallow *Malacothamnus palmeri var. involucratus*	--/--/1B.2	Monterey, San Luis Obispo	Cismontane woodland, chaparral, coastal scrub. Talus hilltops and slopes, sometimes on serpentine. Fire dependent. 5-520 m.	April-October	Specific Plan Area does not provide suitable habitat.
Carmel Valley malacothrix *Malacothrix saxatilis var. arachnoidea*	--/--/1B.2	Monterey, Santa Barbara, San Benito, San Luis Obispo	Chaparral, coastal scrub. Rock outcrops or steep rocky roadcuts. 30-1040 m.	Mar-Dec	Specific Plan Area does not provide suitable habitat.
Fort Ord spineflower *Chorizanthe minutiflora*	--/--/1B.2	Monterey	Coastal scrub, chaparral (maritime). Sandy, openings. 60-145 m.	April-June	Specific Plan Area does not provide suitable habitat.
Point Reyes horkelia *Horkelia marinensis*	--/--/1B.2	Mendocino, Monterey, Marin, Santa Cruz, San Mateo, Sonoma	Coastal dunes, coastal prairie, coastal scrub. Sandy flats and dunes near coast; in grassland or scrub plant communities. 2-775 m.	May-September	Specific Plan Area does not provide suitable habitat.
Hutchinson's larkspur *Delphinium hutchinsoniae*	--/--/1B.2	Monterey	Broadleafed upland forest, chaparral, coastal prairie, coastal scrub. On semi-shaded, slightly moist slopes, usually west-facing. 15-535 m.	March-June	Specific Plan Area does not provide suitable habitat.
Round-leaved filaree *California macrophylla*	--/--/1B.2	Alameda, Butte, Contra Costa, Colusa, Fresno, Glenn, Kings, Kern, Lake, Los Angeles, Merced, Monterey, Napa, Riverside, Santa Barbara, San Benito, Santa Clara, Santa Catalina Island, Santa Cruz Island, San Diego, San Joaquin, San Luis Obispo, San Mateo, Solano, Sonoma, Stanislaus, Tehama, Tulare, Ventura, Yolo	Cismontane woodland, valley and foothill grassland. Clay soils. 30-1345 m.	March-May	Specific Plan Area does not provide suitable habitat.
Choris' popcornflower *Plagiobothrys chorisianus var. chorisianus*	--/--/1B.2	Alameda, Monterey, Santa Clara, Santa Cruz, San Francisco, San Mateo	Chaparral, coastal scrub, coastal prairie. Mesic sites. 2-705 m.	March-June	Specific Plan Area does not provide suitable habitat.
Santa Cruz microseris *Stebbinsoseris decipiens*	--/--/1B.2	Monterey, Marin, Santa Cruz, San Francisco, San Mateo	Broadleafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Open areas in loose or disturbed soil, usually derived from sandstone, shale or serpentine, on seaward slopes. 90-750 m.	April-May	Specific Plan Area does not provide suitable habitat.
Pinnacles buckwheat *Eriogonum nortonii*	--/--/1B.3	Monterey, San Benito	Chaparral, valley and foothill grassland. Sandy soils; often on recent burns; western Santa Lucias. 90-975 m.	Apr-Sep	Specific Plan Area does not provide suitable habitat.
Umbrella larkspur *Delphinium umbraculorum*	--/--/1B.3	Kern, Monterey, Santa Barbara, San Luis Obispo, Ventura	Cismontane woodland, chaparral. Mesic sites. 215-2075 m.	April-June	Specific Plan Area does not provide suitable habitat.

NOTES:
FEDERAL
E = ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
STATE
E = ENDANGERED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL CALIFORNIA ENDANGERED SPECIES ACT.
R = RARE UNDER THE CALIFORNIA ENDANGERED SPECIES ACT

CALIFORNIA NATIVE PLANT SOCIETY
1B = RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE.
2 = RARE, THREATENED, OR ENDANGERED IN CALIFORNIA, BUT MORE COMMON ELSEWHERE.
3 = A REVIEW LIST – PLANTS ABOUT WHICH MORE INFORMATION IS NEEDED.
4 = PLANTS OF LIMITED DISTRIBUTION – A WATCH LIST
.1 = SERIOUSLY ENDANGERED IN CALIFORNIA (OVER 80% OF OCCURRENCES THREATENED-HIGH DEGREE AND IMMEDIACY OF THREAT).
.2 = FAIRLY ENDANGERED IN CALIFORNIA (20-80% OCCURRENCES THREATENED).
.3 = NOT VERY ENDANGERED IN CALIFORNIA (<20% OF OCCURRENCES THREATENED).

TABLE 3.2-3: SPECIAL-STATUS WILDLIFE AND FISH SPECIES WHICH MAY OCCUR IN SPECIFIC PLAN AREA

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
INVERTEBRATES				
Obscure bumble bee *Bombus caliginosus*	--/--	Occur in Mediterranean California and the Pacific Coast.	Coastal areas from Santa Barbara county to north to Washington state. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Specific Plan Area does not provide suitable habitat.
Western bumble bee *Bombus occidentalis*	--/--	Occur in the western United States and western Canada.	Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	Specific Plan Area does not provide suitable habitat.
Globose dune beetle *Coelus globosus*	--/--	Found in Mexico and the United States.	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	Specific Plan Area does not provide suitable habitat.
Monarch - California overwintering population *Danaus plexippus pop. 1*	--/--	The majority of monarch butterflies live east of the Rocky Mountains. In the early spring, they are first seen in Texas and the south. As spring turns to summer, they're seen in more and more states and Canada.	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	The eucalyptus trees located along San Juan Grade Road provide some limited winter roost habitat. Specific Plan Area does not provide suitable habitat.
Smith's blue butterfly *Euphilotes enoptes smithi*	FE/--	Found in the California/Nevada region.	Most commonly associated with coastal dunes & coastal sage scrub plant communities in Monterey & Santa Cruz counties. Hostplant: *Eriogonum latifolium* and *Eriogonum parvifolium* are utilized as both larval and adult foodplants.	Specific Plan Area does not provide suitable habitat.
Redwood shoulderband *Helminthoglypta sequoicola consors*	--/--	Found within Monterey County. Known only from south slope of San Juan Grade, near Foot, 8 miles NW of Salinas.	Coastal scrub.	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
California linderiella *Linderiella occidentalis*	--/--	It has been documented on most land forms, geologic formations and soil types supporting vernal pools in California, at altitudes as high as 1,150 meters (3,770 ft) above sea level. Most common in the Central Valley.	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and total dissolved solids.	Specific Plan Area does not provide suitable habitat.
Pinnacles optioservus riffle beetle *Optioservus canus*	--/--	Chalone Creek, Pinnacles Nat. Mon. of west central California.	Aquatic. Found on rocks and in gravel of riffles in cool, swift, clear streams.	Specific Plan Area does not provide suitable habitat.
California Ridgway's rail *Rallus obsoletus obsoletus*	FE/CE	Is found principally in California's San Francisco Bay to southern Baja California.	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	Specific Plan Area does not provide suitable habitat.
Mimic tryonia (=California brackishwater snail) *Tryonia imitator*	--/--	Southern California coast from just north of San Francisco to Ensenada, Mexico, to dispersal among semicontinuous estuarine habitats along the Pacific coast.	Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County. Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities.	Specific Plan Area does not provide suitable habitat.
AMPHIBIANS				
California tiger salamander *Ambystoma californiense*	FT/CT	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet, and coastal region from Butte County south to northeastern San Luis Obispo County.	Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Appropriate habitat is present in the vicinity. Observed along Natividad Road adjacent to the Specific Plan Area.
Foothill yellow-legged frog *Rana boylii*	--/C	Occurs in the Klamath, Cascade, north Coast, south Coast, Transverse, and Sierra Nevada Ranges up to approximately 6,000 feet.	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Appropriate habitat is present in the vicinity. None observed on-site or in the vicinity.
California red-legged frog *Rana draytonii*	FT/SSC	California red-legged frogs are found almost exclusively in California with a few sightings in Baja, Mexico. Historically, they could be seen throughout most of the California coastal areas; however, their population has dwindled.	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Appropriate habitat is present in the vicinity. Observed in the vicinity, but none observed on-site.
Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	FE/CE	The Santa Cruz long-toed salamander is a relict species, previously widespread throughout California after the Pleistocene era, and is now concentrated in the area of Santa Cruz, California.	Wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey counties. Aquatic larvae prefer shallow (<12 inches) water, using clumps of vegetation or debris for cover. Adults use mammal burrows.	Specific Plan Area does not provide suitable habitat.
Coast Range newt *Taricha torosa*	--/SSC	Is primarily located on the Coastal Range of California from Humboldt County to the Mexican border. Other isolated populations are also located in California, along the western slope of the Sierra Nevada mountain range.	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow-moving streams.	Specific Plan Area does not provide suitable habitat.

SPECIES	STATUS (FED/CA)	GEOGRAPHIC DISTRIBUTION	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA
BIRDS				
Cooper's Hawk *Accipiter cooperii*	--/SSC	Found from Southern Canada to Northern Mexico.	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Limited foraging habitat present.
Tricolored Blackbird *Agelaius tricolor*	--/C (SSC)	Permanent resident in the Central Valley from Butte County to Kern County. Breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties.	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Specific Plan Area does not provide suitable habitat.
Golden eagle *Aquila chrysaetos*	FP/WL	They occur throughout Eurasia, in northern Africa, and in North America. In North America, golden eagles are found in the western half of the continent, from Alaska to central Mexico, with small numbers in eastern Canada and scattered pairs in the eastern United States	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Limited foraging habitat present.
Short-eared owl *Asio flammeus*	--/SSC	Short-eared owls are one of the world's most widely distributed owls. They inhabit all of North and South America; this area includes the coast of the Arctic Ocean to Pantagonia. Short-eared owls can also be found on every continent except Australia and Antarctica.	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Limited foraging habitat present.
Burrowing Owl *Athene cunicularia*	--/SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas. Rare along south coast.	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Limited foraging habitat present., but limited by ground disturbance. None observed.
Ferruginous hawk *Buteo regalis*	--/WL	The Ferruginous Hawk can be found in North America, as far north as Canada, south through western and central United States to northern Texas. It winters south to northern Mexico.	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Limited foraging habitat present.
Swainson's hawk *Buteo swainsoni*	--/CT	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley. Highest nesting densities occur near Davis and Woodland, Yolo County.	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Limited foraging habitat present.
Western snowy plover *Charadrius alexandrinus nivosus*	FT/SSC	Occurs in Grays Harbor and Pacific counties, Washington.	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Northern Harrier *Circus cyaneus*	--/SSC	Have a broad distribution across North America and Eurasia.	Found mostly in open habitats. Reside in fields, savannas, meadows, marshes, prairies and deserts. The largest populations tend to be in dense and low vegetative areas.	Limited foraging habitat present.
White-tailed Kite *Elanus leucurus*	--/FP	Found in western North America and parts of South America.	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Limited foraging habitat present.
California Horned Lark *Eremophila alpestris actia*	--/SSC	Found along the coast of California.	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Appropriate habitat is present. This species has been observed within the Specific Plan Area.
Prairie falcon *Falco mexicanus*	--/WL	*Falco mexicanus* is found throughout the western United States as well as parts of Mexico and Canada. It is commonly found in the desert and prairie regions of British Columbia, Alberta, and Saskatchewan in Canada. In the United States, *Falco mexicanus* is found from North and South Dakota south to Texas, Arizona, and New Mexico. Sightings in Manitoba, Minnesota, Illinois, Iowa, and Indiana have been recorded as well.	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Limited foraging habitat present.
American peregrine falcon *Falco peregrinus anatum*	FP	Found to occur in Arizona, Colorado, and Oklahoma.	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Limited foraging habitat present.
Loggerhead Shrike *Lanius ludovicianus*	--/SSC	Distributed along southern Canada and the contiguous USA. There populations are declining and more reside in southern costal California.	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Limited foraging habitat present.
Bank swallow *Riparia riparia*	--/CT	Bank swallows, or sand martins as they are known in Europe and Asia, are one of the few small passerine birds that have an almost cosmopolitan distribution. They migrate between discrete breeding and wintering ranges. Bank swallow distribution in the breeding range is most limited by suitable nesting habitat. Winter distribution is influenced by appropriate foraging areas.	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Specific Plan Area does not provide suitable habitat.
Yellow Warbler *Setophaga petechia*	--/SSC	Across almost all of North America.	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Appropriate habitat is present. The species has been observed within the Specific Plan Area.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Least Bell's vireo *Vireo bellii pusillus*	FE/CE	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms.	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Specific Plan Area does not provide suitable habitat.
FISH				
Steelhead - South-central California coast DPS *Oncorhynchus mykiss irideus*	FT/--	This distinct population segment, or DPS, includes all naturally spawned populations of steelhead (and their progeny) in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco Bay and San Pablo Bays and their tributaries.	Free of heavy sedimentation with adequate flow and cool, clear water. Gravel that is between 0.5 to 6.0 inches in diameter, dominated by 2 to 3-inch gravel. Escape cover such as logs, undercut banks, and deep pools for spawning adults.	Specific Plan Area does not provide suitable habitat.
Tidewater goby *Eucyclogobius newberryi*	FE/SSC	Is found primarily in waters of coastal lagoons, estuaries, and marshes. Tidewater gobies live only in California, and historically ranged from Tillas Slough (mouth of the Smith River, Del Norte County) to Agua Hedionda Lagoon (northern San Diego County).	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Specific Plan Area does not provide suitable habitat.
Longfin smelt *Spirinchus thaleichthys*	FC/CT	Occurs in estuaries along the California coast. Adults concentrated in Suisun, San Pablo, and North San Francisco Bays. Prior to spawning, these fish aggregate in deepwater habitats available in the northern Delta, including, primarily, the channel habitats of Suisun Bay and the Sacramento River. Spawning occurs in fresh water on the San Joaquin River below Medford Island and on the Sacramento River below Rio Vista.	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Specific Plan Area does not provide suitable habitat.
MAMMALS				
Pallid Bat *Antrozous pallidus*	--/SSC	Associated with oak woodlands in coastal California.	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	The Specific Plan Area provides foraging habitat, and some limited roosting opportunities exist around the farmland residential complexes.
Townsend's big-eared bat *Corynorhinus townsendii*	--/SSC	Coastal regions from Del Norte County south to Santa Barbara County.	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	The Specific Plan Area provides foraging habitat, and some limited roosting opportunities exist around the farmland residential complexes.

SPECIES	STATUS (FED/CA)	GEOGRAPHIC DISTRIBUTION	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA
Hoary bat *Lasiurus cinereus*	--/--	Occur in all 50 states. Rare in the eastern United States and northern Rockies. Found mainly in the Pacific Northwest and California, Arizona, and New Mexico.	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	The Specific Plan Area provides foraging habitat, and some limited roosting opportunities exist around the farmland residential complexes.
Monterey Dusky-footed Woodrat *Neotoma fuscipes luciana*	--/SSC	Costal California from Monterey Bay to Morro Bay.	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Nests constructed of grass, leaves, sticks, feathers, etc. Population may be limited by availability of nest materials.	Specific Plan Area does not provide suitable habitat.
Salinas harvest mouse *Reithrodontomys megalotis distichlis*	--/--	*Reithrodontomys megalotis* is found over a wide portion of the western United States of America and central Mexico. It is broadly distributed from the Great Lakes to the Pacific Coast. It occurs at elevations from Death Valley, California (below sea level), to 4000 m on the Popocatepetl and Orozaba volcanoes in Central Mexico.	Known only from the Monterey Bay region. Occurs in fresh and brackish water wetlands and probably in the adjacent uplands around the mouth of the Salinas River.	Specific Plan Area does not provide suitable habitat.
American badger *Taxidea taxus*	--/SSC	Badgers are found primarily in the Great Plains region of North America. Badgers occur north through the central western Canadian provinces, in appropriate habitat throughout the western United States, and south throughout the mountainous areas of Mexico. They have expanded their range since the turn of the 20th century and are now found as far east as Ontario, Canada.	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	The Specific Plan Area provides foraging habitat. There is no evidence that they occupy the Specific Plan Area.
REPTILES				
Southwestern pond turtle *Actinemys marmorata pallida*	--/SSC	Occurs from just south of San Francisco Bay to Baja California.	The turtles use their resident creeks, rivers, wetlands, lakes and ponds primarily for foraging for food, regulating their temperature, and for shelter to avoid predators. They use dry sunny basking sites for warming themselves such as rocks, logs, or thick floating vegetation.	Specific Plan Area does not provide suitable habitat.
Western pond turtle *Emys marmorata*	--/SSC	Occurs from the Oregon border of Del Norte and Siskiyou Counties south along the coast to San Francisco Bay, inland through the Sacramento Valley, and on the western slope of Sierra Nevada.	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Specific Plan Area does not provide suitable habitat.
Northern California legless lizard *Anniella pulchra*	--/--	California legless lizards are found in California and Mexico. They are found from western central California (San Joaquin and the coastal regions), through northwestern Baja California, and as far south as Colonia Guerrero, Mexico.	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Specific Plan Area does not provide suitable habitat.

SPECIES	*STATUS (FED/CA)*	*GEOGRAPHIC DISTRIBUTION*	*HABITAT REQUIREMENTS*	*POTENTIAL TO OCCUR IN SPECIFIC PLAN AREA*
Coast horned lizard *Phrynosoma blainvillii*	--/SSC	Found at elevations from sea level to 8,000 ft. (2,438 m).	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Specific Plan Area does not provide suitable habitat.
Two-striped gartersnake *Thamnophis hammondii*	--/SSC	Ranges continuously from near Salinas in Monterey County south along the coast mostly west of the south Coast Ranges, to southern California where it ranges east through the Transverse Ranges (and into the desert in Victorville) and south through the Peninsular Ranges into northern Baja California. Occurs in southern Baja California in isolated areas. Also occurs on Catalina Island.	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Specific Plan Area does not provide suitable habitat.

NOTES:

FEDERAL

E = ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
PE = PROPOSED FOR ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
PT = PROPOSED FOR THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
C = CANDIDATE SPECIES FOR LISTING UNDER THE FEDERAL ENDANGERED SPECIES ACT.
D = DELISTED FROM FEDERAL LISTING STATUS.

STATE

E = ENDANGERED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
C = CANDIDATE SPECIES FOR LISTING UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
FP = FULLY PROTECTED UNDER THE CALIFORNIA FISH AND GAME CODE.
SSC = SPECIES OF SPECIAL CONCERN IN CALIFORNIA.

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3.2.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the natural resources of the state and nation including the California Department of Fish and Wildlife (CDFW), USFWS, U.S. Army Corps of Engineers (USACE), and the Regional Water Quality Control Board (RWQCB). These agencies often respond to declines in the quantity of a particular habitat or plant or animal species by developing protective measures for those species or habitat type. The following is an overview of the federal, State and local regulations that are applicable to the proposed project.

FEDERAL

Federal Endangered Species Act

The Federal Endangered Species Act (FESA), administered by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), provides protection to plant and wildlife species listed as endangered or threatened. In general, USFWS has jurisdiction over terrestrial and fresh-water species, while NMFS has jurisdiction over ocean-going species.

Section 9 of FESA generally prohibits all persons from causing the "take" of any member of a listed species. (16 U.S.C. § 1538.) This prohibition applies mainly to animals; it only extends to plants in areas “under federal jurisdiction” and plants already protected under state law. (Id., subd. (a)(2)(B); see also Northern Cal. River Watch v. Wilcox (9th Cir. 2010) 620 F.3d 1075.)

“Take” is defined in statute as, "... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." (16 U.S.C. § 1532(19).) Harass is defined in regulation as "...an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering." (See 50 CFR § 17.3.) Harm is defined in regulation as "...significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.” (Id.) Despite the general prohibition against take, FESA in some circumstances permits “incidental take,” which means take that is incidental to, but not the purpose of, the carrying out of an otherwise lawful activity. (16 U.S.C. § 1539(a).) Under section 10 of FESA, persons seeking permission to engage in actions that could result in such incidental take can obtain such permission through the approval of a habitat conservation plan (HCP) by either USFWS or NMFS. (16 U.S.C., § 1539(a).)

Proposed federal actions that would result in take of a federal-listed or proposed species require consultation with USFWS or NMFS under section 7 of FESA. (Id., § 1536.) The objective of consultation is to determine whether the proposed federal action would jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat. Where such an outcome would not occur, USFWS or NMFS must still impose reasonable and prudent measures to minimize the effects of the incidental taking. Where such an outcome could occur, USFWS or NMFS must

propose reasonable and prudent alternatives that, if implemented, would avoid such an outcome. (Id.)

Compliance with ESA can be achieved under Section 7 or 10 of FESA depending on the involvement of the federal government. Section 7 requires federal agencies to make a finding on all federal actions, including the approval by an agency of a public or private action, such as the issuance of a "404 permit" for filling wetlands by the U.S. Army Corps of Engineers (USACE), on the potential of the action to jeopardize the continued existence of any listed species impacted by the action or to result in the destruction or adverse modification of such species' critical habitat. Provisions of Section 10 are implemented when there is no federal involvement in a project except compliance with FESA. A take not specifically allowed by federal permit under Section 7 or Section 10(a)(1)(B) of the FESA is subject to enforcement through civil or criminal proceedings under Section II of the FESA.

Migratory Bird Treaty Act

To kill, posses, or trade a migratory bird, bird part, nest, or egg is a violation of the Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., §703, Supp. I, 1989), unless it is in accordance with the regulations that have been set forth by the Secretary of the Interior.

Federal Bald and Golden Eagle Protection Act

The Federal Bald and Golden Eagle Protection Act provide regulations to protect bald and golden eagles as well as their nests and eggs from willful damage or injury.

Clean Water Act – Section 404

Section 404 of the CWA regulates all discharges of dredged or fill material into waters of the U.S. Discharges of fill material includes the placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. Waters of the U.S. include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

Clean Water Act – Section 401

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the RWQCB. To obtain the water quality certification, the CVRWQCB must indicate that the proposed fill would be consistent with the standards set forth by the state.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act prohibits the obstruction or alteration of any navigable water of the United States. The Act requires authorization from the USACE for any excavation or deposition of materials into these waters or for any work that could affect the course, location, condition, or capacity of rivers or harbors.

STATE

Fish and Game Code §2050-2097 - California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers a number of laws and programs designed to protect fish and wildlife resources. Principal of these is the California Endangered Species Act of 1984 (CESA Fish and Game Code Section 2050 et seq.), which regulates the listing and take of state endangered and threatened species, as well as candidate species. Under Section 2081 of CESA, CDFW may authorize take of an endangered and/or threatened species, or candidate species, by an incidental take permit or Memorandum of Understanding (MOU) for scientific, educational, or management purposes. In approving an incidental permit, CDFW must ensure, among other things, that "[t]he impacts of the authorized take shall be minimized and fully mitigated." Further, "[t]he measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation." To be consistent with Federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species, but did not do so for rare plants, as previously designated under the California Native Plant Protection Act (discussed below). Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Fish and Game Code §2800-2835 – Natural Communities Conservation Planning Act

The Natural Communities Conservation Planning Act is set forth in Fish and Game Code Sections 2800–2835. The intent of the legislation is to provide for conservation planning as an officially recognized policy that can be used as a tool to eliminate conflicts between the protection of natural resources and the need for growth and development. In addition, the legislation promotes conservation planning as a means of coordination and cooperation among private interests, agencies, and landowners, and as a mechanism for multispecies and multi-habitat management and conservation. The development of Natural Community Conservation Plans (NCCPs) is an alternative to obtaining take authorization under Section 2081 of the Fish and Game Code.

Fish and Game Code §1900-1913 – California Native Plant Protection Act

In 1977 the State Legislature passed the Native Plant Protection Act (NPPA) in recognition of rare and endangered plants of the state. The intent of the law was to preserve, protect, and enhance

endangered plants. The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare, and to require permits for collecting, transporting, or selling such plants. The NPPA includes provisions that prohibit the taking of plants designated as "rare" from the wild, and a salvage mandate for landowners, which requires notification of the CDFW 10 days in advance of approving a building site.

Fish and Game Code §3503, 3503.5, 3800 – Predatory Birds

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called “raptors,” are protected. The law indicates that it is unlawful to take, possess, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Fish and Game Code §1601-1603 – Streambed Alteration

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project proponents must obtain a “Streambed Alteration Agreement” from CDFW prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

Fish and Game Code §3511, 3513, 4700, and 5050 – Fully Protected Species

Fish and Game Code Sections 3511, 3513, 4700, and 5050 pertain to fully protected wildlife species (birds in Sections 3511 and 3513, mammals in Section 4700, and reptiles and amphibians in Section 5050) and strictly prohibit the take of these species. CDFW cannot issue a take permit for fully protected species, except under narrow conditions for scientific research or the protection of livestock, or if an NCCP has been adopted.

California Environmental Quality Act Guidelines § 15380 – Unlisted Species Worth of Protection

The CEQA Guidelines provide that a species that is not listed on the federal or State endangered species list may nevertheless be considered rare or endangered if the species meets certain criteria. (CEQA Guidelines § 15380) Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e. candidate, or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of “Species of Special Concern,” developed by the CDFW. Additionally, the California Native Plant Society (CNPS), a nongovernmental organization, maintains a list of plant species native to California that have low populations, limited

distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere.

California Wetlands Conservation Policy

In August 1993, the Governor announced the "California Wetlands Conservation Policy." The goals of the policy are to establish a framework and strategy that will:

- Ensure no overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetland acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property.
- Reduce procedural complexity in the administration of State and federal wetland conservation programs.
- Encourage partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetland conservation and restoration.

The Governor also signed Executive Order W-59-93, which incorporates the goals and objectives contained in the new policy and directs the Resources Agency to establish an Interagency Task Force to direct and coordinate administration and implementation of the policy.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) is California's primary water quality control statute. But its protections extend to wetlands, and in some instances wetlands that are not subject to federal jurisdiction under the Clean Water Act. Under the Porter-Cologne Act definition, waters of the state are "any surface water or groundwater, including saline waters, within the boundaries of the state." (Wat. Code, § 13050[e].) Although all waters of the United States that are within the borders of California are also waters of the state, the reverse is not necessarily true. Therefore, California retains authority to regulate discharges of waste into any waters of the state, discharges to receiving waters more broadly than the CWA does.

Waters of the state fall under the jurisdiction of the nine Regional Water Quality Control Boards (RWQCBs). Under Porter-Cologne, each RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution. California Water Code Section 13260 requires any person discharging waste, or proposing to discharge waste, in any region that could affect the waters of the state to file a report of discharge (an application for waste discharge requirements [WDRs]) with the applicable RWQCB. Construction activities that may discharge wastes into the waters of the state must meet the discharge control requirements of the Porter-Cologne Act.

Water Quality Control Plan for the Central Coastal Basin

The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal CWA, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the CWA.

LOCAL

City of Salinas General Plan

The Salinas General Plan establishes the following goals and policies directly related to biological resources:

CONSERVATION/OPEN SPACE ELEMENT

Goal COS-1: Promote a safe and adequate supply of water for community uses.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

Goal COS-2: Encourage the conservation of water resources.

Policy COS-2.1: Participate in and implement local and regional programs that promote water conservation.

Goal COS-5: Protect and enhance the remaining identified and significant ecological and biological resources within and surrounding the community.

Policy COS-5.1: Protect and enhance creek corridors, river corridors, the reclamation ditch, sloughs, wetlands, hillsides and other potentially significant biological resources for their value in providing visual amenity, flood protection, habitat for wildlife and recreational opportunities.

Policy COS-5.2: Explore with Monterey County the potential for creation of a Gabilan Creek Regional Park extending along the creek from the urban edge to the headwaters in the Gabilan Mountains.

Goal COS-7: Provide, develop, and maintain ample park and recreational facilities that offer a variety of recreational activities.

Policy COS-7.2: Maximize the use of built and natural features to develop a citywide network of parks and open spaces with Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex as essential elements of the open space network.

Policy COS-7.11: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainage-ways, slopes, and other natural features.

Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes and other services to the integrated trails network.

Policy COS-20: Protection and Enhancement of Special Status Species. Require project developers to protect and enhance special status species habitat through setbacks and open space easements within new development and/or redevelopment areas. Protection and enhancement of special status species habitat shall require management of the habitat to ensure persistence of the species within the setback areas.

Surveys shall be conducted at the appropriate season to ascertain whether the habitats within the proposed project area support special status species. If special status species are observed, avoidance measures shall be implemented.

A qualified biologist shall conduct a biological assessment of all habitat areas to assess the potential for the following special status species: Congdon's tarplant, Contra Costa goldfields, Pinnacles buckwheat, Alkali milk-vetch, Santa Cruz clover, Hutchinson's larkspur, Kellogg's horkelia, Burrowing owl, and /or California tiger salamander. If suitable habitat for any of these species is observed, then focused surveys during the appropriate season should be conducted. Such surveys would include winter and spring surveys for tiger salamander, protocol presence/absence surveys for burrowing owl, and spring/summer surveys for special status plant species. The California Department of Fish and [Wildlife] shall be consulted regarding the appropriate level of effort and protocol prior to conducting focused wildlife species surveys. If any of these species are found to inhabit the survey area, the City may require the preparation and implementation of a Habitat Management Plan to provide protection for the habitat. If impacts to occurrences are deemed unavoidable, the plan shall identify mitigation measures to compensate for impacts to the species. As part of the Habitat Management Plan, a 100-foot buffer shall be

established around rare plant occurrences. The plan shall include measures to manage the rare plant occurrences for their protection and persistence at the site. The Habitat Management Plan shall be reviewed and approved by the California Department of Fish and [Wildlife] and/or USFWS prior to issuance of any permits by the City.

Prior to any proposed development within 150 feet of the stream corridors, protocol presence/absence surveys for California red-legged frog, southwestern pond turtle, and nesting birds should be conducted.

If these species are observed, the CDFG and the USFWS should be consulted regarding appropriate measures to avoid and mitigate potential impacts of the project on these species. The City shall not issue any permits prior to obtaining written approval from the CDFG and/or USFWS that the proposed mitigation plan has been approved.

Prior to any proposed development within or adjacent to oak woodland, a qualified biologist should conduct surveys to determine if protected wildlife species are nesting in the oak woodland, e.g., nesting raptors. If trees are to be removed, a qualified bat biologist should evaluate the trees as potential bat roost sites prior to removal, and recommend measures to avoid impacts to bats, such as exclusionary devices.

City of Salinas Municipal Code

Chapter 35, Trees and Shrubs, of the Salinas Municipal Code protects heritage and/or landmark trees through permit requirements. Section 35-9 outlines the permit requirements for trimming, pruning, planting, removing, or otherwise interfering with any tree, shrub, or plant upon any street, parkway, or alley in the City. Section 35-18 prohibits the removal of heritage or landmark oak trees from City property except with the prior written approval by the Director. The following definitions are outlined in Section 35-1 of the City Municipal Code:

"Heritage and/or landmark trees" are defined as any oak tree which is twenty-four inches or more in diameter when measured two feet above the ground, or oak trees which are visually significant, historically significant, or exemplary in their species.

"Street tree" means any woody perennial plant having a single main axis or stern commonly achieving ten feet in height and capable of being shaped and pruned to develop a branch-free trunk at least nine feet in height.

"Street trees," "shrubs" or "plants" means any tree, shrub, or plant, in any street, park or public place, in the city.

3.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

CEQA Guidelines Appendix G is a sample Initial Study checklist that includes number of factual inquiries related to the subject of biological resources, as it does on a whole series of additional environmental topics. Notably, lead agencies are under no obligation to use these inquiries in fashioning thresholds of significance on the subject of air quality impacts, or indeed on any subject addressed in the checklist. (*Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068.) Rather, with few exceptions, "CEQA grants agencies discretion to develop their own thresholds of significance." (*Ibid*.) Even so, it is a common practice for lead agencies to take the language from the inquiries set forth in Appendix G and to use that language in fashioning thresholds. The City has done so here, though it has exercised its discretion to modify the language of the Appendix G threshold addressing impacts to wetlands so that it applies not only to federally-protected wetlands, but also to wetlands that are protected under State law (the reach of which is sometimes broader than federal law).

Although CEQA generally gives agencies considerable discretion in fashioning significance thresholds, there are some thresholds that must, as a matter of law, be used by public agencies. Many of these relate to biological resources, and are found in CEQA Guidelines section 15065 ("Mandatory Findings of Significance").

Finally, the City is aware that neither Appendix G nor section 15065 sets forth language directly addressing potential effects on birds of prey or nesting birds due to violation of laws (described earlier) intended to protect them. The City has therefore exercised its discretion to formulate a threshold to address this particular category of impact.

In light of the foregoing, for purposes of this EIR, a significant impact would occur if implementation of the proposed project would:

- Substantially reduce the habitat of a fish or wildlife species;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Substantially reduce the number or restrict the range of an endangered, rare or threatened species;
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally - or state- protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan;
- Result in the take or destruction of any nesting birds or birds of prey or the nest or eggs of such birds.

IMPACTS AND MITIGATION

Impact 3.2-1: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Invertebrates (Less than Significant)

There are numerous special-status invertebrates that are documented within region. None are documented within the Specific Plan Area or vicinity. Based on field surveys, habitat conditions, and records searches, there are no special status invertebrate species that have the potential to be present within the Specific Plan Area. The proposed project would not, directly or indirectly, have a substantial adverse effect on invertebrate species through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS. Therefore, the proposed project would have a ***less than significant*** impact on special-status invertebrate species.

Impact 3.2-2: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Reptile and Amphibian (Less than Significant with Mitigation)

There are numerous special-status amphibian and reptile that are documented within the region. The Specific Plan Area was assessed for habitat to support special-status amphibians/reptiles. Based

on field surveys and records searches, three species warranted a more detailed evaluation within this EIR due to the habitat conditions including California tiger salamander (CTS) (*Ambystoma californiense*), California red-legged frog (CRLF) (*Rana draytonii*), and foothill yellow legged frog (FYLF) (*Rana boylii*).

California Tiger Salamander (CTS) (*Ambystoma californiense*): The federally and State-listed Threatened CTS is a large terrestrial salamander. It occurs in central California from the Sacramento Valley to the south-central San Joaquin Valley, and in the surrounding foothills of both the Coast Ranges and the Sierra Nevada Mountains. CTS are also recorded from the San Francisco Bay region, Sonoma County, the Monterey Bay region, and the valleys and foothills of San Luis Obispo and Santa Barbara counties.

CTS breed in temporary wetland pools, such as vernal pools, and other seasonal wetland bodies where ponded water is present for a minimum of three to four months, extending into the early spring. Such ponds and temporary wetlands provide necessary breeding and larval-stage habitat for the species. Adults spend most of the year in aestivation, underground in the burrows of small mammals, such as the California ground squirrel and/or Botta's pocket gopher, or within other suitable subterranean retreats. They emerge at night during winter rain events for brief periods to breed (Trenham et al. 2001). Aquatic juveniles (larvae) are mostly herbivorous (Stebbins 1985). CTS normally begin to reproduce after three to five years.

There are CNDDB records from 2007 and 2008 of CTS located in an agricultural basin immediately adjacent to the Specific Plan Area. The basin was estimated to be five feet deep and approximately 0.25 acres in size located on the east side of Natividad Road, approximately 0.4 miles north of East Boronda Road. The habitat was described as "substantial submergent and emergent vegetation; basin is surrounded by active agricultural product in in all directions." There were 30 larvae observed on September 5, 2007. Twenty-two larval tail clippings were collected for genetic testing by the UC Davis Schaffer Laboratory. The results of the testing indicated that the larvae are hybrids.

This documented occurrence is a metapopulation of hybrid tiger salamanders. A metapopulation is a population of populations, or a group of groups, that is made up of the same species. Each subpopulation, or subgroup, is separated from all other subpopulations, but movement of individuals from one population to another occurs regularly. This species is known to also occur within other areas east and west of the Specific Plan Area in the Future Growth Area.

It is anticipated that CTS adults will disperse at night up to 1.3 miles to refuge sites. The entire Specific Plan Area is within the 1.3 miles migration distance for CTS. While the Specific Plan Area is largely agricultural with a high level of ground disturbance, there are small microhabitats, some of which can provide habitat for CTS. The microhabitats include: farmland fringe (or edge), irrigation ditch (1.13 acres), roadside/ditch bank (3.26 acres) and areas farmland residence/structures.

Dirt Road: The dirt roads lack quality upland habitat. The dirt roads are not refuge habitat for this species, although CTS may travel across the dirt roads in route to their refuge sites.

Paved Road: The paved roads lack upland habitat. The paved roads are not refuge habitat for this species, although CTS may travel across the paved roads in route to their refuge sites.

Tilled Farmland: The tilled farmland lacks quality upland habitat given that it is actively disced/disturbed. This area ground squirrels and burrows. Burrows are a critical component in the lifecycle of the California tiger salamander, and the presence of a breeding pond nearby. The agricultural fields is not refuge habitat for this species, although CTS may travel through the tilled farmland in route to their refuge sites.

Farmland Fringe: There is land along the edge of the tilled farmland that is not cultivated and is less disturbed when compared to the Tilled Farmland. This area is generally between the dirt roads and the tilled farmland and is characterized/labeled as Farmland Fringe. The Farmland Fringe provides a higher quality upland habitat for CTS compared to the tilled farmland because it provides opportunities for refugia given the less frequent disturbance. This area does have some disturbance during tilling, but is not actively planted each year.

Irrigation Ditch: The network of irrigation ditches throughout the Specific Plan Area provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris. There have not been any observations of CTS in the Specific Plan Area, including these ditches and the upland margins; however, detection is difficult without seasonal trapping efforts.

Roadside Ditch: The roadside ditches located along Boronda Road and San Juan Grade Road provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris. There have not been any observations of CTS in the Specific Plan Area, including these ditches and the upland margins; however, detection is difficult without seasonal trapping efforts.

Farmland Residence: The farmland residences (complexes) located along San Juan Grade Road and Natividad Road contain a residences, barns and outbuildings, landscaping, farm tractor and implement storage, dirt roads, and parking areas. Within these areas there are locations for refugia (debris, burrows, crevices, barns, sheds, etc.). The farmland residences along San Juan Grade Road provides lower quality habitat due to the distance from the breeding site, although they provide some opportunity for refuge given that they are within the 1.3-mile dispersal distance. The farmland residence along Natividad is immediately adjacent to the breeding site and provides a possibility for refuge habitat for CTS. While the farmland residence is not a natural undisturbed site, CTS have been known to find refuge in the landscaping areas, under debris, burrows, crevices, barns, sheds, etc. surrounding a farmland residence.

CONCLUSION

As previously noted, there are numerous locations for refugia (debris, burrows, crevices, barns, sheds, etc.) within the Plan Area that could be used by migrating CTS. Higher quality upland habitat is found to the east; however, the Specific Plan Area cannot be completely discounted as having

potential refuge sites. It is noted that there is not any known CTS taking refuge in the Specific Plan Area during their estivation period. It is also theoretically possible that a breeding CTS would emerge from the breeding basin and migrate west of Natividad Road to find refugia in the Specific Plan Area. The areas with potential upland habitat in the Specific Plan Area includes the farmland fringe, irrigation ditch, roadside ditch, and farmland residence. The paved roads, dirt roads, and tilled farmland provide limited habitat because of the frequency of disturbance in these areas. Given that the entire Specific Plan Area is within the 1.3-mile migration radius, and there is potential aquatic breeding and upland habitat, the proposed project will affect this breeding population of CTS.

It is noted that this population has been genetically evaluated and has been determined to be a hybrid population which does not receive the same legal protections as a distinct population segment (DPS). As of the writing of this EIR, neither the USFWS nor the California Fish and Game Commission had officially listed this metapopulation under either ESA or CESA. While it is anticipated that the proposed project would eliminate all potential for refuge in the Specific Plan Area, it is not ruled a significant impact because this metapopulation is not protected. Regardless, there is the potential for a species status to change at some future time and present a new impact that could not have been determined at this time.

Mitigation measures are presented to ensure a final concurrence is obtained from the regulatory agencies to ensure that there is no illegal take for CTS even though they are well documented as a hybrid population. Additionally, measures are presented that would require activities to avoid and minimize impacts to CTS to the extent feasible. Such avoidance and minimization measures include conducting environmental education training for all construction personnel covering the California tiger salamander, the importance of avoiding adverse effects to the species. A biologist(s) would be responsible for overseeing any hand excavation of burrows using hand-trowels and spades. Burrows would be excavated to the terminus of the tunnels, or to where the burrow is less than or equal to 0.5 inch in diameter. If ground disturbing activities in suitable habitat (Farmland Fringe, Irrigation Ditch, Roadside Ditch, and Farmland Residence) are projected to extend beyond the first rain of the rainy season, the applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California tiger salamanders from entering these sites. Drift fencing will be installed and inspected by the biologist(s) no less than 72 hours prior to the first rain event of the rainy season. If weather conditions necessitate the installation of drift fencing, the approved biologist(s) will oversee the installation of pit traps to capture California tiger salamanders migrating during the rain events. The biologist(s) will check pit traps twice daily, once in the morning prior to the start of construction and once at the end of the work day. Any California tiger salamanders captured in pit traps or uncovered in burrows will be transferred immediately to a site designated by the USFWS and CDFW. Transported animals must be kept cool and moist. A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the USFWS and CDFW within 90 calendar days of completion of the project. The report will include: dates of project groundbreaking and completion, information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of California tiger salamanders, an explanation of failure to meet such measures, if any, known project effects on the California tiger salamander, observed incidences of injury to or mortality of the species, and any other relevant information.

With implementation of the following measures, the proposed project would not, directly or indirectly, have a substantial adverse effect on amphibian or reptile species through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS. This potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.2-1*: Prior to issuance of grading and/or building permits, the project applicant shall consult with the USFWS and CDFW for concurrence and a final confirmation that a take permit is not necessary for impacts to the hybrid population of California tiger salamander located along Natividad Road. The regulatory agency concurrence confirmation shall be provided to the City of Salinas for the project file. If the status of this metapopulation were to change and become protected prior to construction, or the regulatory agencies do not concur that the metapopulation does not require a take permit, then the project applicant shall initiate a consultation with the agencies and obtain the appropriate take permits.*

Mitigation Measure 3.2-2*: Prior to issuance of grading and/or building permits, in order to avoid and minimize impacts to California tiger salamander to the extent feasible, the proposed project activities shall be compliant with the following Avoidance and Minimization Measures during Construction Activities. These measures are intended to apply, regardless of the consultation process with regulatory agencies.*

a. *Prior to excavation work or other ground disturbance, a qualified biologist(s) will conduct environmental education training for all construction personnel covering the California tiger salamander, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained.*

b. *The biologist(s) will oversee the hand excavation of any burrows located in suitable habitat that are within the project footprint (Farmland Fringe, Irrigation Ditch, Roadside Ditch, and Farmland Residence). These excavations will be performed carefully using hand-trowels and spades. Burrows will be excavated to the terminus of the tunnels, or to where the burrow is less than or equal to 0.5 inch in diameter.*

c. *If ground disturbing activities in suitable habitat (Farmland Fringe, Irrigation Ditch, Roadside Ditch, and Farmland Residence) are projected to extend beyond the first rain of the rainy season, the applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California tiger salamanders from entering these sites. Drift fencing will be installed and inspected by the biologist(s) no less than 72 hours prior to the first rain event of the rainy season. If weather conditions necessitate the installation of drift fencing, the approved biologist(s) will oversee the installation of pit traps to capture California tiger*

salamanders migrating during the rain events. The biologist(s) will check pit traps twice daily, once in the morning prior to the start of construction and once at the end of the work day.

d. *Any California tiger salamanders captured in pit traps or uncovered in burrows will be transferred immediately to a site designated by the USFWS and CDFW. Transported animals must be kept cool and moist.*

e. *A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the USFWS and CDFW within 90 calendar days of completion of the project for which the grading and/or building permit was required. The report will include:*

    i. *Dates of project groundbreaking and completion.*

    ii. *Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of California tiger salamanders.*

    iii. *An explanation of failure to meet such measures, if any.*

    iv. *Known project effects on the California tiger salamander.*

    v. *Observed incidences of injury to or mortality of the species.*

    vi. *Any other relevant information.*

California Red-legged Frog (CRLF) (*Rana draytonii*): The federally-listed Threatened and California Species of Special Concern CRLF occurs in lowlands and foothills primarily in perennial or ephemeral ponds, pools, and streams where water remains long enough (14 to 28 weeks) for breeding and metamorphosis of tadpoles. Specific breeding sites include streams, creeks, ponds, marshes, sag ponds, deep pools, backwater areas, dune ponds, lagoons, and estuaries. Habitats with the highest densities of CRLF often contain dense emergent or shoreline riparian vegetation closely associated with fairly shallow (< 0.5 meter) to deep (> 0.5 meter), still or slow-moving water (USFWS 2002). CRLF may disperse from their aquatic breeding habitats to upland habitats during the dry season. They prefer upland habitats that provide moisture to prevent desiccation and protection from predators including downed logs, woody vegetation, boulders, moist leaf litter, or other refugia during the dry season. When there is sufficient water at their breeding location, they may remain in aquatic habitats year-round instead of moving to adjacent uplands. During wet seasons, frogs can move long distances between habitats, traversing upland areas or ephemeral drainages. Dispersal distances are typically less than 0.5 km (0.3 mile), with a few individuals moving 2.0 to 3.6 kilometers (1.2 to 2.2 miles). Seeps and springs in open grasslands can function as foraging habitat or refugia for wandering frogs (Jennings and Hayes 1994).

This species was detected along Old Stage Road and the Natividad Creek drainage, which is approximately 1.8 miles from the eastern boundary of the Specific Plan Area. There are also numerous documented occurrences of CRLF, including breeding sites within five miles of the Specific Plan Area. CRLF may disperse through any of the drainages in the vicinity. While the Specific Plan

Area does not provide high quality habitat for CRLF, the network of irrigation ditches presents some habitat opportunities for this species.

CONCLUSION

As previously noted, there are numerous documented occurrences of CRLF in the vicinity of the Specific Plan Area. Higher quality upland and aquatic habitat is found to the east; however, the Specific Plan Area cannot be completely discounted as having potential habitat within the drainage features (i.e. ditches). It is noted that there is not any known CRLF within the Specific Plan Area. The areas with potential upland habitat in the Specific Plan Area includes the irrigation ditches and roadside ditches. The paved roads, dirt roads, tilled farmland, farmland fringe, and farmland residences provide very limited to no habitat. The proposed project would eliminate all potential use of the land within the Specific Plan Area. The following mitigation measures are presented to ensure a final concurrence is obtained from the regulatory agencies to ensure that there is no illegal take for CRLF. Additionally, measures are presented to avoid and minimize impacts to CRLF to the extent feasible. Such avoidance and minimization measures include conducting environmental education training for all construction personnel covering the California red-legged frog, the importance of avoiding adverse effects to the species. A biologist(s) will monitor construction activities located in suitable habitat that is within the project footprint (Irrigation Ditch, Roadside Ditch). The applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California red-legged frog from entering the construction site. Drift fencing will be installed and inspected by the biologist(s). A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the USFWS and CDFW within 90 calendar days of completion of the project. The report will include: Dates of project groundbreaking and completion, Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of California red-legged frog. An explanation of failure to meet such measures, if any, known project effects on the California red-legged frog, observed incidences of injury to or mortality of the species, and any other relevant information.

With implementation of the following measures, the proposed project would not, directly or indirectly, have a substantial adverse effect on amphibian or reptile species through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS. This potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.2-3*: Prior to issuance of grading and/or building permits the project applicant shall consult with the USFWS for concurrence and a final confirmation that a take permit is not necessary for impacts to the California red-legged frog that is documented in the region, and has the potential to utilize the surrounding drainages. The regulatory agency concurrence confirmation shall be provided to the City of Salinas for the project file. If the regulatory agency does not concur that*

the project does not require a take permit, then the project applicant shall initiate a consultation with the agency and obtain the appropriate take permit.

***Mitigation Measure 3.2-4**: Prior to issuance of grading and/or building permits, in order to avoid and minimize impacts to CRLF to the extent feasible, the proposed project activities shall be compliant with the following Avoidance and Minimization Measures during Construction Activities. These measures are intended to apply, regardless of the consultation process with regulatory agencies.*

a. *Prior to excavation work or other ground disturbance, a biologist(s) will conduct environmental education training for all construction personnel covering the California red-legged frog, the importance of avoiding adverse effects to the species. New personnel who are added to the project after the training is first conducted also will be required to be trained.*

b. *The biologist(s) will monitor construction activities located in suitable habitat that is within the project footprint (Irrigation Ditch, Roadside Ditch).*

c. *The applicant will erect drift fencing around the work areas, prior to commencing work, to prevent California red-legged frog from entering the construction site. Drift fencing will be installed and inspected by the biologist(s).*

d. *A post-construction report detailing compliance with the avoidance/minimization measures will be provided to the U.S. Fish and Wildlife Service within 90 calendar days of completion of the project, for which the grading/building permit was required. The report will include:*

    i. *Dates of project groundbreaking and completion.*

    ii. *Information concerning the success of the project in meeting minimization measures, such as the capture and offsite transport of.*

    iii. *An explanation of failure to meet such measures, if any.*

    iv. *Known project effects on the California red-legged frog.*

    v. *Observed incidences of injury to or mortality of the species.*

    vi. *Any other relevant information.*

If proposed construction activities may result in the "take" (harass, harm, pursue, wound, kill, trap, or capture) of California red-legged frog or California tiger salamander, the project proponent shall obtain state and federal Incidental Take Permits, and comply with all stipulated conditions to protect special-status amphibians.

Foothill Yellow Legged Frog (FYLF) (*Rana boylii*): The FYLF is a State candidate for listing as Threatened. They occur in partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. They need at least some cobble-sized substrate for egg-laying and at least 15

weeks to attain metamorphosis. Adults often bask on exposed rock surfaces near streams. When disturbed, they dive into the water and take refuge under submerged rocks or sediments. During periods of inactivity, especially during cold weather, individuals seek cover under rocks in the streams or on shore within a few meters of water. Egg clusters are attached to gravel or rocks in moving water near stream margins. Unlike most other ranid frogs in California, this species is rarely encountered (even on rainy nights) far from permanent water. Tadpoles require water for at least three or four months while completing their aquatic development. Significant seasonal movements or migrations from breeding areas have not been reported. Normal home ranges are probably less than 10 m (33 ft) in the longest dimension. Occasional long-distance movements (up to 50 m) (165 ft) may occur during periods with high water conditions. Breeding and egg laying usually await the end of spring flooding and may commence any time from mid-March to May, depending on local water conditions. The breeding season at any locality is usually about two weeks for most populations. Females deposit eggs in clusters of 200 to 300 (range 100 to 1000). They hatch in about five days. Tadpoles reach maximum sizes of 50 to 55 mm (2.2 in) and transform in three to four months.

CONCLUSION

The FYLF is not documented in the vicinity of the Specific Plan Area. The ditches within the Specific Plan Area provide some limited habitat for FYLF. This species is known to occur in aquatic habitats, such as creeks or rivers in woodland, forest, mixed chaparral, and wet meadow habitats with rock and gravel substrate and low overhanging vegetation along the edge. They are usually found near riffles with rocks and sunny banks nearby. The conditions of the Plan Area, including the drainages, are not ideal for this species and they are presumed absent. Implementation of the proposed project would have a ***less than significant*** impact relative to this species.

Impact 3.2-3: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Birds (Less than Significant with Mitigation)

There are numerous special-status birds that are documented within the region. The Specific Plan Area was assessed for habitat to support special-status birds. Field surveys revealed the presence of two special-status birds: yellow warbler (*Setophaga petechial*), and California horned lark (*Eremophila alpestris actia*). While other special-status birds were not observed on-site during field surveys, it is highly likely that they could regularly use or pass through the Specific Plan Area given their high mobility.

Nesting Raptors (Birds of Prey): All raptors (owls, hawks, eagles, falcons), including common species, and their nests, are protected from take pursuant to the Fish and Game Code of California

Section 3503.5, and the federal MBTA, among other federal and State regulations. Powerlines and trees located in the region represent potentially suitable nesting habitat for a variety of special-status raptors, including white-tailed kite *(Elanus leucurus*), Swainson's hawk *(Buteo swainsoni*), and Cooper's hawk *(Accipiter cooperii*). The agricultural land in the Specific Plan Area and vicinity represents potentially suitable nesting habitat for the ground-nesting northern harrier *(Circus cyaneus*) and burrowing owl *(Athene cunicularia*) and it also serves as foraging habitat for a wide variety of raptors including: Prairie falcon (*Falco mexicanus*), ferruginous hawk *(Buteo rega*), golden eagle *(Aquila chrysaetos*), merlin *(Falco columbarius*). In general, raptor nesting occurs from late February and early March through late July and early August, depending on various environmental conditions. In addition to the species described above, common raptors such as red-tailed hawk *(Buteo jamaicensis)* and great horned owl *(Bubo virginianus),* among others, may nest in or adjacent to the Specific Plan Area. The field surveys over the past decade, including the latest 2016 survey, did not reveal any evidence of raptor nesting.

Shore/Water Birds: Colonial nesting water bird rookery sites of double-crested cormorant *(Phalacrocorax auritus),* great blue heron *(Ardea herodias),* great egret *(Ardea alba),* snowy egret *(Egretta thula),* and black-crowned night heron *(Nycticorax nycticorax),* among others, are considered sensitive species. These species are not formally listed and protected pursuant to either the State or federal Endangered Species Acts but are of stated interest to CDFW and are protected by the MBTA. The irrigation ditches present potentially suitable habitat for these species, although rookeries of these species have not been previously reported in this area nor were they observed during any of the field surveys. In general, the nesting season for these colonial nesters is from March through July, but may vary depending on weather conditions or disturbances. The agricultural area throughout the Specific Plan Area provides foraging habitat for these colonial nesters. Although these species were not observed during any of the field surveys, they are common in the region and may use the Specific Plan Area for foraging from time to time.

Nesting Passerine Birds (songbirds): There is limited nesting habitat present in the Specific Plan Area for songbirds. The agricultural area throughout the Specific Plan Area provides foraging habitat for nesting passerine birds including: yellow warbler (*Setophaga petechial*), Loggerhead Shrike (*Lanius ludovicianus*), California horned lark (*Eremophila alpestris actia*). The development of the Specific Plan Area would remove potential nesting habitat along the ditches and foraging habitat throughout the area.

CONCLUSION

There are very few trees suitable for nesting within the Specific Plan Area. All trees are associated with the farm residence complexes located along Natividad Road and San Juan Grade Road. There was no evidence of nesting in the on-site trees during any of the past field surveys. There are also powerlines located along Natividad Road, Rogge Road, portions of San Juan Grade Road, and various dirt farm roads through the Specific Plan Area. There were no nests observed in the powerlines/poles.

Construction activities in the Specific Plan Area would create temporary sources of noise and light that could affect nesting songbirds if they are located adjacent to the Specific Plan Area in the future.

The ongoing activities associated with the operational phase (i.e., human and/or domesticated animal presence, light, noise, etc.) could disrupt nesting birds if they are located adjacent to the Specific Plan Area in the future.

The following mitigation is intended to avoid and minimize impacts to special-status birds to the extent feasible. The measure requires a preconstruction survey of the Plan Area and immediate vicinity for all special-status birds protected by the federal and state ESA, MBTA and CFGC prior to construction. Such a survey would ensure that appropriate avoidance and minimization measures could be applied during the construction process to ensure that nesting birds were not adversely affected if determined to be present at that time. If nesting birds are found during the survey, a 300-foot buffer would be developed around active nests to ensure that the nesting birds are not disrupted during the breeding (February 1 – September 15). If construction stops for a period of 15 days or more during the avian breeding season than an additional bird survey shall be conducted. Construction activity shall be prohibited within the buffer zones until the young have fledged. Nests shall be monitored at least twice per week during the nesting season and a report submitted to the City and CDFW monthly.

With implementation of the following measures, the proposed project would not, directly or indirectly, have a substantial adverse effect on bird species through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS. Implementation of the proposed project, with the following mitigation measure, would ensure that potential impacts to special-status nesting birds are reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.2-5: *Building and grading permits and plans issued for development in the project area shall note the following: If construction activities occur during the avian breeding season (February 1 – September 15) then the project proponent shall conduct pre-construction surveys to prevent impacts to nesting birds. No more than 15 days prior to the start of construction a bird survey shall be conducted by a qualified biologist to identify any active nests within the Specific Plan Area, and shall be submitted to the City. If construction stops for a period of 15 days or more during the avian breeding season than an additional bird survey shall be conducted. The biologist will conduct a survey in the Specific Plan Area for all special-status birds protected by the federal and state ESA, MBTA and CFGC. The biologist shall map all nests that are within, and visible from, the Specific Plan Area. If nests are identified, the biologist shall map the location and establish a minimum 300-foot buffer zone around active nests. Construction activity shall be prohibited within the buffer zones until the young have fledged. Nests shall be monitored at least twice per week during the nesting season and a report submitted to the City and CDFW monthly.*

Impact 3.2-4: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Fish (Less than Significant)

There are numerous special-status fish that are documented within region. None are documented within the Specific Plan Area or vicinity. Based on field surveys, habitat conditions, and records searches, there are no fish species that have the potential to be present within the Specific Plan Area. The proposed project would not, directly or indirectly, have a substantial adverse effect on fish species through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS. Therefore, the proposed project would have a ***less than significant*** impact on special-status fish species.

Impact 3.2-5: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Mammals (Less than Significant with Mitigation)

There are numerous special-status mammals that are documented within the region. None are documented in the Specific Plan Area or the general vicinity. The Specific Plan Area was assessed for habitat to support special-status mammals and based on field surveys and records searches, two warranted a more detailed evaluation within this EIR due to the habitat conditions including Monterey dusky-footed woodrat (*Neotoma fuscipes Luciana*), and protected bats.

Monterey Dusky-Footed Woodrat (*Neotoma fuscipes luciana*). The Monterey dusky-footed woodrat is a California Species of Special Concern that occurs in a variety of woodland and scrub habitats in Monterey County. Dusky-footed woodrats are found in riparian and oak woodland forests or thick chaparral habitat. Dusky-footed woodrats build large, complex nests of sticks and other woody debris. Nests are typically located near the bases of trees or shrubs, under snags, under dense brush, in the lowest branches of trees, and are often found within riparian areas. Dusky-footed woodrats favor dense canopy cover and areas with poison oak. The breeding season generally begins in February and continues through September, and females have a single brood per

year. This species may occur within riparian vegetation found in the region, most notably along Gabilian Creek and Natividad Creek located to the east; however, appropriate habitat is not present within the Specific Plan Area. Implementation of the proposed project would have a ***less than significant*** impact on this species.

Special-status bats: The Specific Plan Area provides potential habitat for several special-status bats, including: Mexican free-tailed bat (*Tadarida brasiliensis),* California mastiff bat (*Eumops perotis californicus*), big brown bat (*Eptesicus fuscus),* Hoary bat (*Lasiurus cinereus),* spotted bat (*Euderma maculatum),* Townsend's big-eared bat (*Corynorhinus townsendii),* pallid bat (*Antrozous pallidus*), western pipistrelle (*Pipistrellus Hesperus),* small-footed myotis/bat (*Myotis ciliolabrum*), long-eared myotis/bat (*Myotis evotis*), California myotis (*Myotis californicus),* long-legged myotis/bat (*Myotis volans*), Yuma myotis/bat (*Myotis yumanensis*), and little brown bat *(Myotis lucifugus).* These species are not federal or State listed; however, most of them are considered California Species of Special Concern and/or are tracked by the CNDDB. Bats are found in a variety of habitats in the region, including buildings, bridges, mines, caves, tree cavities, under bark or rocks, etc. There is the potential for bats to roost in the two on-site farmland residence complexes along San Juan Grade Road, and/or the complexes located along Natividad Road. There is no evidence that bats are present in these locations at this time; however, they can become occupied at some future date. The following mitigation measure is presented to ensure appropriate measures are taken to avoid and minimize impacts to bats to the extent feasible.

CONCLUSION

With implementation of the following measures, the proposed project would not, directly or indirectly, have a substantial adverse effect on mammal species through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS. With implementation of the following measure, this potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.2-6: *Grading and/or building permits and plans issued for development in the project area shall note the following: Fifteen days prior to construction activities within 200 feet of the residential complexes located along Natividad Road and San Juan Grade Road, the project applicant shall retain a qualified biologist familiar with bat biology to perform a preconstruction survey for roosting special-status bats; and shall be submitted to the City. The survey shall include a minimum of one daytime and one evening survey. The survey shall cover the trees, structures, and debris located within these complexes. If active roosting is observed, removal of the tree or building shall be avoided until the bats can be excluded. All active non-maternity roosting sites shall be fitted with passive exclusion devices, such as one-way flaps or doors, and all bats shall be allowed to leave voluntarily. Once it is confirmed that all bats have left the roost (minimum of five days), crews shall be allowed to continue work in the area. If a maternity roosting site is discovered, a minimum 50-foot buffer shall be established around the roost. The project applicant shall consult with the qualified*

biologist in order to determine if a greater buffer is warranted based on the bat species, roost location, and specific construction activities to be performed in the vicinity. The buffer shall stay in effect until all young are determined to be volant (i.e., able to fly and feed independently) by a qualified biologist. Once it is determined that all young are volant (generally by August 1st), passive exclusion devices shall be installed and all bats shall be allowed to leave voluntarily. Once it is determined by a qualified biologist that all bats have left the roost (minimum of five days), crews shall be allowed to work within the buffer zone. Project Improvement Plans will include this measure as a note in the plans.

Impact 3.2-6: The proposed project has the potential to, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS - Plants (Less than Significant)

The records search identified numerous special-status plants located within the region. Field surveys and habitat evaluations were performed in 2004 by Biotic Resources Group: March (26th and 31st), April (14th and 30th), May (17th), June (17th), July (26th). Additional field surveys were performed by De Novo Planning Group in 2015 September (11th) and in 2016 (April 18th). The collection of field surveys included surveys that coincided with the blooming period for special many status plants known to occur within the region. The conditions of the Specific Plan Area are highly disturbed due to the active agricultural operations. No special-status plants were observed within the Specific Plan Area during field surveys.

The proposed project would not, directly or indirectly, have a substantial adverse effect on plant species through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS. Implementation of the proposed project will have a ***less than significant*** impact on candidate, sensitive, or special-status plants.

Impact 3.2-7: The proposed project has the potential to have substantial adverse effect on federally - or state- protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Less than Significant with Mitigation)

The Specific Plan Area does not contain any natural hydrologic features. During the previous surveys it was noted that there was a dry pond located near the intersection of Natividad Road and Rogge Road. This area was a man-made agricultural irrigation basin. The most recent surveys show that

this dry pond is no longer present. Aerial photos show that the dry pond was converted back to agricultural use sometime around 2004 to 2005. This area has been farmed ever since.

The Specific Plan Area contains an internal network of agricultural ditches along the margins of the farm fields. These areas were mostly void of vegetation during the field surveys of September 2015 and April 2016. Farmworkers indicated that the ditches are regularly maintained to control/collect irrigation runoff from the fields. These features are manmade and are fed only by local irrigation water during the irrigation season or rainfall during the winter/spring season.

The Specific Plan Area contains a roadside ditch located along the east side of San Juan Grade Road. The ditch was constructed to support agricultural operations, and drains agricultural runoff into the existing City storm water drainage system. The ditch is approximately six feet in width and three feet in depth. The ditch drains into a culvert in San Juan Grade Road and ultimately into the Santa Rita Creek. Santa Rita Creek flows west away from the city and enters the Reclamation Ditch east of SR 183 just over one-mile south of Castroville.

The Specific Plan Area also contains a roadside ditch located along the north side of East Boronda Road. The ditch was constructed to support agricultural operations, and drains agricultural runoff from most of the Specific Plan Area into the existing City storm water drainage system. The ditches range from five to nine feet in width from top of bank to top of bank, and range from 1.5 to three feet in depth. The total length of drainage ditch is approximately 6,618 feet. This roadside ditch drains into two inlets that are connected to the City's storm water drainage system: one is located on the north side of the intersection of Dartmouth Way and East Boronda Road, and another is located on the north side of the intersection of McKinnon Street and East Boronda Road. After entering the City's storm water drainage system, the water intermixes with municipal runoff and flows through approximately 3.22 miles of underground storm drain pipe and through three detention basin facilities: McKinnon Park, Northgate Park, and Westridge Center. The water then flows into a detention area on the southwest side of the City known as Markley Swamp. This area is comprised of low-lying agricultural fields that are actively farmed during most of the year, though occasionally the fields are inundated with excess storm water. From Markley Swamp it enters an open flow channel connecting to the Reclamation Ditch system, which ultimately connects to Monterey Bay at Moss Landing Harbor.

The USACE has regulatory responsibility for navigable waters as well as "all other waters such as...streams ...wetlands...and natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce" (33 CFR 323.2) under Section 404 of the CWA. A formal jurisdictional determination must be made by the USACE relative to the protected wetlands and jurisdictional waters within the Specific Plan Area. The agricultural irrigation ditches are manmade and believed to solely function to drain upland agricultural runoff. As such, they are expected to be exempted from the USACE jurisdiction under the Irrigation Ditch Exemption pursuant to Federal Regulations (33 CFR 323.4(a)(3)). However, a final determination must be made by the USACE prior to any filling of these ditches for urban use.

It is noted that the City of Salinas and its consultants have consulted with the USACE in coordination with the East Boronda Road Widening Project. Through that consultation, the USACE has claimed jurisdiction over the roadside ditch located along the north side of East Boronda Road. This road

widening project is being led by the City of Salinas. The City and its consultants are pursuing a 404 permit through the Nationwide Permit process (i.e. NWP 14 for linear transportation projects).

A portion of the East Boronda Road widening project is located along the southern boundary of the Plan Area. The timing of that road widening project will likely occur prior to the West Area Specific Plan, so it is anticipated that any fill activities in the ditch would be permitted through the East Boronda Road widening project. If this proves to be the case, then upon completion of that project the hydrology would change from an open roadside ditch to and underground pipe. If the West Area Specific Plan moved forward prior to the East Boronda road widening project, then a permit would be required prior to any fill activities in this roadside ditch.

Given that the USACE intends to exert its jurisdiction over the East Boronda roadside ditch, it is anticipated that the roadside ditch located along the east side of San Juan Grade Road would also be jurisdictional and any fill activities would be subject to a 404 permit. The type of 404 permit would be dependent on several factors and would be determined in consultation with the USACE.

CONCLUSION

The proposed project has the potential to have substantial adverse effect on federally - or state-protected wetlands through direct removal, filling, hydrological interruption, or other means. Implementation of the following mitigation measure would ensure that there is no fill, or hydrologic interruption, to a jurisdictional facility, without an appropriate authorization from the regulatory agencies (USACE, RWQCB, and CDFW). Additionally, the following mitigation measure would require a "no net loss" of wetland, which would require a 1:1 replacement of acreage and function of all wetlands and other waters that would be removed, lost, or degraded as a result of project implementation or operations. With implementation of the following measure, the impact would be ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.2-7*: Prior to grading/building permit issuance in an area that would disturb the irrigation ditches and/or roadside ditches, the project applicant shall obtain a jurisdictional determination from the USACE and CDFW for the ditches that are proposed to be disturbed. If these regulatory agencies concur that these facilities are exempt, then no further mitigation is necessary. If it is determined that these facilities are not exempt, authorization for fill from the regulatory agencies (USACE-404 permit, RWQCB-401 certification, 1600 Streambed Alteration Agreement) will be necessary and a permit shall be adhered to throughout the construction phase. At a minimum, the project applicant shall replace on a "no net loss" basis (minimum 1:1 ratio) the acreage and function of all wetlands and other waters that would be removed, lost, or degraded as a result of project implementation or operations, although a higher mitigation measure may be required by the USACE, RWQCB, and CDFW through their permitting processes. Wetland habitat shall be replaced at acreage and location agreeable to the USACE, RWQCB, and CDFW and as determined during the Section 401, 404, and 1600 permitting processes.*

Impact 3.2-8: The proposed project has the potential to have substantial adverse effect on riparian habitat or other sensitive natural community

identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (Less than Significant)

The records search and field surveys did not reveal the presence of any riparian habitat or sensitive natural communities within the Specific Plan Area. The conditions of the Specific Plan Area are highly disturbed due to the active agricultural operations. The proposed project would not result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or UFWSF. Implementation of the proposed project will have a ***less than significant*** impact on riparian habitat or sensitive natural communities.

Impact 3.2-9: The proposed project has the potential to interfere substantially with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites (Significant and Unavoidable)

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

Impacts from development, such as habitat fragmentation and/or isolation, and the creation of impassable barriers can cause a significant impact to wildlife corridors. Depending on the organism and its needs, movement corridors can either be continuous or discontinuous patches of suitable habitat. Preserving expanses of open space that are connected may enable species utilizing these areas as foraging or breeding habitat to persist.

The Specific Plan Area is used predominantly for active agricultural production, which generally prohibits most overland wildlife movement due to the lack of suitable vegetative cover. The exception is the irrigation and roadside ditches that drain irrigation runoff. This network of irrigation ditches throughout the Specific Plan Area provides some aquatic linkage and potential movement corridors for special-status species documented in the vicinity, including CTS and CRLF. The roadside ditches located along Boronda Road and San Juan Grade Road also provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris. There have not been any observations of these species in the Specific Plan Area; however, detection is difficult without seasonal trapping efforts.

CONCLUSION

The proposed project has the potential to interfere substantially with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery

sites. Development of the proposed project would eliminate any movement habitat through the Specific Plan Area, along with any upland habitat adjacent to the movement corridors. This is a potentially significant impact. There are no mitigation measures that can fully mitigate this impact and, given the fact that once the land is converted, it will no longer be a viable migration corridor for any species. Implementation of the proposed project would have a ***significant and unavoidable*** impact relative to the loss of movement habitat through the Specific Plan Area, combined with the loss of upland habitat.

Impact 3.2-10: The proposed project has the potential to conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan (Less than Significant)

The proposed project is not subject to a Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, the proposed project would not conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan. The proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.2-11: The proposed project has the potential to conflict with local policies or ordinances protecting biological resources (Less than Significant)

State law requires any decision by a city affecting land use and development to be consistent with its General Plan. This determination is ultimately made by the City Council. If an action, program or project is inconsistent with the General Plan, State law requires it be reconciled. This may involve modification to the action, program, or project, or amendment of the General Plan. Therefore, this impact discussion will evaluate the proposed projects' consistency with the Salinas General Plan as it related to biological resources. The evaluation will consider the proposed project's consistency with the adopted General Plan policies included within the Conservation/Open Space Element of the Salinas General Plan. This impact discussion also includes an evaluation of the project's consistency with the City of Salinas Municipal Code.

City of Salinas General Plan: The following discussion analyzes the project's consistency with the relevant goal and policies of the City's General Plan.

Policy COS-2.1: Participate in and implement local and regional programs that promote water conservation.

> Impacts associated with water supply are analyzed in Section 3.11, Utilities, of this EIR. As noted on page 3.11-18, all new buildings and irrigated area systems in the West Area Specific Plan are to comply with current City of Salinas Codes (including the City's Water Efficient Landscape ordinance), the City's General Plan EIR Mitigation Monitoring and Reporting Program, and the California Plumbing and California Green Building Codes, which mandate installation of water conservation plumbing fixtures and fittings. The proposed project is consistent with Policy COS-2.1.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

Impacts associated with hydrology and water quality are analyzed in Section 3.6, Hydrology and Water Quality, of this EIR. As noted in Impact 3.6-1, in accordance with the National Pollutant Discharge Elimination System (NPDES) Stormwater Program, Mitigation Measure 3.6-1 ensures compliance with existing regulatory requirements to prepare a Stormwater Pollution Prevention Plan (SWPPP) designed to control erosion and the loss of topsoil to the extent practicable using best management practices (BMPs) that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. Additionally, Mitigation Measure 3.6-2 requires the project applicant to submit detailed plans and calculations for water quality BMPs and water quality detention/retention basins design, consistent with the City's NPDES permit requirements. These are regulatory requirements that have been incorporated into the EIR as mitigation to ensure water quality is maintained. The proposed project is consistent with Policy COS-1.6.

Policy COS-5.1: Protect and enhance creek corridors, river corridors, the reclamation ditch, sloughs, wetlands, hillsides and other potentially significant biological resources for their value in providing visual amenity, flood protection, habitat for wildlife and recreational opportunities.

The Plan Area does not contain creek corridors, river corridors, reclamation ditches, sloughs, wetlands, or hillsides. There is an area located near the intersection of Natividad Road and Rogge Road that had a dry pond during previous surveys. The most recent surveys show that this dry pond is no longer present. Aerial photos show that the dry pond was converted back to agricultural use sometime around 2004 to 2005. This area has been farmed ever since.

The Plan Area contains an internal network of agricultural ditches along the margins of the farm fields. These areas were mostly void of vegetation during the field surveys of September 2015 and April 2016. Farmworkers indicated that the ditches are regularly maintained to control/collect irrigation runoff from the fields. These features are manmade and are fed only by local irrigation water during the irrigation season or rainfall during the winter/spring season.

The Plan Area contains a roadside ditch located along the east side of San Juan Grade Road. The ditch was also constructed to support agricultural operations, and drains agricultural runoff into the existing City storm water drainage system. The ditch is approximately six feet in width and three feet in depth. The ditch drains into a culvert in San Juan Grade Road and ultimately into the Santa Rita Creek. Santa Rita Creek flows west away from the city and enters the Reclamation Ditch east of SR 183 just over one-mile south of Castroville.

The Plan Area contains a roadside ditch located along the north side of East Boronda Road. The ditch was constructed to support agricultural operations, and drains agricultural runoff from most of the Specific Plan Area into the existing City storm water drainage system. The ditches range from five to nine feet in width from top of bank to top of bank, and range from 1.5 to three feet in depth. The total length of drainage ditch is approximately 6,618 feet. The City of Salinas and their consultants have had preliminary discussions with the USACE about this

roadside ditch in coordination with the East Boronda Road Widening Project. Through that consultation, the USACE has indicated that they intend to exert their jurisdiction over the roadside ditch. This road widening project is being led by the City of Salinas, and it is anticipated that the City and their consultants will pursue a 404 permit through the Nationwide Permit process (i.e. NWP 14 for linear transportation projects). It is anticipated that the fill activities would be completed under the East Boronda Road widening project and that the hydrology would change from an open roadside ditch to and underground pipe. If the West Area Specific Plan moved forward prior to the East Boronda road widening project, then a permit would be required prior to any fill activities in this roadside ditch.

A mitigation measure has been incorporated into this project to ensure that no fill activities of any ditches occur within consultation and/or permitting from the USACE. Therefore, the proposed project is consistent with Policy COS-5.1.

Policy COS-5.2: Explore with Monterey County the potential for creation of a Gabilan Creek Regional Park extending along the creek from the urban edge to the headwaters in the Gabilan Mountains.

Gabilan Creek is located approximately 0.37 miles east of the western Plan Area boundary. The Gabilan Mountains are located further east of the Creek. Therefore, the proposed project is consistent with Policy COS-5.2.

Policy COS-7.2: Maximize the use of built and natural features to develop a citywide network of parks and open spaces with Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex as essential elements of the open space network.

Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex are not located on the Plan Area. However, the proposed project includes ample park and open space uses such that all residents will be within an approximately five-minute walking time of a neighborhood or small park and ten minutes from the community park. The proposed project is consistent with Policy COS-7.2.

Policy COS-7.11: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainage-ways, slopes, and other natural features.

The proposed project includes development of an integrated system of open-space corridors and trails. The proposed project is consistent with Policy COS-7.11.

Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes and other services to the integrated trails network.

Monterey-Salinas Transit (MST) currently provides transit access to the site from existing bus stops located along Boronda Road. One of the primary project objectives is to create a community with a compact form that promotes sustainable neighborhood design and is pedestrian, bicycle, and transit friendly. The proposed project includes development of an integrated system of open-space corridors and trails in an area of the City which is currently

served by MST. Additionally, as shown in Figure 2-6 in Chapter 2.0, Project Description, various recreational opportunities would be provided by the onsite parks, which would also be linked by the proposed open space corridors. The proposed project is consistent with Policy COS-7.12.

Policy COS-20: Protection and Enhancement of Special Status Species. Require project developers to protect and enhance special status species habitat through setbacks and open space easements within new development and/or redevelopment areas. Protection and enhancement of special status species habitat shall require management of the habitat to ensure persistence of the species within the setback areas.

Surveys shall be conducted at the appropriate season to ascertain whether the habitats within the proposed project area support special status species. If special status species are observed, avoidance measures shall be implemented.

A qualified biologist shall conduct a biological assessment of all habitat areas to assess the potential for the following special status species: Congdon's tarplant, Contra Costa goldfields, Pinnacles buckwheat, Alkali milk-vetch, Santa Cruz clover, Hutchinson's larkspur, Kellogg's horkelia, Burrowing owl, and /or California tiger salamander. If suitable habitat for any of these species is observed, then focused surveys during the appropriate season should be conducted. Such surveys would include winter and spring surveys for tiger salamander, protocol presence/absence surveys for burrowing owl, and spring/summer surveys for special status plant species. The California Department of Fish and Wildlife shall be consulted regarding the appropriate level of effort and protocol prior to conducting focused wildlife species surveys. If any of these species are found to inhabit the survey area, the City may require the preparation and implementation of a Habitat Management Plan to provide protection for the habitat. If impacts to occurrences are deemed unavoidable, the plan shall identify mitigation measures to compensate for impacts to the species. As part of the Habitat Management Plan, a 100-foot buffer shall be established around rare plant occurrences. The plan shall include measures to manage the rare plant occurrences for their protection and persistence at the site. The Habitat Management Plan shall be reviewed and approved by the California Department of Fish and Wildlife and/or USFWS prior to issuance of any permits by the City.

Prior to any proposed development within 150 feet of the stream corridors, protocol presence/absence surveys for California red-legged frog, southwestern pond turtle, and nesting birds should be conducted.

If these species are observed, the CDFG and the USFWS should be consulted regarding appropriate measures to avoid and mitigate potential impacts of the project on these species. The City shall not issue any permits prior to obtaining written approval from the CDFG and/or USFWS that the proposed mitigation plan has been approved.

Prior to any proposed development within or adjacent to oak woodland, a qualified biologist should conduct surveys to determine if protected wildlife species are nesting in the oak woodland, e.g., nesting raptors. If trees are to be removed, a qualified bat biologist should evaluate the trees as potential bat roost sites prior to removal, and recommend measures to avoid impacts to bats, such as exclusionary devices.

The Plan Area contains suitable habitat for several special-status species, as discussed throughout this section. The project includes open space areas which aim to protect and enhance habitat for special status and other species. Additionally, as required by Mitigation Measure 3.6-2 in Section 3.6 of this EIR, the project would be required to limit disturbance of creeks and natural drainage features and provide setbacks according to Permit Provision L.1.d.

As noted in page 3.2-1 of this section, various field surveys of the Plan Area have been conducted, including March (26th and 31st) 2004, April (14th and 30th) 2004, May (17th) 2004, June (17th) 2004, July (26th) 2004, September (11th) 2015, and (April 18th) 2016. These surveys were conducted during the appropriate season to ascertain whether the habitats within the Plan Area support special status species. Additional surveys of the Plan Area would be conducted prior to any proposed construction activities, as required by Mitigation Measures 3.2-5 (nesting birds) and 3.2-6 (roosting special-status bats). A qualified biologist conducted a biological assessment of all habitat areas to assess the potential for the following special status species (among other species): Congdon's tarplant, Contra Costa goldfields, Pinnacles buckwheat, Alkali milk-vetch, Santa Cruz clover, Hutchinson's larkspur, Kellogg's horkelia, Burrowing owl, and /or California tiger salamander. See Tables 3.2-2 and 3.2-3 for the potential for each of these species to occur in the Plan Area.

Additionally, California red-legged frog and southwestern pond turtle were not observed on-site. Surveys for nesting birds would be required by Mitigation Measure 3.2-5. The proposed project is consistent with Policy COS-20.

City of Salinas Municipal Code: Chapter 35, Trees and Shrubs, of the Salinas Municipal Code protects heritage and/or landmark trees through permit requirements. Section 35-9 outlines the permit requirements for trimming, pruning, planting, removing, or otherwise interfering with any tree, shrub, or plant upon any street, parkway, or alley in the City. Section 35-18 prohibits the removal of heritage or landmark oak trees from City property except with the prior written approval by the Director.

There are few trees located in the Plan Area. All of the on-site trees are landscape trees located in the western portion of the Plan Area along San Juan Grade Road. A few scattered trees are located near the residence southeast of the San Juan Grade Road / Van Buren Avenue intersection, and a few are located further north at another private residence on San Juan Grade Road. The species of these trees are eucalyptus (*Eucalyptus* sp.) and other ornamental species types.

Any removal of these trees would be required to comply with the provisions of the Salinas Municipal Code, including Chapter 35. This is an existing standard and regulation that is enforced by the City of Salinas during the improvement/grading plan and/or building plan phase of a project.

CONCLUSION

The proposed project would not conflict with local policies or ordinances protecting biological resources. The project proponent is required to comply with the provisions of the City's General Plan and Municipal Code. As demonstrated above, the proposed project is generally consistent with the

above relevant open space and conservation policies of the General Plan, as well as the City's Municipal Code. Overall, the proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species (Cumulatively Considerable and Significant and Unavoidable)

The cumulative context for a cumulative analysis can be defined by region, by political subdivision, or by the geography. This cumulative analysis utilizes the "Bioregion" as its cumulative setting. The Plan Area is located in the Central Coast Bioregion, which has a wide variety of habitats and vegetation, including coastal prairie scrub, chaparral, mixed hardwoods, oak woodlands, and redwood forests, among many other habitats. The climate in this Bioregion does not vary much with the seasons. The northern portion, and more coastal areas, experience relatively cool, often foggy summers, mild falls, and chilly, rainy winters. The southern and inland portions of this Bioregion have hot, dry summers and warm autumns that are followed by mild, wet winters. Snowfall is rare. The Central Coast Bioregion is the appropriate cumulative context because environmental impacts related to biological resources are best addressed in the context of geographic areas defined by natural features rather than by political or administrative boundaries.[2]

The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures were developed to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats. It has been found in this EIR that, with the implementation of mitigation measures, the project would not, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS.

The West Area Specific Plan will eliminate the onsite irrigation ditches, which provide some, but relatively little quality habitat. The West Area Specific Plan is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures were developed to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance, and that there be a no net loss of wetlands (1:1 minimum replacement ratio). The permit process ensures that minimization and compensation is incorporated into the activity. It has been found in this EIR that,

[2] U.S.G.S. Bioregions of the Pacific U.S. Available at: <https://www.usgs.gov/centers/werc/science/bioregions-pacific-us?qt-science_center_objects=0#qt-science_center_objects>.

with the implementation of mitigation measures, the project would not have substantial adverse effects, directly or indirectly, on protected wetlands and jurisdictional waters.

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

Impacts from development, such as habitat fragmentation and/or isolation, and the creation of impassable barriers can cause a significant impact to wildlife corridors. Depending on the organism and its needs, movement corridors can either be continuous or discontinuous patches of suitable habitat. Preserving expanses of open space that are connected may enable species utilizing these areas as foraging or breeding habitat to persist.

The Specific Plan Area is used predominantly for active agricultural production, which generally prohibits most overland wildlife movement due to the lack of suitable vegetative cover. The exception is the irrigation and roadside ditches that drain irrigation runoff. This network of irrigation ditches throughout the Specific Plan Area provides some aquatic linkage and potential movement corridors for special-status species documented in the vicinity, including CTS and CRLF, which have not been observed on the site and which are rare within the Bioregion. The roadside ditches located along Boronda Road and San Juan Grade Road also provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris.

The project would result in impacts to biological resources including habitats and special status species. Development of the proposed project would eliminate any movement habitat through the Specific Plan Area, along with any upland habitat adjacent to the movement corridors. This permanent loss of movement habitat was determined to be a significant and unavoidable impact. While the City has evaluated urban development in the Plan Area extensively through the General Plan and North of Boronda FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this loss of movement/migration habitat. Given the rareness of CTS and CRLF in the Bioregion, the incremental loss of movement habitat from the proposed project, when considered alongside all past, present, and probable future projects (inclusive of all communities within the Bioregion), is a ***significant and unavoidable cumulative impact***, and the Specific Plan's incremental contribution to this impact is itself ***cumulatively considerable***.

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Legend

- BAY AREA/DELTA
- CENTRAL COAST
- COLORADO DESERT
- KLAMATH/NORTH COAST
- MODOC
- MOJAVE
- SACRAMENTO VALLEY
- SAN JOAQUIN VALLEY
- SIERRA
- SOUTH COAST

Sources: Inter-agency Natural Areas Coordinating Committtee (INACC), 2004; California Spatial Information Library. Map date: April 25. 2016.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-1: Bioregions Map

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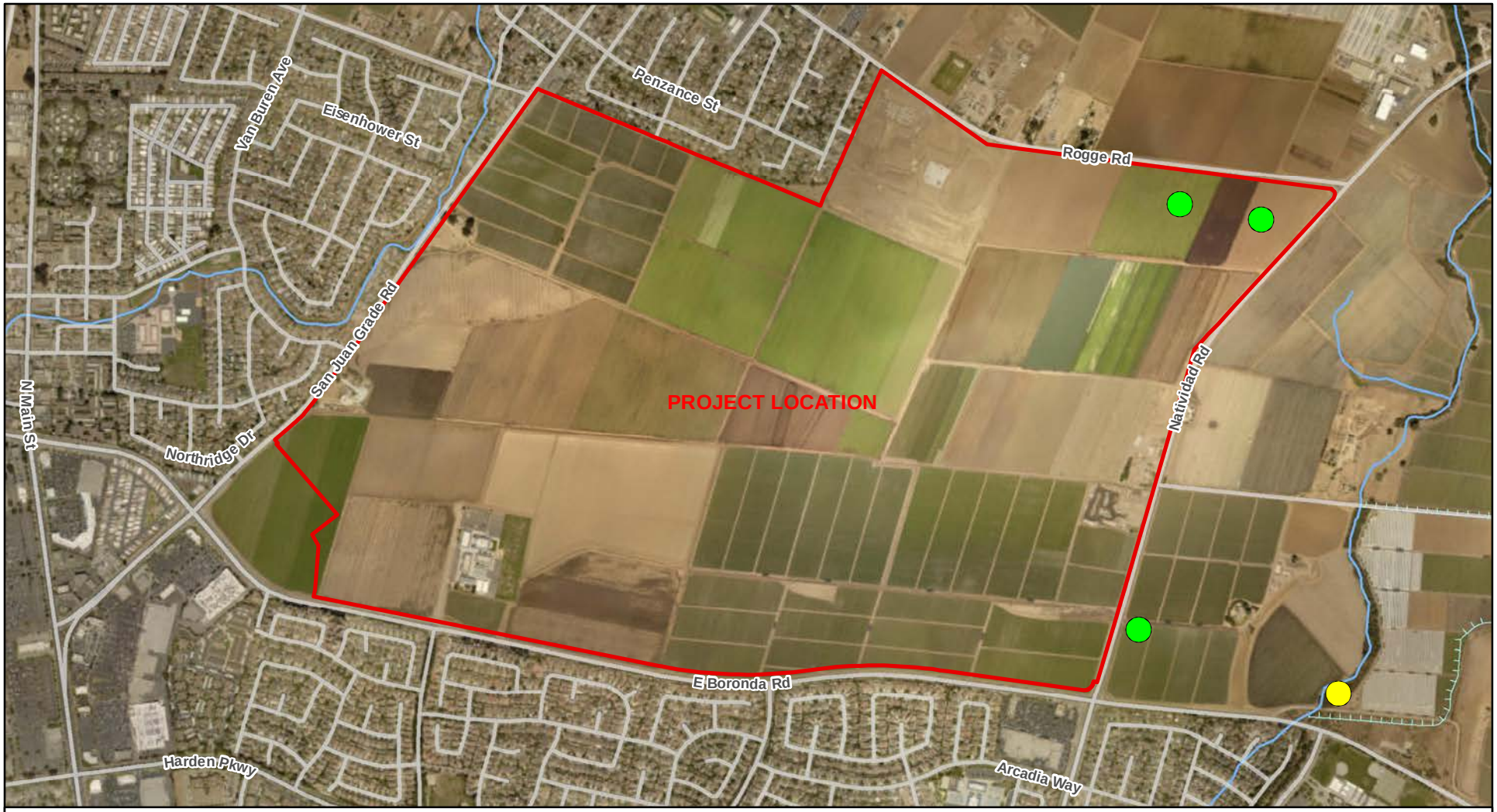

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-2: Wildlife Observations

Legend

- California horned lark, males/pairs
- Yellow warbler, singing males

N

0 600 1,200

Feet

1:16,000

Sources: Biotic Resources Group; Monterey County GIS; USGS National Hydrography Database; ArcGIS Online Aerial Imagery Service. Map date: April 25, 2016. Revised November 21, 2016. Boundary update: February 25, 2019.

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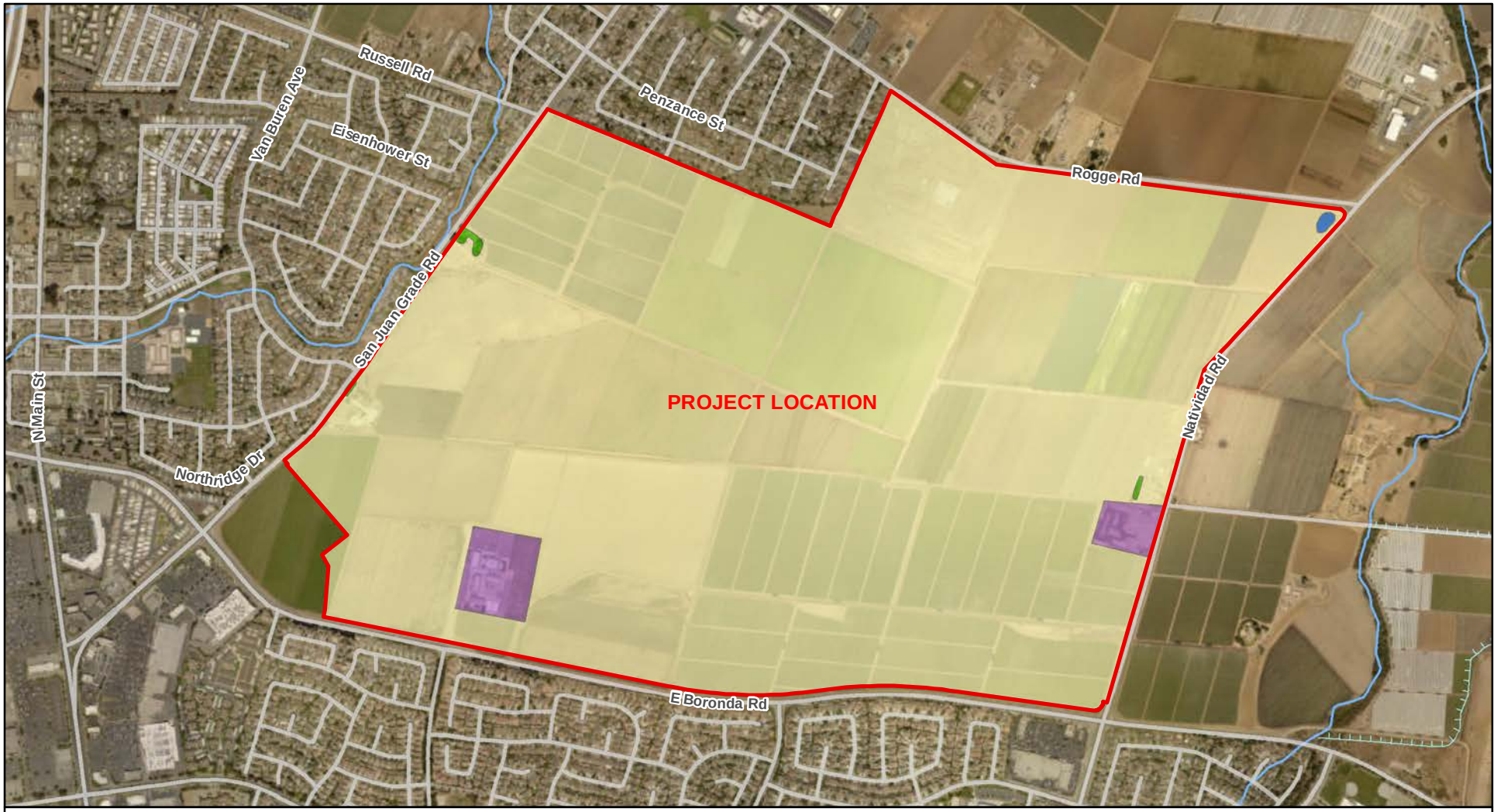

Legend

- Agricultural Fields
- Developed Area
- Landscape Trees (eucalyptus and other)
- Pond (dry)

N

0 600 1,200

Feet

1:16,000

Sources: Biotic Resources Group; Monterey County GIS; USGS National Hydrography Database; ArcGIS Online Aerial Imagery Service. Map date: April 25, 2016. Revised November 21, 2016. Boundary update: February 25, 2019.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-3: Existing Plant Communities

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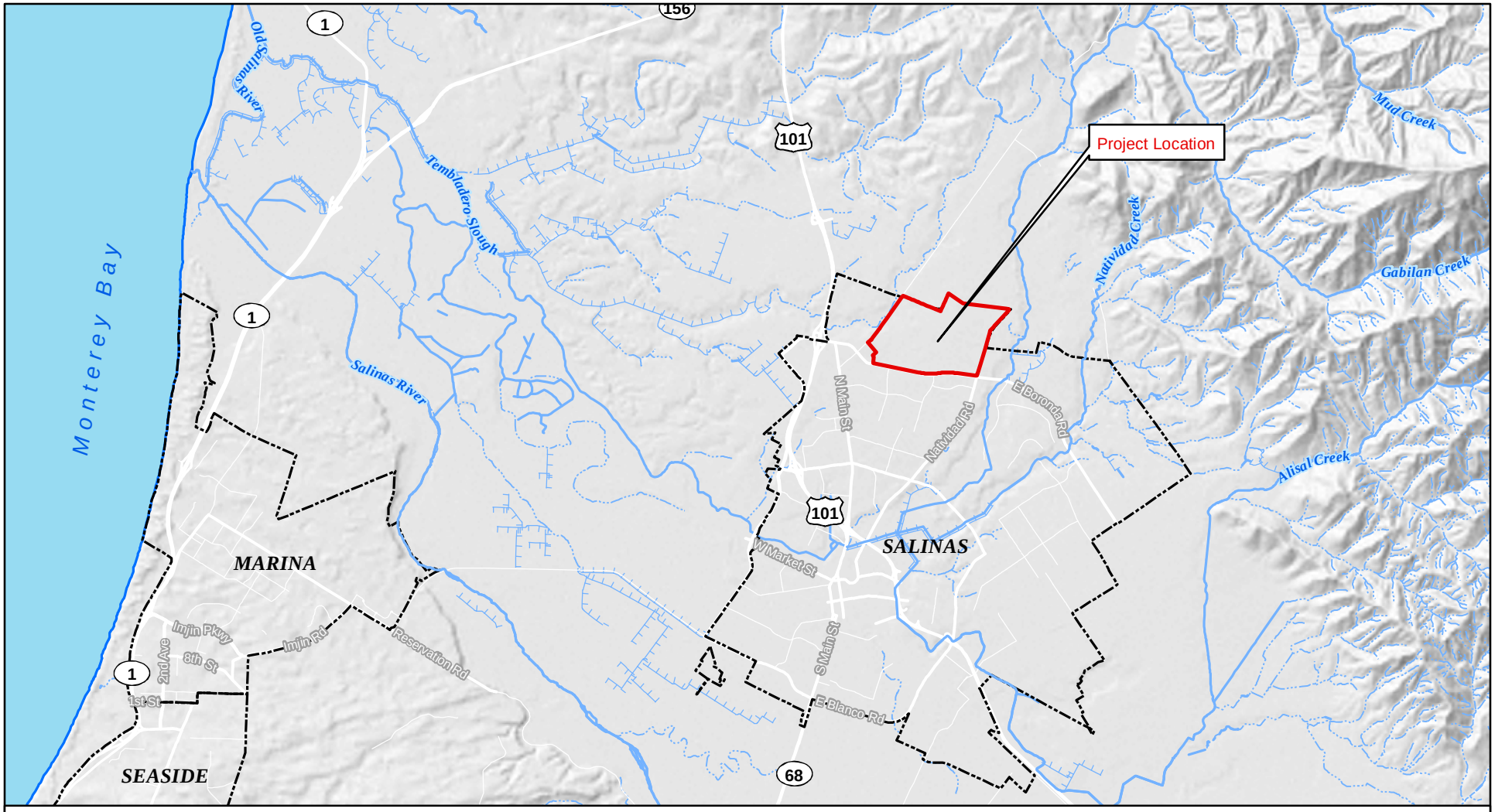

USGS Stream Type

- Perennial Stream
- Intermittent Stream
- Canal or Ditch
- Coastline

N

0 0.5 1

Miles

1:120,000

Sources: USGS National Hydrography Dataset; Monterey County GIS. Map date: April 26, 2016. Revised November 21, 2016. Boundary update: February 25, 2019.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-4: Hydrology Map

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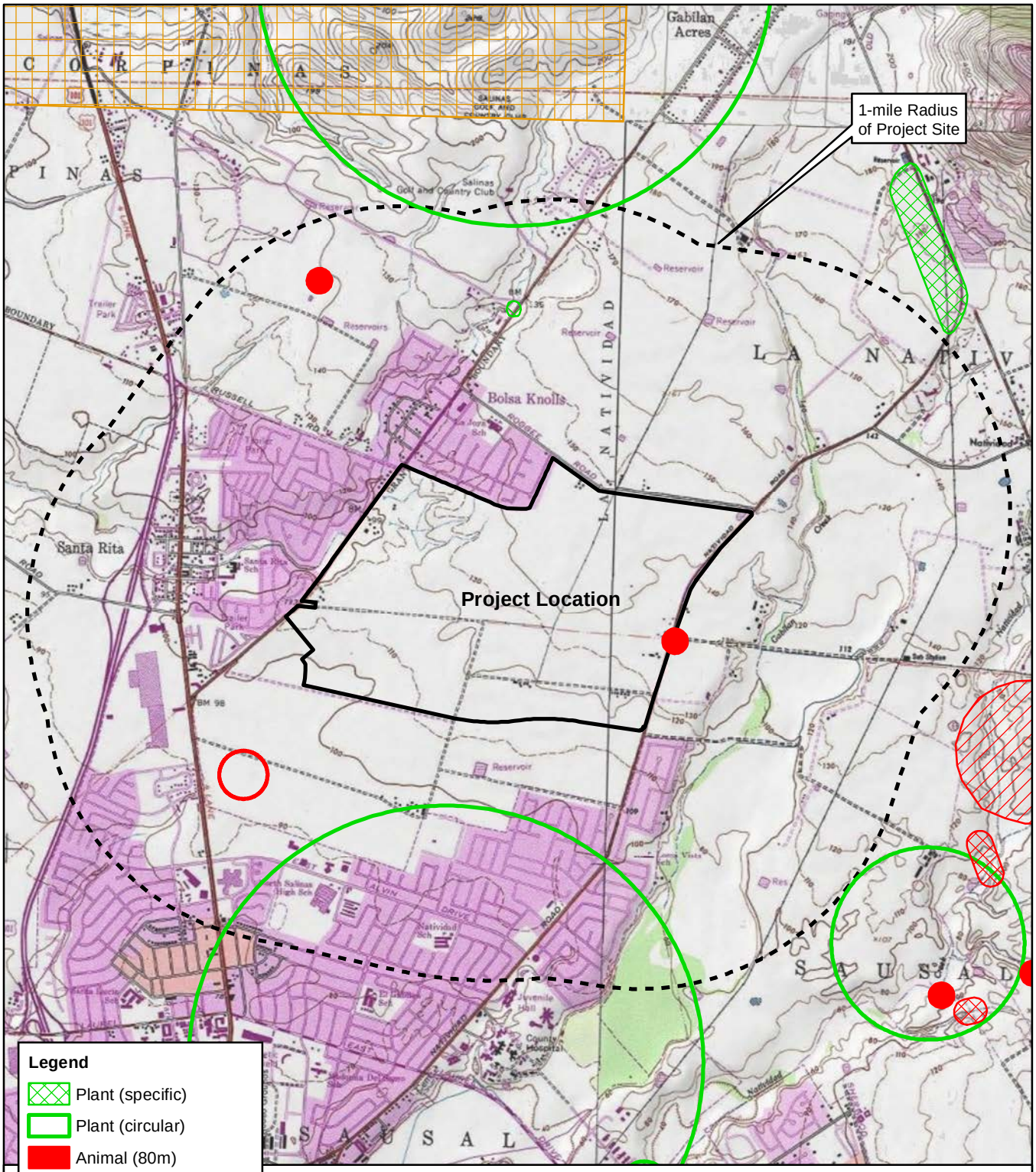

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.2-5. California Natural Diversity Database

1-mile Radius Search

CNDDB version 10/01/2017. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: October 29, 2017.

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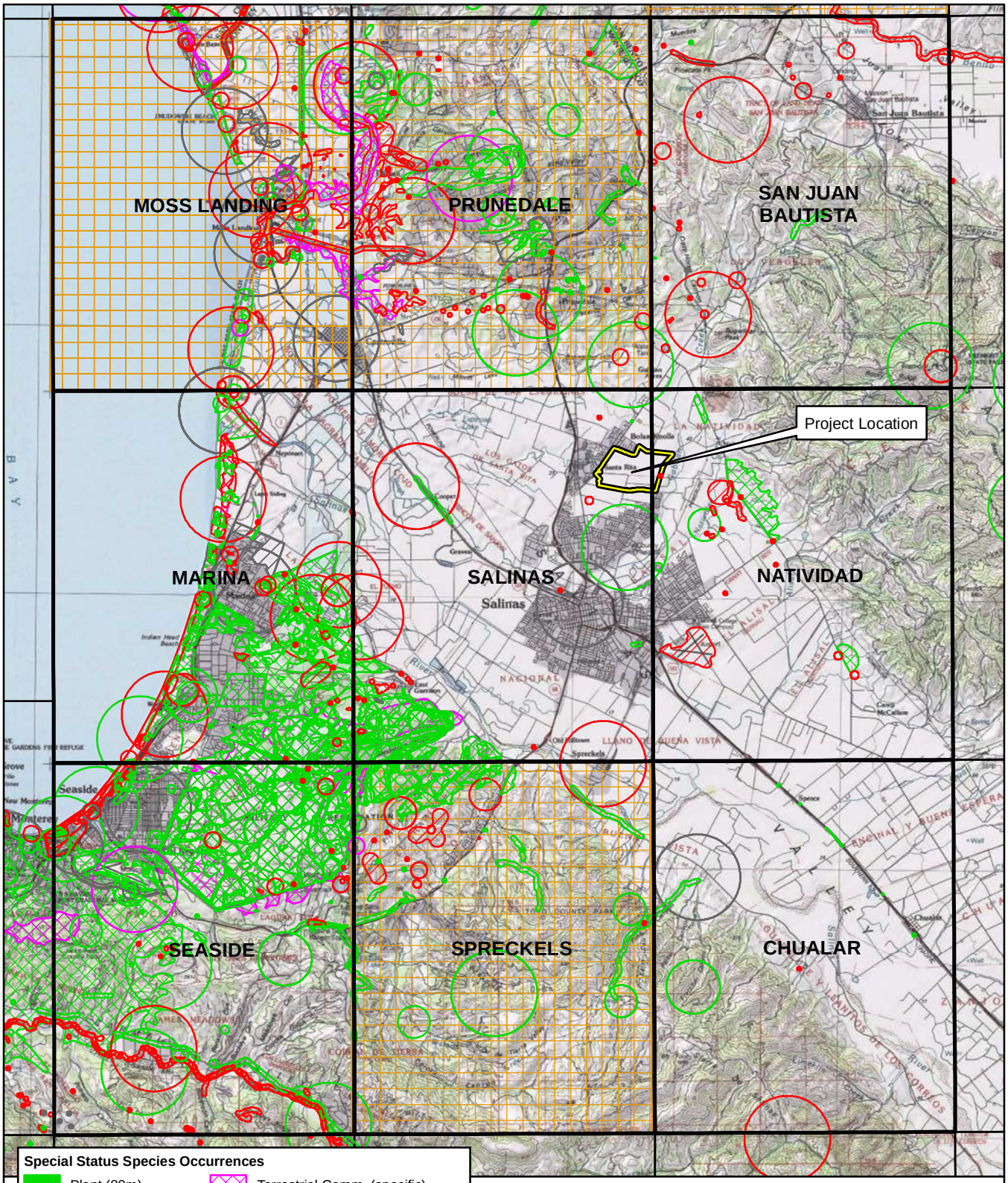

CITY OF SALINAS WEST AREA SPECIFIC PLAN

Figure 3.2-6: California Natural Diversity Database

9-Quad Search

N

0 1 2

Miles

1:210,000

CNDDB version 07/01/2017. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Basemap: ArcGIS Online Topographic Map Service. Map date: July 10, 2017.

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This section provides an overview discussion of the prehistoric period background, ethnographic background, and historic period background, known cultural resources in the region, the regulatory setting, impact analysis, and mitigation measures. Information in this section is derived primarily from the *Cultural Resource Assessment of the Proposed Project*, Peak and Associates, March 2016.

One comment was received during the public review period for the Notice of Preparation regarding environmental impacts associated with cultural resources. The Ohlone/Costanoan-Esselen Nation (OCEN) responded with a letter dated January 11, 2016. The OCEN requested to be included in ongoing project consultation. The letter did not identify any cultural resources in the Specific Plan Area. The comment letters is included in **Appendix A** of this EIR.

KEY TERMS

Cultural and Historic Resources are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. Preservation of the city's cultural heritage should be considered when planning for the future.

Archaeology. The study of historic or prehistoric peoples and their cultures by analysis of their artifacts and monuments.

Complex. A patterned grouping of similar artifact assemblages from two or more sites, presumed to represent an archaeological culture.

Ethnography. The study of contemporary human cultures.

Midden. A deposit marking a former habitation site and containing such materials as discarded artifacts, bone and shell fragments, food refuse, charcoal, ash, rock, human remains, structural remnants, and other cultural leavings.

Paleontology. The science of the forms of life existing in former geologic periods, as represented by their fossils.

3.3.1 ENVIRONMENTAL SETTING

PREHISTORY

Humans are believed to have resided in northern Monterey County for the past 13,000 years. Archeologists who have studied these past cultures have uncovered evidence of widespread activities that allowed them to divide these previous 13,000 years into periods or phases based on the kinds of subsistence behaviors practiced.

Six periods have been identified with locally defined phases and regional cultures added to the mix. The six periods are (from Jones and Klar 2007):

- Paleo-Indian Period, pre 8000 B.C
- Millingstone (or Early Archaic) Period, 8000 – 3500 B.C.
- Early Period, 3500 – 600 B.C.

- Middle Period, 600 B.C. – A.D. 1000
- Middle/Late Transition Period, A.D. 1000 – A.D. 1250
- Late Period, A.D. 1250 – A.D. 1769

Paleo-Indian Period (13,000 – 8000 B.C.)
Little is known about the earliest inhabitants in the area except for a few isolated artifacts that include a fluted spear point. Archeologists have yet to uncover a habitation site from this period that would allow for a greater understanding of how these people lived apart from hunting big game.

Millingstone (or Early Archaic) Period (8000 – 3500 B.C)
Over 40 archeological sites have been discovered with evidence from the people of this time period. Coastal resources were the focus of the early peoples, but the collection and processing of seeds was paramount during this period with a secondary reliance on hunting. Millingstones and handstones, also known by their Spanish name metates and manos are common tools for these early inhabitants while the side-notched spear points and other stone tools created for hunting purposes are less numerous.

Early Period (3500 – 600 B.C.)
This period witnessed a shift from the reliance of coastal resources and seeds to an increased focus on hunting. Deposits from this period are full of various kinds of spear points indicating wild game was now a preference for the dinner menu. The switch from millingstones and a seed based diet to one with meat was widespread throughout the Central Coast.

Middle Period (600 B.C. – A.D. 1000)
Diversification is the key to understanding this period as the early inhabitants began to utilize the resource base in more varied ways. Spear points are still very common but new tools such as the portable mortar and pestle and circular shell fishhooks become widespread. The Middle Period also witnesses the first use of a revolutionary technological development, the bow and arrow.

Middle/Late Transition Period (A.D. 1000 – 1250)
Perhaps it was the bow and arrow to blame, but significant changes took place in a relatively short period of time. Coastal resources were still favored, but a new push toward inland areas occurred and deer looks to have been the animal of choice hunting-wise.

Late Period (A.D. 1250 – 1769)
This period saw a new food discovered, literally growing right over their heads. Acorns became king and suddenly the vast interior valleys, full of oak trees, looked a lot more attractive. Hunting and acorn collection were often practiced simultaneously at special use camps scattered throughout the interior areas. Where bedrock was suitable, mortar holes used to process acorns proliferated.

ETHNOLOGY

Mutsun ancestors of the Ohlone people moved into the San Francisco and Monterey Bay areas from the Delta of the San Joaquin and Sacramento rivers about A.D. 500. The designation "Costanoan," which was originally applied to this group by anthropologists and others, derives

from the Spanish term for coastal people, and was not used by the Native American people. Ohlone territory extended from the Carquinez Strait in the northeast to just south of Chalome Creek in the southeast and from San Francisco to the Sur River along the Coast. This vast territory was broken into eight different language based zones. These eight branches of the Costanoan linguistic family were separate languages, not dialects.

The project location lies in the southern portion of the territory of the Mutsun. The Mutsun Costanoan occupied the land along the Pajaro River drainage. It is estimated that their population was approximately 2,700 in 1770. They situated their permanent villages on high ground above seasonal marshes that were inundated by highwater for a few months of the year. Access to fresh drinking water was a criterion for selecting a village location.

The basic political unit of the Ohlone, like many Californian Native Americans, was the tribelet, a group of people who spoke a common language and lived in a contiguous area centered on a main village. Territorial boundaries of tribelets were defined by physiographic features. Tribelet chiefs might be either men or women. The office was inherited patrilineally, usually passing from father to son. When there were no male heirs the position went to the man's sister or daughter. Accession to the office of chief required approval of the community. The chief was responsible for feeding visitors, providing for the impoverished, directing ceremonial activities, caring for captive grizzly bears and coyote, and directing hunting, fishing, gathering, and warfare expeditions. In all these matters the chief acted as the leader of a council of elders. The chief and council served mainly as advisors to the community (Levy 1978:487).

The Ohlone had mixed relations with various peoples. Wars were waged both among the various Costanoan tribelets and with Esselen, Salinan, and Northern Valley Yokuts. At the same time, however, they augmented the wealth of locally-available resources by trading with the Plains Miwok, Sierra Miwok, and Yokuts. The Ohlone supplied mussels, abalone shells, salt, and dried abalone to the Yokuts, bows to the Plains Miwok, and Olivella shells to the Sierra Miwok. In return, they received piñon nuts from the Yokuts and probably clam shell disk beads from the Miwok (Levy 1978:488-489, 493).

The Ohlone followed a seasonal round of subsistence activities, gathering plant and animal foods and materials for baskets and other manufactures. They insured a sustained yield of plant and animal foods by careful management of the land. Large mammals consumed by the Ohlone included black-tailed deer, Roosevelt elk, antelope, grizzly bear, mountain lion, sea lion, and whale. The most effective method of hunting deer was stalking by individual hunters. Other mammals eaten included dog, wildcat, skunk, raccoon, brush rabbit, cottontail, jackrabbit, tree squirrel, ground squirrel, woodrat, mouse, and mole. Some of the types of fowl they ate include the Canadian goose, snow goose, pintail mallard, and the mourning dove. In addition to animals, the Ohlone also ate seeds including acorns and buckeye and berries including blackberries, strawberries, and wild grapes among others (Levy 1978:491).

Religion and ceremony played important roles in life and death. The Ohlone observed rituals at important life events such as birth, puberty, and death. Treatment of the dead varied, with northern groups reportedly cremating their dead except when there were no kinsman to gather

wood for a funeral pyre, in which case the corpse was buried (Kroeber 1925:469; Levy 1978:490). The southern groups, Rumsen and Chalon, buried their dead.

Shamans controlled the weather and could cause rain to start or stop. They cured disease by cutting the skin of the patient, sucking out the disease objects and exhibiting them to onlookers. Shamans also used herbs in curing disease and conducted performances to insure good crops of acorns, an abundance of fish, or the stranding of whales (Levy 1978:490).

Spanish explorers of coastal California between 1767 and 1776 described the Costanoans living a traditional existence. Between 1770 and 1797, the Franciscans established seven missions in Ohlone territory and effectively changed the Indian way of life. Unwilling recruits to the missions resisted control by Franciscans. In 1793, a runaway neophyte named Charquin began a three-year struggle during which tribes in the northeast Bay Area engaged in sporadic warfare with the Spanish. The Ohlone also mounted resistance against Mission San Jose in 1800 (Castillo 1978:103). Levy (1978:486) reports that "mission baptismal records demonstrate that the last Costanoan tribelets living an aboriginal existence had disappeared by 1810," and that by 1832 the Costanoan population had decreased to one-fifth or less than its pre-contact size. After the Mexican government secularized the missions (between 1834 and 1836), some Ohlone returned to traditional religious and subsistence practices while others worked on Mexican ranchos. Former mission residents formed multi-tribal Indian communities in Pleasanton and other locations within their traditional territory. Although the Ohlone languages were probably extinct by 1935, it has been estimated that more than 200 persons of Ohlone descent were living in 1973 (Levy 1978:487).

HISTORIC PERIOD BACKGROUND

The general history of the exploration and settlement of Monterey County has been documented in a number of sources. This background section focuses on the specific history of Salinas and the lands containing the West Area Specific Plan Area.

The lands of West Area Specific Plan were first claimed by non-Native peoples through land grants from the Mexican government. The northern portion of the Specific Plan lies on lands of the La Natividad land grant, and the southern portion is the Sausal land grant.

The La Natividad land grant consisted of two square leagues of land (15,256 acres) south of Gabilan Creek. The land was granted to Manuel Butron and Nicolás Alviso by Governor Alvarado in November 1837. The land grant of 8,631 acres was confirmed to the children of Butron and Alviso by the United States in 1853.

The Sausal grant was made to José Tiburcio Castro in 1834. Castro had built an adobe on the land in 1823. Jacob P. Leese, who owned tracts of land in many parts of the State, acquired the property. He first filed claims for the grant in 1853. He ultimately received a patent for a tract of 10,241 acres from the United States in 1859.

Eugene Sherwood purchased the lands of the Sausal land grant. Sherwood, born in London, had come to San Francisco in 1856 as the American representative and manager of a company formed

with the intention of raising sheep on a chain of ranches extending from southern Monterey County to San Francisco. The sheep would be sheared at the outskirts of San Francisco, with the product shipped from that point.

Sherwood had also purchased the lands of the 24,000 acre San Lorenzo land grant in 1859 for his sheep raising enterprise. Sherwood suffered a string of losses in the mid to late 1860s due to drought and flood, and sold off his sheep herd and the San Lorenzo ranch. He then moved to Sausal, growing grain on a portion of the land. He rented out the remainder of the land for cash or on shares, with hundreds of acres put into production for wheat (Guinn, 1910).

Sherwood was one of the early promoters of Salinas, reportedly offering free land to the Southern Pacific Railroad for its right of way and a depot to lure the railroad through this region from San Jose, instead of the rumored route through the San Joaquin Valley. As a result, there was a building boom in Salinas, with 50 residences built in four months in 1868 (Fink, 1978).

By 1881, Salinas had grown to about 4,000 residents with hotels, paved streets, stores and many residences, in part due to its location on the railroad line (Elliott & Moore, 1881).

Portions of the ranch were sold off, but Sherwood reportedly retained some of the land as late as 1910. In 1883, he retired from active management of his lands, and moved to San Francisco, and later to Alameda (Guinn, 1910).

The southern portion of the property in the Sausal land grant had been acquired by Duncan McKinnon by 1877. McKinnon owned this property as a portion of an 1,104-acre tract. His ranch headquarters were to the south of the Specific Plan (Cox, 1877).

Duncan McKinnon had an early life of adventure, including working in the Frazer River area in British Columbia during the gold rush years in the 1860s, returning to Santa Clara in 1866 and renting a farm. He went home to Canada, then sold the family home and returned to Santa Clara in 1867. After the harvest of his lands in that year, he went in search of land for farming purposes in Monterey County. He rented part of the Santa Rita lands, and part of the Sausal rancho lands (Elliott & Moore, 1881).

In 1874, McKinnon and his brother purchased the 1,100-acre tract of the Sausal land grant that includes the southern portion of the West Area Specific Plan. Duncan McKinnon bought out his brother's interest in the property in 1881 (Elliott & Moore, 1881).

Just west of the Specific Plan, is the community of Santa Rita, first platted in 1867 as a town by J.M. Soto, the owner of the Ranch Santa Rita. Originally, it was meant to be the main town in the region. In 1869, Dr. S.M. Archer started a hospital on lots in the center of town adjacent to his residence (Elliott & Moore 1881).

In 1903, Duncan McKinnon's son had taken over management of 365 acres of Santa Rita ranch, with younger son, Elmer, managing the home ranch of 1,100 acres (Guinn 1903).

From 1903 until the present, the lands of the West Area Specific Plan have primarily been held as open agricultural lands, with some development occurring along the west and east sides before 1947 (Salinas and Natividad USGS topographic quadrangles).

PALEONTOLOGICAL RESOURCES

The often unseen records of past life buried in the sediments and rocks below the ground surface are among natural resources deserving conservation and preservation. These records are often under the pavement, buildings, soils, and vegetation that are covered by developed areas, but are also found in undeveloped areas that are either in their natural condition or under agricultural use. These records – fossils and their geologic context – can exist in large quantities below the surface in many areas in Monterey County, and span millions of years in age of origin. Fossils constitute a non-renewable resource, meaning once they are lost or destroyed, the exact information they contained can never be reproduced.

Paleontology is the science that attempts to unravel the meaning of these fossils in terms of the organisms they represent, the ages and geographic distribution of those organisms, how they interacted in ancient ecosystems and responded to past climatic changes, and the changes through time of all of these aspects.

The sensitivity of a given area or body of sediment with respect to paleontological resources is a function of both the potential for the existence of fossils and the predicted significance of any fossils which may be found there. The primary consideration in the determination of paleontological sensitivity of a given area, body of sediment, or rock formation is its potential to include fossils. Information that can contribute to assessment of this potential includes: 1) direct observation of fossils within the project area; 2) the existence of known fossil localities or documented absence of fossils in the same geologic unit (e.g., “Formation” or one of its subunits); 3) descriptive nature of sedimentary deposits (such as size of included particles or clasts, color, and bedding type) in the area of interest compared with those of similar deposits known elsewhere to favor or disfavor inclusion of fossils; and 4) interpretation of sediment details and known geologic history of the sedimentary body of interest in terms of the ancient environments in which they were deposited, followed by assessment of the favorability of those environments for the preservation of fossils.

The most general paleontological information can be obtained from geologic maps, but geologic cross sections (slices of geologic layers to view the third dimension) must be reviewed for an area in question (i.e. if such resources are discovered). These usually accompany geologic maps or technical reports. Once it can be determined which formations may be present in the subsurface, the question of paleontological resources must be addressed. Even though a formation is known to contain fossils, they are not usually distributed uniformly throughout the many square miles the formation may cover. If the fossils were part of a marine environment when they died, perhaps a scattered layer of shells will be preserved over large areas. If on the other hand, a whale died in this bay, you might expect to find fossil whalebone only in one small area of less than a few hundred square feet. Other resources to be considered in the determination of paleontological

potential are regional geologic reports, site records on file with paleontological repositories and site-specific field surveys.

Paleontologists consider all vertebrate fossils to be of significance. Fossils of other types are considered significant if they represent a new record, new species, an oldest occurring species, the most complete specimen of its kind, a rare species worldwide, or a species helpful in the dating of formations. However, even a previously designated low potential site may yield significant fossils.

CULTURAL RESOURCES IN THE WEST AREA SPECIFIC PLAN AREA

No cultural resources were found during field surveys for the proposed project. Additionally, there are no cultural resources that have been identified in the Specific Plan Area on maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no cultural resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any cultural resources in the Specific Plan Area.

Most fossils within Monterey County consist of micro-organisms such as foraminifera or diatoms, or assemblages of mollusks and barnacles most commonly found in sedimentary rocks ranging from Cretaceous age (138 to 96 million years old) to Pleistocene age (1.6 million to 11 thousand years old). Fossils are found throughout the Monterey County because of the widespread distribution of marine deposits. No significant fossil records have been discovered within the Specific Plan Area. However, the City of Salinas General Plan EIR (2002) identifies that important archaeological resources have the potential to occur within the General Plan planning area, including within portions of the undeveloped North of Boronda FGA. These areas are the Carr Lake/Natividad Creek corridor and a wide band on either side of Highway 101 in the northwest portion of the General Plan planning area.

3.3.2 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

Most regulations at the Federal level stem from the National Environmental Policy Act (NEPA) and historic preservation legislation such as the National Historic Preservation Act (NHPA) of 1966, as amended. NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations specifically for federal land-holding agencies, but also includes regulations (Section 106) which pertain to all projects that are funded, permitted, or approved by any federal agency and which have the potential to affect cultural resources. All projects that are subject to NEPA are also subject to compliance with Section 106 of the NHPA and NEPA requirements concerning cultural resources. Provisions of NHPA establish a National Register of Historic Places (The National Register)

maintained by the National Park Service, the Advisory Councils on Historic Preservation, State Historic Preservation Offices, and grants-in-aid programs.

American Indian Religious Freedom Act and Native American Graves and Repatriation Act

The American Indian Religious Freedom Act recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access), and the use of sacred objects shall be protected and preserved. Additionally, Native American remains are protected by the Native American Graves and Repatriation Act of 1990.

Other Federal Legislation

Historic preservation legislation was initiated by the Antiquities Act of 1966, which aimed to protect important historic and archaeological sites. It established a system of permits for conducting archaeological studies on Federal land, as well as setting penalties for noncompliance. This permit process controls the disturbance of archaeological sites on Federal land. New permits are currently issued under the Archeological Resources Protection Act (ARPA) of 1979. The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 declared that it is national policy to "Preserve for public use historic sites, buildings, and objects of national significance."

STATE

California Register of Historic Resources (CRHR)

California State law provides for the protection of cultural resources by requiring evaluations of the significance of prehistoric and historic resources identified in documents prepared pursuant to the California Environmental Quality Act (CEQA). Under CEQA, a cultural resource is considered an "historical resource" if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. Criteria identified in the CEQA Guidelines are similar to those described under the NHPA. The State Historic Preservation Office (SHPO) maintains the CRHR. Historic properties listed, or formally designated for eligibility to be listed, on The National Register are automatically listed on the CRHR. State Landmarks and Points of Interest are also automatically listed. The CRHR can also include properties designated under local preservation ordinances or identified through local historical resource surveys.

California Environmental Quality Act (CEQA)

CEQA requires that lead agencies determine whether projects may have a significant effect on "tribal cultural resources," "unique archaeological resources," and "historical resources." The determination as to whether a particular cultural resource falls under one of these three categories requires the application of statutory criteria set forth in Public Resources Code sections 21074 (tribal cultural resources), 21083.2[g] (unique archaeological resources), and 21084.1

(historical resources). Further guidance regarding the last two categories is also found in CEQA Guidelines section 15064.5.

If the agency determines that a project may have a significant effect on one of these types of cultural resources, the project is determined to have a significant effect on the environment, and these effects must be addressed. If a cultural resource is found not to be significant under the qualifying criteria, it need not be considered further in the planning process. Notably, the Legislature has directed that "[a]n [EIR], if otherwise necessary, shall not address the issue of nonunique archaeological resources. A negative declaration shall be issued with respect to a project if, but for the issue of nonunique archaeological resources, the negative declaration would be otherwise issued." (Pub. Resources Code, § 21083.2, subd. (a).)

CEQA emphasizes avoidance of unique archaeological resources and historical resources as the preferred means of reducing potential significant environmental effects resulting from projects. If avoidance is not feasible, an excavation program or some other form of mitigation must be developed to mitigate the impacts. In order to adequately address the level of potential impacts, and thereby design appropriate mitigation measures, the significance and nature of the cultural resources must be determined. The following are steps typically taken to assess and mitigate potential impacts to unique archaeological resources and historical resources for the purposes of CEQA:

- Identify cultural resources,
- evaluate the significance of the cultural resources found,
- evaluate the effects of the project on cultural resources, and
- develop and implement measures to mitigate the effects of the project on cultural resources that would be significantly affected.

Although CEQA does not address the treatment of paleontological resources, in practice such treatment is generally similar to treatment of cultural resources, requiring evaluation of resources in a project area of potential affect, assessment of potential impacts on unique resources, and development of mitigation measures for potentially significant impacts, which may include monitoring combined with data recovery and/or avoidance.

Assembly Bill 52 (Chapter 532, Statutes of 2014)

Assembly Bill ("AB") 52 establishes a formal consultation process for California tribes as part of CEQA and equates significant impacts on "tribal cultural resources" with significant environmental impacts (PRC Section 21084.2). AB 52 defines a "California Native American Tribe" as a Native American tribe located in California, and included on the contact list maintained by the Native American Heritage Commission. AB 52 requires formal consultation with California Native American Tribes prior to determining the level of environmental document if a tribe has requested to be informed by the lead agency of proposed projects. AB 52 also requires that the consultation address project alternatives and mitigation measures, for significant effects, if requested by the California Native American Tribe, and that consultation be considered concluded when either the

parties agree to measures to mitigate or avoid a significant effect, or the agency concludes that mutual agreement cannot be reached.

Senate Bill 18 (Burton, Chapter 905, Statutes 2004)

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. This legislation, which amended §65040.2, §65092, §65351, §65352, and §65560, and added §65352.3, §653524, and §65562.5 to the Government Code, also requires the Governor's Office of Planning and Research (OPR) to include in the General Plan Guidelines advice to local governments on how to conduct these consultations. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.). According to the Office of Planning and Research, moreover, these requirements also apply to specific plans (defined in Government Code §65450 et seq.). (See Office of Planning and Research, *Tribal Consultation Guidelines*, p. 3 (2005). SB 18 consultation was completed for the proposed project on August 16, 2017.

State Laws Pertaining to Human Remains

Section 7050.5 of the California Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission. CEQA Guidelines (Section 15064.5) specify the procedures to be followed in case of the discovery of human remains on non-Federal land. The disposition of Native American burials falls within the jurisdiction of the Native American Heritage Commission.

State Laws Pertaining to Paleontological Resources

Section 5097.5 of the California Public Resources Code prohibits "knowing and willful" excavation, removal, destruction, injury, and defacement of any "vertebrate paleontological site, including fossilized footprints," on public lands, except where the agency with jurisdiction has granted express permission. "As used in this section, 'public lands' means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."

Section 30244 of the California Public Resources Code requires reasonable mitigation for impacts on paleontological resources that occur as a result of development on public lands.

Section 4307–4309 of the California Code of Regulations relating to the Department of Parks and Recreation affords protection to geologic features, "paleontological features", and objects of archaeological, or historical interest or value, and grants the Department of Parks and Recreation

the power to grant a permit to "remove, treat, disturb, or destroy plants or animals or geological, historical, archaeological or paleontological materials." (California Code of Regulations, Title 14, Section 4307–4309).

NATIVE AMERICAN CONSULTATION

Letters were sent to: the Native American Heritage Commission; Ms. Jakki Kehl; Tony Cerda, Chairperson, Coastanoan Rumsen Carmel Tribe; Ms. Louise Miranda-Ramirez, Chairperson, Ohlone Coastanoan-Esselen Nation; Ms. Ramona Garibay, Representative, Trina Marine Ruano Family; Mr. Valentine Lopez, Amah Mutsun Tribal Band; Ms. Irene Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista; Ms. Christianne Arias, Vice Chairperson Ohlone/Coastanoan-Esselen Nation; Mr. Edward Ketchum, Amah Mutsun Tribal Band; Ms. Pauline Martinez-Arias, Tribal Council Women, Ohlone/Coastanoan-Esselen Nation; Ms. Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Coastanoan; Ms. Linda G. Yamane; and, Ms. Michelle Zimmer, Amah Mutsun Tribal Band of Mission San Juan Bautista regarding the West Area Specific Plan Area. The Native American Heritage Commission responded with a letter dated August 12, 2015. The Ohlone/Costanoan-Esselen Nation (OCEN) responded with a letter dated January 11, 2016. Consultation was requested by, and meetings were held with, the Ohlone Coastanoan-Esselen Nation (Ms. Louise J. Miranda-Ramirez). Comment letters are included in **Appendix A** of this EIR.

LOCAL

City of Salinas General Plan

The existing City of Salinas General Plan identifies the following policies related to cultural resources:

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-4.1: When historic buildings are renovated to extend their useful lives, the historic architecture should be maintained when possible.

Policy COS-4.2: Support private efforts to reinvest in and restore historically and architecturally significant structures and to continue their use as an integral part of the community.

Policy COS-4.3: Identify historic sites through historic landmark plaques and the Historic House Tour Guide.

Policy COS-4.4: Protect significant archaeological resources in accordance with the California Environmental Quality Act (CEQA).

City of Salinas Municipal Code

The City of Salinas Municipal Code Zoning Code section 37.50.180 (i) outlines cultural resources performance standards that are applicable to discretionary land uses in all zoning districts. For historic resources, a study shall be conducted for structures that potentially have historic significance to determine whether the structure is a historical resource. For archaeological resources, a study is only required if the development is located within the Carr Lake/Natividad

Creek Corridor. The Zoning Code also states that all development proposals shall be assessed by the City Planner for potential impacts to paleontological resources and a study may be required if the project involves earthwork.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, CEQA Guidelines section 15064.5, and Public Resources Code section 21083.2, the proposed project is considered to have a significant impact on cultural resources if it will:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Public Resources Code section 21083.2 and CEQA Guidelines §15064.5;
- Directly or indirectly destroy a unique paleontological resource;
- Disturb any human remains, including those interred outside of formal cemeteries.

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: Project implementation may cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5 (Less than Significant with Mitigation)

No historical resources were found during field surveys for the proposed project. Additionally, there are no historical resources that have been identified in the Specific Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no historical resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any historical resources in the Specific Plan Area.

It is not anticipated that ground disturbing activities would result in impacts to historical resources given that none are believed to be present. However, as with most projects in California that involve ground disturbing activities, there is the potential for discovery of a previously unknown historical resource. Project implementation may cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5. The implementation of the following mitigation measure would ensure that this potential impact is reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.3-1: *In the event that evidence of archaeological or historical features or deposits (e.g., ceramic shard, trash scatters, lithic scatters) are uncovered (discovered) during excavation and/or grading, all work shall stop in the area of the subject property until an*

appropriate data recovery program can be developed and implemented by a qualified archaeologist. This archaeologist shall determine whether the uncovered deposits or features qualify as either "historical resources" within the meaning of CEQA Guidelines section 15064.5, subdivision (a), "unique archaeological resources" as defined in Public Resources Code section 21083.2, subdivision (g), or "tribal cultural resources," as defined in Public Resources Code section 21074. If historical resources, unique archaeological resources, or tribal cultural resources are present, the project proponent shall preserve any such resources or implement any feasible mitigation measures identified by the archaeologist and imposed by the City. Recommended mitigation measures shall be reviewed by the City Planner and shall be approved if feasible in light of project design, logistics, and cost considerations and, if approved, shall be implemented and completed prior to commencing further work for which grading or building permits were issued, unless otherwise directed by the City Planner. Data recovery shall be an option if preservation in place is infeasible. Where resources have been determined to be "unique archaeological resources" but not "historical resources" or "tribal cultural resources," the project proponent's obligations shall be limited as set forth in Public Resources Code section 21083.2, subdivisions (d), (e), and (f). Grading/building permits and plans shall note this measure.

Impact 3.3-2: Project implementation may cause a substantial adverse change in the significance of archaeological resource pursuant to CEQA Guidelines §15064.5 (Less than Significant with Mitigation)

No archaeological resources were found during field surveys for the proposed project. Additionally, no archaeological resources have been identified in the Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no archaeological resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any archaeological resources in the Specific Plan Area.

It is not anticipated that ground disturbing activities would result in impacts to archaeological resources given that none are believed to be present. However, as with most projects in California that involve ground disturbing activities, there is the potential for discovery of a previously unknown archaeological resource. Project implementation may cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5. The implementation of Mitigation Measures 3.3-1 above would ensure that this potential impact is reduced to a ***less than significant*** level.

Impact 3.3-3: Project implementation may directly or indirectly destroy a unique paleontological resource (Less than Significant with Mitigation)

A search of the University of California, Berkeley Museum of Paleontology collections database of Paleontology Localities did not identify any paleontological resources (fossils or fossil formations) within the Specific Plan Area. However, no formal paleontological investigations have been identified for the area.

A search of the University of California Museum of Paleontology (UCMP) collections database identified many previously recorded paleontological resources in Monterey County. These resources primarily consist of microfossils and invertebrates, but also include a small number of vertebrates and plants.

The Monterey County General Plan Draft EIR (2007) included a review of known fossil localities conducted by paleontologists in 2001. Twelve fossil sites were identified as having outstanding scientific value. For the most part, the fossils at these 12 sites reflect the type of assemblages found throughout the county (microorganisms or invertebrates); however, each has special characteristics that make it unique or rare, or in some way provide important stratigraphic or historic information. None of the 12 identified high value sites are located on or near the Specific Plan Area. Additionally, the Salinas General Plan Final EIR (2002) does not identify any high value sites in the Specific Plan area or in the City as a whole.

However, unknown important paleontological resources have the potential to occur within the planning area including the undeveloped future growth areas, which include the Specific Plan Area. The construction of new development would involve grading and other earthwork that can disturb important fossils. Therefore, project implementation may directly or indirectly destroy a unique paleontological resource. This impact is considered potentially significant. Implementation of the following mitigation measures would reduce the impact to paleontological resources to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.3-2: *If paleontological resources are discovered during the course of construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Salinas shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. If the paleontological resource is considered significant, it should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where the resource could be curated and displayed for public education purposes. Grading/ building permits and plans shall note this measure.*

Impact 3.3-4: Project implementation may disturb human remains, including those interred outside of formal cemeteries (Less than Significant with Mitigation)

No human remains or known burial sites were found during field surveys for the proposed project. Additionally, there are no human remains or known burial sites that have been identified in the Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Specific Plan Area and no human remains or known burial sites were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any human remains or known burial sites in the Specific Plan Area.

It is not anticipated that ground disturbing activities would result in impacts to human remains or known burial sites given that none are believed to be present. However, as with most projects in

California that involve ground disturbing activities, there is the potential for discovery of previously unknown human remains or known burial sites. Project implementation may disturb human remains, including those interred outside of formal cemeteries. The implementation of the following mitigation measure would ensure that this potential impact is reduced to a ***less than significant*** level.

Mitigation Measure 3.3-3*: If human remains are found during construction within the Specific Plan Area, or at off-site infrastructure improvement locations, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until a qualified archeological monitor and the coroner of Monterey County are contacted. If it is determined that the remains are Native American, the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if:*

a) the Native American Heritage Commission is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission;
b) the descendent identified fails to make a recommendation; or
c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Grading permit/building permit plans shall note this measure.

Impact 3.3-5: The project may contribute to cumulative impacts on known and undiscovered cultural resources (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography, where sufficient inventory data is available to define it. The cumulative setting for cultural resources includes all of the Monterey County, which includes the entire Salinas Planning Area. There are extensive cultural sites located in Monterey County and the region as a whole. Generally, these sites are related to Native Americans who historically have lived in the area; however, there are also numerous historical resources such as nearby ranches. Monterey County was chosen as the cumulative context for this analysis because it encompasses an extensive set of cultural resources potentially present over a wide geographic area. Discovery of cultural resources have the potential to be interlinked; that is, knowledge of cultural resources in one part of Monterey County has the potential to affect cultural resources in other parts of Monterey County.

The Salinas General Plan Final Program EIR includes mitigation measures that would reduce impacts to cultural resources (Mitigation Measures CR1, CR2, and CR3). However, although these mitigation measures were found to reduce the potentially significant impact to paleontological resources to a less than significant level, the Salinas General Plan Final Program EIR found that these mitigation measures may not reduce the potentially significant impacts to historic and archaeological resources for the following reasons: Mitigation Measure CR1 would apply only to discretionary permits, which would allow ministerial projects to be processed without being reviewed and subjected to the requirements of Mitigation Measures CR1; Mitigation Measure CR2, which is presented as a way to extend the discretionary review powers of the City over projects with potential impacts to historic and archaeological resources only requires the City to consider implementing the historic/architectural preservation ordinance. Moreover, there exists the potential for cumulative impacts to cultural resources throughout the remainder of Monterey County. Therefore, there exists the potential for the proposed project combined with all past, present, and probably future projects to cause a significant cumulative impact to historical and/or archaeological resources.

While there are extensive documented cultural resources in Salinas and unincorporated Monterey County, there are no cultural resources that were found during field surveys of the proposed project. Additionally, there are no cultural resources that have been identified in the Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Plan Area and no cultural resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any cultural resources in the Plan Area. Furthermore, mitigation measures incorporated into this EIR would require the proposed project to evaluate any cultural resources discovered during construction activities. Any significant discoveries during construction would be required to be preserved in place or mitigated through relocation or documentation; and the project is not anticipated to considerably contribute to a significant reduction in cultural resources.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts. The proposed project would not have cumulatively considerable impacts associated with cultural resources. Implementation of the proposed project would have a ***less than significant cumulative impact*** and ***less than cumulatively considerable*** incremental contribution to cumulative impacts on cultural resources.

This section discusses regional greenhouse gas (GHG) emissions, climate change, and energy conservation impacts that could result from implementation of the Specific Plan. This section provides a background discussion of GHG and climate change linkages and effects of global climate change. This section also provides background discussion on the energy conservation components of the proposed project. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis. The analysis and discussion of the GHG, climate change, and energy impacts in this section focuses on the Specific Plan's consistency with local, regional, statewide, and federal climate change planning and energy conservation efforts and discusses the context of these planning efforts as they relate to the Specific Plan. Disclosures of the Specific Plan's total estimated energy usage and GHG emissions are provided. It should be noted that the Monterey Bay Unified Air Pollution Control District (MBUAPCD) recently changed their name to Monterey Bay Air Resources District (MBARD).

No comment letters were received during the public review period for the Notice of Preparation regarding this topic.

3.4.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring GHGs include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct GHGs CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three GHGs have increased globally by 40, 150, and 20 percent, respectively (IPCC, 2013).

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors (California Energy Commission, 2018).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 440 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2016 (California Air Resources Board, 2018a). By 2020, under business as usual conditions, California is projected to produce 509 $MMTCO_2e$ per year (California Air Resources Board, 2015a).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2016, accounting for 41% of total GHG emissions in the State. This category was followed by the industrial sector (23%), the electricity generation sector (including both in-state and out of-state sources) (16%), the agriculture sector (8%), the residential energy consumption sector (7%), and the commercial energy consumption sector (5%) (California Air Resources Board, 2019).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the State. The snowpack portion of the supply could potentially decline by 50% to 75% by the end of the 21st century (National Resources Defense Council, 2014). This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (California Environmental Protection Agency, 2010). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to

adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report (California Environmental Protection Agency, 2010), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25% to 35% under the lower warming range and to 75% to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major State fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the State (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack

will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snow pack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large of wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the State's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are most widely used form of energy in the State. However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 33% of electricity generated from renewable resources by 2020, 60 percent by 2030, and to achieve zero-carbon emissions by 2045 (as passed in September 2018, under AB 100).

Overall, in 2013, California's per capita energy usage was ranked 49th in the nation (U.S. EIA, 2016) (lower rank means lower per capita energy consumption). California's per capita rate of energy usage has remained relatively constant since the 1970's. Many State regulations since the 1970's, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of non-renewable energy (i.e. fossil fuels) associated with the operation of passenger, public transit, and commercial vehicles, results in GHG emissions that contribute to global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. In 2016, more than one-fourth of the electricity supply comes from facilities outside of the State. Much of the power delivered to California from states in the Pacific Northwest was generated by wind. States in the Southwest delivered power generated at coal-fired power plants, at natural gas-fired power plants, and from nuclear generating stations (U.S. EIA, 2017a). In 2016, approximately 50 percent of California's utility-scale net electricity generation was fueled by natural gas. In addition, about 25 percent of the State's utility-scale net electricity generation came from non-hydroelectric renewable technologies, such as solar, wind, geothermal, and biomass. Another 14 percent of the State's utility-scale net electricity generation came from hydroelectric generation, and nuclear energy powered an additional 11 percent. The amount of electricity generated from coal negligible (approximately 0.2 percent) (U.S. EIA, 2017a). The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed the State's Renewable Portfolio Standard (RPS).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (U.S. EIA, 2017b). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010. In 2014, electricity consumption in Monterey County was 2,615 GWh (California Energy Commission, 2014).

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2016, world consumption of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (International Energy Agency, 2018). The transportation sector relies heavily on oil. In California, petroleum-based fuels currently provide approximately 96 percent of the State's transportation energy needs (California Energy Commission, 2012).

Natural Gas/Propane

The State produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest (California Energy Commission, 2012). In 2006, California produced 325.6 billion cubic feet of natural gas (California Energy Commission, 2012). PG&E is the largest publicly-owned utility in California and provides natural gas for residential, industrial, and agency consumers within the Monterey County area, including the City of Salinas. In 2014, natural gas consumption in Monterey County was 100 million therms (California Energy Commission, 2014).

3.4.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, State attainment plans, motor National Ambient Air Quality Standards (NAAQS) vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

On April 2, 2007, in the court case of *Massachusetts et al. vs. the USEPA et al*. (549 U.S. 497), the U.S. Supreme Court found that GHGs are air pollutants covered by the federal Clean Air Act (42 USC §§ 7401-7671q). The Supreme Court held that the Administrator of the United States Environmental Protection Agency must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the Administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing GHG emission standards for vehicles. In collaboration with the National Highway Traffic Safety Administration (NHTSA) and CARB, the USEPA developed emission standards for light-duty vehicles (2012-2025 model years), and heavy-duty vehicles (2014-2027 model years).

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, State, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs. However, as of this writing, there are no adopted federal plans, policies, regulations, or laws directly regulating GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO_2 per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial GHGs along with vehicle and engine manufacturers will report at the corporate level. An estimated 85% of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

STATE

The California Legislature has enacted a series of statutes in recent years addressing the need to reduce GHG emissions all across the State. These statutes can be categorized into four broad categories: (i) statutes setting numerical statewide targets for GHG reductions, and authorizing

CARB to enact regulations to achieve such targets; (ii) statutes setting separate targets for increasing the use of renewable energy for the generation of electricity throughout the State; (iii) statutes addressing the carbon intensity of vehicle fuels, which prompted the adoption of regulations by CARB; and (iv) statutes intended to facilitate land use planning consistent with statewide climate objectives. The discussion below will address each of these key sets of statutes, as well as CARB "Scoping Plans" intended to achieve GHG reductions under the first set of statutes and recent building code requirements intended to reduce energy consumption.

Statutes Setting Statewide GHG Reduction Targets

ASSEMBLY BILL 32 (GLOBAL WARMING SOLUTIONS ACT)

In September 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006 (Health & Saf. Code, § 38500 et seq.), also known as Assembly Bill (AB) 32 (Stats. 2006, ch. 488). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directs the California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

SENATE BILL 32

Effective January 1, 2017, SB 32 (Stats. 2016, ch. 249) added a new section 38566 to the Health and Safety Code. It provides that "[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by [Division 25.5 of the Health and Safety Code], [CARB] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." In other words, SB 32 requires California, by the year 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

Between AB 32 (2006) and SB 32 (2016), the Legislature has codified some of the ambitious GHG reduction targets included within certain high-profile Executive Orders issued by the last two Governors. The 2020 statewide GHG reduction target in AB 32 was consistent with the second of three statewide emissions reduction targets set forth in former Governor Arnold Schwarzenegger's 2005 Executive Order known as S-3-05, which is expressly mentioned in AB 32. (See Health & Saf. Code, § 38501, subd. (i).) That Executive Branch document included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several State agencies to cooperate in the development of a climate action plan. The Secretary of Cal-EPA leads the Climate Action Team, whose goal is to implement global warming emission reduction programs identified in the Climate Action Plan and to report on the progress made toward meeting the emission reduction targets established in the executive order.

In April 2015, Governor Brown issued another Executive Order, B-30-15, which created a "new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050." SB 32 codified this target.

In September 2018, the Governor issued Executive Order B-55-18, which established a statewide goal to "achieve carbon neutrality as soon as possible, and no later than 2045, and maintain and achieve negative emissions thereafter." The order directs the CARB to work with other State agencies to identify and recommend measures to achieve those goals.

Notably, the Legislature has not yet set a 2045 or 2050 target in the manner done for 2020 and 2030 through AB 32 and SB 32, though references to a 2050 target can be found in statutes outside the Health and Safety Code. In the 2015 legislative session, the Legislature passed Senate Bill 350 (SB 350) (Stats. 2015, ch. 547) (discussed in more detail below). This legislation added to the Public Utilities Code language that essentially puts into statute the 2050 GHG reduction target already identified in Executive Order S-3-05, albeit in the limited context of new state policies (i) increasing the overall share of electricity that must be produced through renewable energy sources and (ii) directing certain State agencies to begin planning for the widespread electrification of the California vehicle fleet. Section 740.12(a)(1)(D) of the Public Utilities Code now states that "[t]he Legislature finds and declares [that] … [r]educing emissions of [GHGs] to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050 will require widespread transportation electrification." Furthermore, Section 740.12(b) now states that the California Public Utilities Commission (PUC), in consultation with CARB and the California Energy Commission (CEC), must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, … and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

Statutes Setting Targets for the Use of Renewable Energy for the Generation of Electricity

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

In September 2002, the Legislature enacted Senate Bill 1078 (Stats. 2002, ch. 516), which established the Renewables Portfolio Standard program, requiring retail sellers of electricity, including electrical corporations, community choice aggregators, and electric service providers, to purchase a specified minimum percentage of electricity generated by eligible renewable energy resources such as wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. (See Pub. Utilities Code, § 399.11 et seq. [subsequently amended].) The legislation set a target by which 20 percent of the State's electricity would be generated by renewable sources. (Pub. Utility Code, § 399.11, subd (a) [subsequently amended].) As described in the Legislative Counsel's Digest, Senate Bill 1078 required "[e]ach electrical corporation … to increase its total procurement of eligible renewable energy resources by at least one percent per year so that 20 percent of its retail sales are procured from eligible renewable energy resources. If an electrical corporation fails to procure sufficient eligible renewable energy resources in a given year to meet an annual target, the electrical

corporation would be required to procure additional eligible renewable resources in subsequent years to compensate for the shortfall, if funds are made available as described. An electrical corporation with at least 20 percent of retail sales procured from eligible renewable energy resources in any year would not be required to increase its procurement in the following year."

In September 2006, the Legislature enacted Senate Bill 107 (Stats. 2006, ch. 464), which modified the Renewables Portfolio Standard to require that at least 20 percent of electricity retail sales be served by renewable energy resources by year 2010. (Pub. Utility Code, § 399.11, subd (a) [subsequently amended].)

In April 2011, the Legislature, in a special session, enacted Senate Bill X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1), which set even more aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State's electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, § 399.11 et seq. [subsequently amended].)

Finally, in 2015, the Legislature enacted Senate Bill 350 (SB 350) (Stats. 2015, ch. 547) (discussed above). It increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, § 399.11, subd (a); see also § 399.30, subd. (c)(2).) Of equal significance, Senate Bill 350 also embodies a policy encouraging a substantial increase in the use of electric vehicles. As noted earlier, Section 740.12(b) of the Public Utilities Code now states that the PUC, in consultation with CARB and the CEC, must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, … and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

In March 2012, Governor Brown had issued an Executive Order, B-16-12, which embodied a similar vision of a future in which zero-emission vehicles (ZEV) will play a big part in helping the State meet its GHG reduction targets. Executive Order B-16-12 directed State government to accelerate the market for in California through fleet replacement and electric vehicle infrastructure. The Executive Order set the following targets:

- By 2015, all major cities in California will have adequate infrastructure and be "ZEV ready";
- By 2020, the State will have established adequate infrastructure to support 1 million ZEVs in California;
- By 2025, there will be 1.5 million ZEVs on the road in California; and
- By 2050, virtually all personal transportation in the State will be based on ZEVs, and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

In 2018, the Legislature enacted, and the Governor signed, Senate Bill 100 (Stats. 2018, ch. 312), which revise the above-described deadlines and targets so that the State will have to achieve a 50%

renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60% target by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all State agencies by December 31, 2045.

In summary, California has set a statutory goal of requiring that, by the year 2030, 60 percent of the electricity generated in California should be from renewable sources, with increased generation capacity intended to sufficient to allow the mass conversion of the statewide vehicle fleet from petroleum-fueled vehicles to electrical vehicles and/or other ZEVs. By 2045, all electricity must come from renewable resources and other carbon-free resources. Governor Brown has an even more ambitious goal for the State of achieving carbon neutrality as soon as possible and by no later than 2045. The Legislature is thus looking to California drivers to buy electric cars, powered by green energy, to help the State meet its aggressive statutory goal, created by SB 32, of reducing statewide GHG emissions by 2030 to 40 percent below 1990 levels. Another key prong to this strategy is to make petroleum-based fuels less carbon-intensive. A number of statutes in recent years have addressed that strategy. These are discussed immediately below.

Statutes and CARB Regulations Addressing the Carbon Intensity of Petroleum-based Transportation Fuels

ASSEMBLY BILL 1493, PAVLEY CLEAN CARS STANDARDS

In July 2002, the Legislature enacted Assembly Bill 1493 ("Pavley Bill") (Stats. 2002, ch. 200), which directed the CARB to develop and adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks beginning with model year 2009. (See Health & Saf. Code, § 43018.5.) In September 2004, pursuant to this directive, CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. These regulations created what are commonly known as the "Pavley standards." In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. These regulations created what are commonly known as the "Pavley II standards." (See California Code of Regulations, Title 13, §§ 1900, 1961, and 1961.1 et seq.)

In January 2012, CARB adopted an Advanced Clean Cars (ACC) program aimed at reducing both smog-causing pollutants and GHG emissions for vehicles model years 2017-2025. This historic program, developed in coordination with the USEPA and NHTSA, combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The regulations focus on substantially increasing the number of plug-in hybrid cars and zero-emission vehicles in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle technologies. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. (See California Code of Regulations, Title 13, §§ 1900, 1961,

1961.1, 1961.2, 1961.3, 1965, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2112, 2139, 2140, 2145, 2147, 2235, and 2317 et seq.)

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 34 percent below 2016 levels by 2025, all while improving fuel efficiency and reducing motorists' costs.

Cap and Trade Program

On October 20, 2011, in a related action, CARB adopted the final cap-and-trade program for California. (See California Code of Regulations, Title 17, §§ 95801-96022.) The California cap-and-trade program will create a market-based system with an overall emissions limit for affected sectors. The program is intended to regulate more than 85 percent of California's emissions and staggers compliance requirements according to the following schedule: (1) electricity generation and large industrial sources (2012); (2) fuel combustion and transportation (2015).

According to 2012 guidance published by CARB, "[t]he Cap-and-Trade Program will reduce GHG emissions from major sources (covered entities) by setting a firm cap on statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals. The statewide cap for GHG emissions from major sources, which is measured in metric tons of carbon dioxide equivalent (MTCO2e), will commence in 2013 and decline over time, achieving GHG emission reductions throughout the program's duration. Each covered entity will be required to surrender one permit to emit (the majority of which will be allowances, entities are also allowed to use a limited number of CARB offset credits) for each ton of GHG emissions they emit. Some covered entities will be allocated some allowances and will be able to buy additional allowances at auction, purchase allowances from others, or purchase offset credits."

The guidance goes on to say that "[s]tarting in 2012, major GHG-emitting sources, such as electricity generation (including imports), and large stationary sources (e.g., refineries, cement production facilities, oil and gas production facilities, glass manufacturing facilities, and food processing plants) that emit more than 25,000 $MTCO_2e$ per year will have to comply with the Cap-and-Trade Program. The program expands in 2015 to include fuel distributors (natural gas and propane fuel providers and transportation fuel providers) to address emissions from transportation fuels, and from combustion of other fossil fuels not directly covered at large sources in the program's initial phase." In early April 2017, the Third District Court of Appeal upheld the lawfulness of the cap-and-trade program as a "fee" rather than a "tax." (See *California Chamber of Commerce et al. v. State Air Resources Board et al.* (2017) 10 Cal.App.5th 604.)

In early 2017, the Legislature enacted, and the Governor signed, AB 398 (Stats. 2017, ch. 135), which extended the life of the existing Cap and Trade Program through December 2030.

Statutes Intended to Facilitate Land Use Planning Consistent with Statewide Climate Objectives

CALIFORNIA SENATE BILL 375 (SUSTAINABLE COMMUNITIES STRATEGY)

This 2008 legislation built on AB 32 by setting forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHGs. The focus is to reduce miles traveled by passenger vehicles and light trucks. CARB is required to set GHG reduction targets for each metropolitan region for the years 2020 and 2035. Each of California's metropolitan planning organizations then prepares a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. Once adopted by the metropolitan planning organizations, the sustainable communities strategy is to be incorporated into that region's federally enforceable regional transportation plan. If a metropolitan planning organization is unable to meet the targets through the sustainable communities strategy, then an alternative planning strategy must be developed which demonstrates how targets could be achieved, even if meeting the targets is deemed to be infeasible.

AMBAG is the metropolitan planning organization responsible for preparing the SCS. The current SCS is embedded in AMBAG's 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (AMBAG, 2018). The MTP/SCS sets forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, is intended to reduce GHG emissions from passenger vehicles and light duty trucks to achieve the regional GHG reduction targets set by CARB.

CARB set targets for the AMBAG region as "not to exceed 2005 per capita levels of GHGs" by 2020 and a five percent reduction from 2005 levels by 2035. These targets applied to the AMBAG region as a whole for all on-road light duty trucks and passenger vehicles emissions, and not to individual cities or sub-regions. Therefore, AMBAG, through the 2040 MTP/SCS, must maintain or reduce these levels to meet the 2020 target and reduce these levels to meet the 2035 targets. Updates to the 2010 standards are included in CARB's 2017 Scoping Plan as discussed below under the discussion of that plan.

SB 375 specifically states that local governments retain their autonomy to plan local general plan policies and land uses. The 2040 MTP/SCS provides a regional policy foundation that local governments may build upon, if they so choose. The 2040 MTP/SCS includes and accommodates the quantitative growth projections for the region. In addition, the 2040 MTP/SCS EIR lays the groundwork for the streamlined CEQA review of qualifying development projects. Such projects are defined as Transit Priority Projects that are located within an Opportunity Area that meet specific criteria, including:

- Consistent with the SCS;
- Contains at least 50 percent residential use;
- Proposed to be developed at a minimum 20 dwelling units per acre; and
- Located within one half mile of a major transit stop or high quality transit corridor that is included in the MTP/SCS.

The proposed project does not include residential uses. Therefore, future projects proposed within the project site would not be eligible for streamlined CEQA review.

Climate Change Scoping Plans

AB 32 SCOPING PLAN

In December 2008, CARB adopted the Climate Change Scoping Plan, which contains the main strategies California will implement to achieve reduction of approximately 118 million metric tons (MMT) CO_2e, or approximately 22 percent from the State's projected 2020 emission level of 545 MMT of CO_2e under a business-as-usual scenario This is a reduction of 47 MMT CO_2e, or almost 10 percent, from 2008 emissions. CARB's original 2020 projection was 596 MMT CO_2e, but this revised 2020 projection takes into account the economic downturn that occurred in 2008. The Scoping Plan also includes CARB recommended GHG reductions for each emissions sector of the State GHG inventory. CARB estimates the largest reductions in GHG emissions would be by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (26.1 MMT CO_2e);
- the Low Carbon Fuel Standard (15.0 MMT CO_2e);
- energy efficiency measures in buildings and appliances (11.9 MMT CO_2e); and
- renewable portfolio and electricity standards for electricity production (23.4 MMT CO_2e).

In 2011, CARB adopted a cap-and-trade regulation. The cap-and-trade program covers major sources of GHG emissions in the State such as refineries, power plants, industrial facilities, and transportation fuels. The cap-and-trade program includes an enforceable emissions cap that will decline over time. The State distributes allowances, which are tradable permits, equal to the emissions allowed under the cap. Sources under the cap are required to surrender allowances and offsets equal to their emissions at the end of each compliance period. Enforceable compliance obligations started in 2013. The program applies to facilities that comprise 85 percent of the State's GHG emissions.

With regard to land use planning, the Scoping Plan expects that reductions of approximately 3.0 MMT CO_2e will be achieved through implementation of Senate Bill (SB) 375, which is discussed further below.

2014 SCOPING PLAN UPDATE

In response to comments on the 2008 Scoping Plan, and AB 32's requirement to update the Scoping Plan every five years, CARB revised and reapproved the Scoping Plan, and prepared the First Update to the 2008 Scoping Plan in 2014 (2014 Scoping Plan). The 2014 Scoping Plan contains the main strategies California will implement to achieve a reduction of 80 MMT of CO_2e emissions, or approximately 16 percent, from the State's projected 2020 emission level of 507 MMT of CO_2e under the business-as-usual scenario defined in the 2014 Scoping Plan. The 2014 Scoping Plan also includes a breakdown of the amount of GHG reductions CARB recommends for each emissions sector of the State's GHG inventory. Several strategies to reduce GHG emissions are included: the Low Carbon

Fuel Standard, the Pavley Rule, the ACC program, the Renewable Portfolio Standard, and the Sustainable Communities Strategy.

2017 SB 32 SCOPING PLAN

With the passage of SB 32, the Legislature also passed companion legislation AB 197, which provides additional direction for developing the scoping plan. In response to these two pieces of legislation, CARB adopted an updated Scoping Plan in December 2017. The document represents a second update to the scoping plan to reflect the 2030 target of reducing statewide GHG emissions by 40 percent below 1990 levels codified by SB 32. The GHG reduction strategies in the plan that CARB will implement to meet the target include:

- SB 350 - achieve 50 percent Renewables Portfolio Standard (RPS) by 2030 and doubling of energy efficiency savings by 2030;
- Low Carbon Fuel Standard - increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020);
- Mobile Source Strategy (Cleaner Technology and Fuels Scenario) - maintaining existing GHG standards for light- and heavy-duty vehicles, put 4.2 million zero-emission vehicles on the roads, and increase zero-emission buses, delivery and other trucks.
- Sustainable Freight Action Plan - improve freight system efficiency, maximize use of near-zero emission vehicles and equipment powered by renewable energy, and deploy over 100,000 zero-emission trucks and equipment by 2030;
- Short-Lived Climate Pollutant Reduction Strategy - reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and reduce emissions of black carbon 50 percent below 2013 levels by 2030;
- SB 375 Sustainable Communities Strategies - increased stringency of 2035 targets;
- Post-2020 Cap-and-Trade Program - declining caps, continued linkage with Québec, and linkage to Ontario, Canada;
- 20 percent reduction in GHG emissions from the refinery sector; and
- By 2018, develop an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Building Code Requirements Intended to Reduce GHG Emissions

CALIFORNIA ENERGY CODE

The California Energy Code (California Code of Regulations, Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency results in decreased GHG emissions because energy efficient buildings require less electricity and thus less consumption of fossil fuels, which emit GHGs. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The current 2008 Building Energy Efficiency Standards, commonly referred to as the "Title 24" standards, include changes from the previous standards that were adopted, to do the following:

- Provide California with an adequate, reasonably priced, and environmentally sound supply of energy.
- Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its GHG emissions to 1990 levels by 2020.
- Pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.
- Act on the California Energy Commission's Integrated Energy Policy Report, which finds that standards are the most cost effective means to achieve energy efficiency, states an expectation that the Building Energy Efficiency Standards will continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Building Energy Efficiency Standards in reducing energy related to meeting California's water needs and in reducing GHG emissions.
- Meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of State building codes.
- Meet Executive Order S-20-04, the Green Building Initiative, to improve the energy efficiency of non-residential buildings through aggressive standards.

The most recent Title 24 standards are the 2016 Title 24 standards (the 2019 Title 24 standards would not be effective until year 2020; although the proposed project would not be operational until after year 2020, the year 2016 Title 24 standards are used as the basis of this analysis for the sake of a conservative analysis). The 2016 Title 24 standards, which became effective on January 1, 2017, are estimated to result in new buildings that use 28 percent less energy for lighting, heating, cooling, ventilation, and water heating than the previous 2013 Standards. The 2016 updates to Title 24 are focused on moving closer to zero net energy homes by getting energy loads down so that remaining electricity demand can be met by solar photovoltaic (PV) panels. The 2016 Title 24 standards require "solar-ready roofs" to accommodate future installations of solar PV panels. Additionally, the 2016 Title 24 standards will save millions of gallons of water per year.

CALIFORNIA GREEN BUILDING STANDARDS CODE

The purpose of the California Green Building Standards Code (California Code of Regulations Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. The California Green Building Standards, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;

- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

- **Tier I:** 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.
- **Tier II:** 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

California Supreme Court Decisions

THE "NEWHALL RANCH" CASE

On November 30, 2015, the California Supreme Court released its opinion on *Center for Biological Diversity v. California Department of Fish and Wildlife* (2015) 62 Cal.4th 204 (hereafter referred to as the Newhall Ranch Case).

Because of the importance of the Supreme Court as the top body within the California Judiciary, and because of the relative lack of judicial guidance regarding how GHG issues should be addressed in CEQA documents, the opinion provides very important legal guidance to agencies charged with preparing EIRs.

The case involved a challenge to an EIR prepared by the California Department of Fish and Wildlife (CDFW) for the Newhall Ranch development project in Los Angeles County, which consists of approximately 20,000 dwelling units as well as commercial and business uses, schools, golf courses, parks and other community facilities in the City of Santa Clarita.

In relation to GHG analysis, the Newhall Ranch Case illustrates the difficulty of complying with statewide GHG reduction targets at the local level using CEQA to determine whether an individual project's GHG emissions will create a significant environmental impact triggering an EIR, mitigation, and/or statement of overriding consideration. The EIR utilized compliance with AB 32's GHG reduction goals as a threshold of significance and modelled its analysis on the CARB's business-as-usual (BAU) emissions projections from the 2008 Scoping Plan. The EIR quantified the project's annual emissions at buildout and projected emissions in 2020 under a BAU scenario, in which no additional regulatory actions were taken to reduce emissions. Since the Scoping Plan determined a reduction of 29 percent from BAU was needed to meet AB 32's 2020 reduction goal, the EIR concluded that the project would have a less-than-significant impact because the project's annual GHG emissions were projected to be 31 percent below its BAU estimate.

The Supreme Court concluded that the threshold of significance used by the EIR was permissible; however, the BAU analysis lacked substantial evidence to demonstrate that the required percentage reduction from BAU is the same for an individual project as for the entire State. The court expressed skepticism that a percentage reduction goal applicable to the State as a whole would apply without change to an individual development project, regardless of its size or location. Therefore, the Supreme Court determined that the EIR's GHG analysis was not sufficient to support the conclusion that GHG impacts would be less than significant.

In addition, the Supreme Court provided the following guidance regarding potential alternative approaches to GHG impact assessment at the project level for lead agencies:

1. The lead agency determination of what level of GHG emission reduction from business-as-usual projection that a new land development at the proposed location would need to achieve to comply with statewide goals upon examination of data behind the Scoping Plan's business-as-usual emission projections. The lead agency must provide substantial evidence and account for the disconnect between the Scoping Plan, which dealt with the State as a whole, and an analysis of an individual project's land use emissions (the same issues with CEQA compliance addressed in this case);

2. The lead agency may use a project's compliance with performance based standards – such as high building energy efficiency – adopted to fulfill a statewide plan to reduce or mitigate GHG emissions to assess consistency with AB 32 to the extent that the project features comply with or exceed the regulation (See Guidelines Section 15064.4(a)(2), (b)(3); see also Guidelines Section 15064(h)(3)). A significance analysis would then need to account for the additional GHG emissions – such as transportation emissions – beyond the regulated activity. Transportation emissions are in part a function of the location, size, and density or intensity of a project, and thus can be affected by local governments' land use decision making. Additionally, the lead agency may use a programmatic effort including a general plan, long range development plan, or a separate plan to reduce GHG emissions (such as Climate Action Plan or a SB 375 metropolitan regional transportation impact Sustainable Communities Strategy) that accounts for specific geographical GHG emission reductions to streamline or tier project level CEQA analysis pursuant to Guidelines 15183.5(a)-(b) for land use and Public Resources Code Section 21155.2 and 21159.28 and Guidelines Section 15183.5(c) for transportation.

3. The lead agency may rely on existing numerical thresholds of significance for GHG emissions (such as the Bay Area Air Quality Management District's proposed threshold of significance of 1,100 MT CO_2E in annual emission for CEQA GHG emission analysis on new land use projects). The use of a numerical value provides what is "normally" considered significant but does not relieve a lead agency from independently determining the significance of the impact for the individual project (See Guidelines Section 15064.7).

THE SANDAG CASE

In *Cleveland National Forest Foundation v. San Diego Association of Governments* (2017) 3 Cal.5th 497 (*SANDAG)*, the Supreme Court addressed the extent to which, if any, an EIR for a Regional Transportation Plan (RTP) with a Sustainable Communities Strategy (SCS) must address the proposed project's consistency with the 2050 target set forth in Executive Order S-03-05 (i.e., 80 percent below 1990 levels). The Court held that SANDAG did not abuse its discretion by failing to treat the 2050 GHG emissions target as a threshold of significance. The Court cautioned, however, that its decision applies narrowly to the facts of the case and that the analysis in the challenged EIR should not be used as an example for other lead agencies to follow going forward. Notably, the RTP itself covered a planning period that extended all the way to 2050.

The Court acknowledged the parties' agreement that "the Executive Order lacks the force of a legal mandate binding on SANDAG[.]" (*Id*. at p. 513.) This conclusion was consistent with the Court's earlier decision in *Professional Engineers in California Government v. Schwarzenegger* (2010) 50 Cal.4th 989, 1015, which held the Governor had acted in excess of his executive authority in ordering the furloughing of State employees as a money-saving strategy. In that earlier case, which is not mentioned in the *SANDAG* decision, the Court held that the decision to furlough employees was legislative in character, and thus could only be ordered by the Legislature, and not the Governor, who, under the State constitution, may only exercise executive authority. In *SANDAG*, the Court thus impliedly recognized that Governors do not have authority to set statewide legislative policy, particularly for decades into the future. Even so, however, the Court noted, and did not question, the parties' agreement that "the Executive Order's 2050 emissions reduction target is grounded in sound science." (3 Cal.5th at p. 513.) Indeed, the Court emphasized that, although "the Executive Order 'is not an adopted GHG reduction plan' and that 'there is no legal requirement to use it as a threshold of significance,'" the 2050 goal nevertheless "expresses the pace and magnitude of reduction efforts that the scientific community believes necessary to stabilize the climate.

This scientific information has important value to policymakers and citizens in considering the emission impacts of a project like SANDAG's regional transportation plan." (*Id*. at p. 515.) Towards the end of the decision, the Court even referred to "the state's 2050 climate goals" as though the 2050 target from E.O. S-03-05 had some sort of standing under California law. (*Id*. at p. 519.) The Court seemed to reason that, because the Legislature had enacted both AB 32 and SB 32, which followed the downward GHG emissions trajectory recommended in the Executive Order, the Legislature, at some point, was also likely to adopt the 2050 target as well: "SB 32 … reaffirms California's commitment to being on the forefront of the dramatic greenhouse gas emission reductions needed to stabilize the global climate." (*Id*. at p. 519.) Finally, the Court explained that "planning agencies like SANDAG must ensure that CEQA analysis stays in step with evolving scientific knowledge and state regulatory schemes." (*Ibid*.)

In sum, the Court recognized that the Executive Order did not carry the force of law, but nevertheless considered it to be part of "state climate policy" because the Legislature, in enacting both AB 32 and SB 32, seems to be following both the IPCC recommendations for reducing GHG emissions worldwide and evolving science. Nothing in the decision, however, suggests that all projects,

regardless of their buildout period, must address the 2050 target or treat it as a significance threshold.

CEQA Guidelines Appendix F

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. The goal of conserving energy implies the wise and efficient use of energy.

LOCAL

Association of Monterey Bay Area Governments (AMBAG) Energy & Climate Action Planning Program

The Draft Energy Action Strategies developed by AMBAG Energy Watch are meant to highlight the potential savings that can be achieved through various energy actions, and provide insights for decision-makers in each jurisdiction. For those jurisdictions who ultimately decide to develop and adopt comprehensive Climate Action Plans, the initiatives comprising the Energy Action Strategies can be easily and efficiently integrated into the energy chapter(s) of the Climate Action Plans.

City of Salinas GHG Emissions Inventory

In association with Local Governments for Sustainability, AMBAG has assisted a number of local communities in the preparation of GHG emissions baseline inventories. The City of Salinas participated in this effort. In 2011, AMBAG produced the *City of Salinas Greenhouse Gas Emissions Inventory 2005 Baseline Report*. The baseline report provides data on the City's 2005 emissions baseline volumes generated by community activities (i.e. land use development) and by municipal operations. Total 2005 GHG emissions were estimated at 804,444 MT CO_2e. Emissions from commercial and industrial development were estimated at 271,143 MT CO_2e. The commercial and industrial emissions include only those related to the consumption of electricity and natural gas and do not include emissions from associated transportation or waste disposal/management.

City of Salinas General Plan

The Salinas General Plan establishes the following policies relative to GHG emissions and/or energy conservation in the General Plan:

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-6.1: Cooperate with the Monterey Bay Unified Air Pollution Control District [now Monterey Bay Air District] to implement the Air Quality Plan.

Policy COS-6.2: Implement measures to protect air quality that may be required to mitigate the effects of population growth.

Policy COS-6.3: Encourage development design that maintains air quality and reduces

direct and indirect emissions of air contaminates.

Policy COS-6.4: Support alternative modes of transportation, such as walking, biking and public transit, and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.

Policy COS-8.1: Enforce State Title 24 building construction requirements.

Policy COS-8.2: Apply standards that promote energy conservation in new and existing development.

Policy COS-8.3: Work with energy suppliers and distributors to implement energy conservation programs and help inform the public of these programs.

Policy COS-8.4: Participate in programs that promote energy conservation.

Policy COS-8.5: Encourage land use arrangements and densities that facilitate the use of energy efficient public transit.

Policy COS-8.6: Encourage the creation and retention of neighborhood-level services (e.g., family medical offices, dry cleaners, grocery stores, drug stores) throughout the City in order to reduce energy consumption through automobile use.

SAFETY ELEMENT

Policy S-3.1: To reduce the risk posed by air pollution, work with responsible federal, state, and county agencies to decrease air pollution emissions occurring within the air basin.

LAND USE ELEMENT

Policy LU-1.1: Achieve a balance of land uses to provide for a range of housing, jobs, libraries, and educational and recreational facilities that allow residents to live, work, shop, learn, and play in the community.

COMMUNITY DESIGN ELEMENT

Policy CD-3.1: Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, each neighborhood should have the following characteristics:

- An approximately 5-minute walk from perimeter to center;
- Housing densities should increase from perimeter to center (i.e., neighborhoods should be more densely populated at the center);
- The neighborhood center should be the location of retail space, office space, and upper story residential above commercial and office space;
- A civic or public space such as a plaza or park should be at the neighborhood center;
- Small parks should be distributed throughout the neighborhood;

- Schools should lie within the neighborhood and be easily accessible and within walking distance;
- When not adjacent to agricultural operations, which may require a variety of buffering techniques, the neighborhood edge should be bordered by either a natural corridor or the edge of an adjacent neighborhood across a pedestrian-friendly boulevard; and
- Front yard setbacks should decrease from neighborhood edge to neighborhood center.

City of Salinas General Plan Final Program EIR

The Salinas General Plan Final Program EIR establishes the following mitigation measures:

SEIR GCC1: Within 36 months, the City shall establish a global climate change action plan that includes a baseline inventory of all GHG emissions associated with all residences, businesses, industries, agriculture, municipal operations, and other sources within the City limits; establishment of a GHG emissions reduction target; development of enforceable, feasible GHG emissions reduction measures to meet the established target; and performance monitoring of the GHG emissions reduction measures shall occur every 3 years to ensure the emissions reductions are being achieved.

SEIR GCC2: Prioritized parking within new commercial and retail areas shall be given to electric vehicles, hybrid vehicles, and alternative fuel vehicles.

SEIR GCC3: The City shall require that new or major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) for residential projects of 6 units or more comply with at least one of the following:

- Participate in the CEC's New Solar Homes Partnership (this program provides rebates to developers of 6 units or more who offer solar power in 50 percent of new units), or a similar program with solar power requirements equal to or greater than those of the CEC's New Solar Homes Partnership as demonstrated to the City by the project applicant.
- Design, construct, or retrofit 50 percent of the square footage of the building(s) that are part of the project capable of being certified under one of the following Leadership in Energy and Environmental Design (LEED) or equivalent building rating systems: LEED for New Construction; LEED for Existing Buildings, LEED for Homes, LEED for Core & Shell, or any Application Guides of these rating systems. However, no formal LEED certification shall be required, and the City

Manager or his/her designee shall make the determination that the potential for LEED certification has been achieved. All credits used to demonstrate capability to meet one of the above certifications must directly or indirectly result in a reduction in GHG emissions.

SEIR GCC4: The City shall require that new or major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) of commercial, office, or industrial development greater than or equal to 25,000 square feet in size must incorporate renewable energy generation (on- or off-site) to provide 15 percent or more of the project's energy needs.

SEIR GCC5: The City shall require new development or redevelopment projects in excess of 10 acres in size be capable of meeting the certification requirements of the LEED for Neighborhood Development Rating System Pilot Version (February 2007) ("LEED ND"). However, no formal certification shall be required, and the City Manager or his/her designee shall make the determination that the potential for certification has been achieved. All credits used to demonstrate capability to meet the LEED ND certification must directly or indirectly result in a reduction in GHG emissions.

SEIR GCC6: The City shall require that the design or purchase of any new street lights and water and wastewater pumps and treatment systems achieve a 10 percent reduction beyond an estimated baseline energy use for this infrastructure. All new traffic lights installed within Salinas shall use LED technology.

SEIR GCC7: The City shall require all new development or major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) projects to recycle and/or salvage at least 50 percent of nonhazardous construction and demolition debris. To implement this requirement, a construction waste management plan identifying materials to be diverted from disposal and whether the materials will be stored on-site or commingled shall be developed and implemented by the applicant for said development or rehabilitation. Excavated soil and land-clearing debris do not contribute to this credit. Calculation can be done by weight or volume but must be consistent throughout.

SEIR GCC8: The City shall require all new development and major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000

square feet of industrial floor area) projects to incorporate any combination of the following strategies to reduce heat gain for 50 percent of the nonroof impervious site landscape (including roads, sidewalks, courtyards, parking lots, and driveways):

- Shaded (within 5 years of occupancy)
- Paving materials with a Solar Reflectance Index (SRI) of at least 29
- Open grid pavement system
- Parking spaces under cover (defined as underground, under deck, under roof, or under a building). Any roof used to shade or cover parking must have an SRI of at least 29

SEIR GCC9: The City shall require that all new development or major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) projects incorporate "green building" points in construction plans prior to issuing a permit to build. Such points may be achieved through checklists identified by New Home Construction Green Building Guidelines available at www.builditgreen.org, or through a similar list that distinguishes specific measures targeting efficiencies in energy, resource use, or other measures that would also directly or indirectly result in GHG emission reductions. Specific efficiencies that would reduce GHG emissions should be implemented where feasible for all project areas including site design, landscaping, foundation, structural frame and building envelope, exterior finishing, plumbing, appliance use, insulation, heating, venting and air conditioning, building performance, use of renewable energy, finishes, and flooring.

City of Salinas Municipal Code

Section 31-903.16 of the Municipal Code (*Energy Conservation*) requires that the design of a subdivision for which a tentative map is required shall provide, to the extent feasible, for future pass or natural heating or cooling opportunities in the subdivision.

3.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE (GREENHOUSE GASES)

Consistent with Appendix G of the CEQA Guidelines, climate change-related impacts are considered significant if implementation of the Specific Plan would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan).

CEQA Direction

In 2008, the Schwarzenegger administration issued guidance regarding assessing significance of GHGs in CEQA documents; that guidance stated that the adoption of appropriate significance thresholds was a matter of discretion for the lead agency. The guidance states:

> "[T]he global nature of climate change warrants investigation of a statewide threshold of significance for GHG emissions. To this end, OPR has asked the CARB technical staff to recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the state. Until such time as state guidance is available on thresholds of significance for GHG emissions, we recommend the following approach to your CEQA analysis."
>
> **Determine Significance**
>
> - When assessing a project's GHG emissions, lead agencies must describe the existing environmental conditions or setting, without the project, which normally constitutes the baseline physical conditions for determining whether a project's impacts are significant.
>
> - As with any environmental impact, lead agencies must determine what constitutes a significant impact. In the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a "significant impact," individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice.
>
> - The potential effects of a project may be individually limited but cumulatively considerable. Lead agencies should not dismiss a proposed project's direct and/or indirect climate change impacts without careful consideration, supported by substantial evidence. Documentation of available information and analysis should be provided for any project that may significantly contribute new GHG emissions,

either individually or cumulatively, directly or indirectly (e.g., transportation impacts).

- Although climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment. CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project.

CEQA Guidelines Section 15064.4 was later added, in 2010, to address GHGs. The Guidelines state:

(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.

(b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Thus, one threshold that may be used to analyze the project's GHG emissions is whether the project would conflict with or obstruct the goals or strategies of the California Global Warming Solutions Act of 2006 (AB 32) or its governing regulation (Sections 38500-38599 of the Health & Safety Code).

The OPR Guidance did not require Executive Order S-3-05 to be used as a significance threshold under CEQA. Rather, OPR recognized that, until the CARB establishes a statewide standard, selecting an appropriate threshold was within the discretion of the lead agency.

The OPR Guidance did not include a quantitative threshold of significance to use for assessing a project's GHG emissions under CEQA. Moreover, the CARB has not established such a threshold or recommended a method for setting a threshold for project-level analysis. In the absence of a consistent statewide threshold, the County in consultation with the MBARD, has provided a threshold of significance for analyzing the proposed project's GHG emissions. The issue of setting a GHG threshold is complex and dynamic, especially in light of the California Supreme Court decision in *Center for Biological Diversity v. California Department of Fish and Wildlife* (discussed in detail earlier and referred to as the Newhall Ranch decision hereafter). The Supreme Court ruling highlighted the need for the threshold being tailored to the specific project, its location, and the surrounding setting. Therefore, the threshold used to analyze the proposed project is specific to the analysis herein.

Prior to the Newhall Ranch decision, analysis involved comparison of the project emissions to a "no action taken" (NAT) scenario. In the Newhall Ranch decision, the court found that, although comparison of a project to NAT (or "business as usual") may be appropriate in concept, the comparison of a specific local project against a statewide business as usual scenario is not an analogous comparison. Specifically, the Court stated that the business as usual approach would need to be based on a substantial evidence-supported link between data in the Scoping Plan and the project, at its proposed location, to demonstrate consistency of a project's reductions with statewide goals. It should be noted that, based on current data available, it is not possible, within the structure of the Scoping Plan sectors, to develop the evidence to reliably relate a specific land use development project's reductions to the Scoping Plan's statewide goal, as envisioned by the Court. Based on the court's finding, the NAT approach is now considered problematic and is no longer recommended. Therefore, consistent with direction from the MBARD, this DEIR analysis replaces the former MBUACPD threshold with a threshold that is consistent with the Newhall Ranch decision. This consists of evaluating the consistency of a project's GHG efficiency with California's GHG reduction targets. In light of the Newhall Ranch decision, efficiency metrics were developed to assess the project's consistency with California's adopted GHG reduction targets for 2020 under AB 32, 2030 under SB 32, and for 2050 under Executive Order S-3-05. Because this approach gives consideration to the 2050 target, it necessarily also considers the 2020 and 2030 targets created by AB 32 and SB 32 (discussed above).

Monterey Bay Air Resources District (MBARD)

The MBARD has previously recommended that lead agencies use the GHG emission thresholds of significance for evaluating construction- and operation-related GHG emissions adopted by the San Luis Obispo County Air Pollution Control District (SLO County APCD) available in the SLO County APCD CEQA Air Quality Handbook, last updated in 2012[1]. These thresholds were developed for San Luis Obispo County, and incorporate locally-based data. The thresholds provided by the SLO County APCD include a mass emissions bright-line threshold of 1,150 MT CO_2e/year and a per capita threshold of 4.9 MT CO_2e/service population (SP)/year. These metrics represent the rate of emissions for projects in SLO County needed to achieve a fair share of the State's emissions mandate embodied in the AB 32 Year 2020 target. The use of "fair share" in this instance indicates the GHG

[1] Correspondence with MBARD Engineer David Frisbey, on 2/29/2016 (11:30 am).

efficiency level that, if applied statewide, would meet the AB 32 Year 2020 emissions target and support efforts to reduce emissions beyond 2020. The intent of AB 32 is to accommodate population and economic growth in California, but do so in a way that achieves a lower rate of GHG emissions. SLO County APCD also developed its bright-line threshold of 1,150 MT CO2e/year based on the following steps: (1) estimate overall statewide growth in GHG emissions; (2) estimate statewide "off-inventory" GHG reductions; (3) calculate the statewide GHG emission gap; (4) apply the statewide gap to the SLO County Regional Land Use Emissions Inventory; (5) evaluate historical land use development trends in SLO County to estimate potential future development; (6) project the level of new development expected in SLO County by 2020; (7) estimate the GHG emissions reductions needed from future development in SLO County; and (8) determine the threshold level needed to close the regional gap of 13,788 MT CO_2e/year. Following a similar process, the SLOAPCD developed a per capita GHG emissions threshold of 4.9 MT CO_2e/SP/year.

In light of the Newhall Ranch decision, an independent efficiency metric was calculated by De Novo Planning Group in coordination with the MBARD to assess the project's consistency with California's adopted GHG reduction targets for 2020 AB 32 (given that the SLO County APCD per capita thresholds was developed prior to the Newhall Ranch decision). It was found, based on this independent calculation, that a per capita threshold of 4.84 MT CO_2e/SP/year in 2020 would be the appropriate threshold for projects in California for the Year 2020. This independent efficiency metric is similar to the aforementioned efficiency metric calculated by the SLO County APCD. De Novo Planning Group developed the 4.84 MT CO_2e/SP/year in 2020 threshold based on emissions for the land use-driven emission sectors in the CARB GHG Inventory. This approach to developing a GHG efficiency metric is only based on sectors that would accommodate projected growth (as indicated by population and employment growth) while allowing for consistency with the goals of AB 32. More specifically, this per service population efficiency target is based on the AB 32 GHG reduction target and GHG emissions inventory prepared for the CARB's AB 32 Scoping Plan. The land-used sector driven inventory for 1990 was divided by the population and employment projections for California in 2020. This efficiency metric allows the threshold to be applied evenly to all project types (residential, commercial/retail and mixed use) and uses an emissions inventory comprised only of sources from land-use related sectors. The efficiency approach allows lead agencies to assess whether any given project or plan would accommodate population and employment growth in a way that is consistent with the emissions limit established under AB 32.

Since this independently-generated GHG efficiency threshold for the State of California would be applicable statewide, this approach to establishing efficiency thresholds is utilized for this analysis for operational emissions. The high level of similarity between the Year 2020 SLO County APCD GHG efficiency metric, and the independently derived Year 2020 metric provides for further reliability that this numerical value of 4.84 MT CO_2e/SP/year for 2020 would be an appropriate threshold for projects in California.

Buildout of the proposed project is not likely to occur until Year 2040. Nevertheless, the CARB set a per capita GHG emissions reduction target for 2035 (CARB set targets for the AMBAG region as "not to exceed 2005 per capita levels of GHGs" by 2020 and a five percent reduction from 2005 levels by 2035). Therefore, efficiency thresholds for Year 2035 and for long-term future Year 2050 were also

derived, following the same methodology as utilized to derive the 2020 efficiency threshold. The CARB has indicated that an average statewide GHG reduction of 5.2 percent per year from 2020 through 2050 would be necessary to achieve the State's 2050 target of an 80% reduction in GHGs below 1990 levels (CARB, 2016b). This annual percentage reduction was utilized as a basis for developing the per capita efficiency thresholds for Year 2035 and long-term future Year 2050. Thresholds for these two years were estimated by applying a uniform reduction from the CARB's 1990 emissions inventory and dividing the resultant value by the projected population and employment for each future year (see **Appendix B** of this EIR for detailed calculations). The derived per capita thresholds for Year 2035 is 1.94 MT CO_2e/SP/year in 2035, and for Year 2050 is 0.80 MT CO_2e/SP/year.

The proposed project is anticipated to be built out in the medium-term, within the timeframe for the State's longer-term target years (2030 and 2050). The City bases its post-2020 significance determination for this proposed project on the 2035 (CARB target year) and 2050 (long-term horizon) analysis provided herein.

If the project's estimated GHG emissions per service population in 2035 and 2050 are equal to or less than these derived efficiency thresholds, the impact would be considered less than significant for the AB 32 and SB 32 target years. Consistent with SB 32 and the State's 2050 GHG reduction target, the post-2020 GHG efficiency metrics were derived based on the reduction trajectory the State of California needs to maintain to achieve its 2030 and 2050 goals (5.2 percent reduction per year) (CARB, 2016b). Therefore, if the project's emissions are determined to be on this trajectory based on compliance with the derived 2035 and 2050 GHG emissions per service population goals, the proposed project would not be anticipated to interfere with the State's long-term GHG reduction goals.

Conclusion

The MBARD had previously recommended using the adopted SLO County APCD quantitative emissions bright-line threshold of 1,150 MT CO_2e per year, or the SLO County APCD per capita emissions threshold of 4.9 MT CO_2e/SP/year for year 2020 for most land use projects. However, independently calculated per capita emissions thresholds were derived, in conformance with the Newhall Ranch decision, based on the GHG emissions included for land use-based sectors within California's 1990 GHG Inventory and future-year population and employment projections. These independently calculated per capita emissions thresholds (for Years 2035 and 2050) are utilized for the evaluation of operation-related emissions. Therefore, in compliance with the Newhall Ranch decision, the project's contribution to cumulative impacts related to GHG emissions and climate change would be cumulatively considerable if the project would produce more than 1,150 MT CO_2e per year in construction-related emissions, or 1.94 MT CO_2e/SP/year in 2035, or 0.80 MT CO_2e/SP/year in 2050, in operation-related emissions. In addition, a project that contributes to a net decrease in GHG emissions and is consistent with the reduction goals of AB 32 and SB 32 is presumed to have a less than significant GHG impact.

Based on the discussion above, the following thresholds are applied to this analysis:

- For the evaluation of construction-related emissions, the SLO County APCD-recommended mass emission threshold of 1,150 metric tons of CO_2e per year is used.
- For the evaluation of operation-related emissions, for year 2035, the independently derived per capita emissions threshold of 1.94 MT CO_2e/service population/year is used.
- For the evaluation of operation-related emissions, for year 2050, the independently derived per capita emissions threshold of 0.80 MT CO_2e/service population/year is used.

THRESHOLDS OF SIGNIFICANCE (CEQA GUIDELINES APPENDIX F)

Consistent with Appendix F of the CEQA Guidelines, energy-related impacts are considered significant if implementation of the Specific Plan would do the following:

- Result in significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal;
- Result in significant adverse impacts on local and regional energy supplies and on requirements for additional capacity;
- Result in significant adverse impacts on peak and base period demands for electricity and other forms of energy;
- Fail to comply with existing energy standards;
- Result in significant adverse impacts on energy resources;
- Result in significant adverse impacts related to transportation energy use requirements of the project and use of transportation alternatives; or
- Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to energy conservation.

In order to determine whether or not the proposed project would result in a significant impact on energy use, this EIR includes an analysis of proposed project energy use, as provided under *Impacts and Mitigation Measures* below.

IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (Significant and Unavoidable)

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and

agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the Specific Plan would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O), from mobile sources and utility usage.

The Specific Plan's short-term construction-related and long-term operational GHG emissions were estimated using the California Emission Estimator Model (CalEEMod)™ (v.2016.3.2). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., MT CO_2e), based on the global warming potential of the individual pollutants.

Short-Term Construction GHG Emissions: Estimated unmitigated GHG emissions associated with construction of the Specific Plan are summarized in Table 3.4-1. These emissions include all worker vehicle, vendor vehicle, hauler vehicle, and off-road construction vehicle GHG emissions. For the purposes of this analysis, based on input from the project applicants, the proposed project is assumed to commence construction in 2020 and occur through 2040, and full buildout of the Plan Area would be completed by 2040. It should be noted that this schedule is an approximation and may change over time. Buildout of the Specific Plan Area would occur based on market conditions, and therefore the pace of construction is expected to vary over time. Nevertheless, a regularized construction schedule was utilized for modelling purposes for the sake of simplicity. It should also be noted that the results provided in Table 3.4-1 incorporates the CalEEMod default assumptions for off-road construction equipment, which tend to represent an overestimate of project off-road construction equipment needs. Emission results in Table 3.4-1 therefore represent a conservative estimate of project construction-related GHG emissions.

TABLE 3.4-1: CONSTRUCTION GHG EMISSIONS (UNMITIGATED AVERAGE MT CO_2E/YEAR)

Year	*Bio- CO_2*	*Non-Bio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
2020	0	385	385	0.1	0	388
2021	0	11,869	11,869	0.6	0	11,883
2022	0	11,688	11,688	0.5	0	11,701
2023	0	11,373	11,373	0.5	0	11,385
2024	0	11,200	11,200	0.4	0	11,211
2025	0	10,903	10,903	0.4	0	10,913
2026	0	10,657	10,657	0.4	0	10,667
2027	0	10,459	10,459	0.4	0	10,468
2028	0	10,245	10,245	0.4	0	10,254
2029	0	10,130	10,130	0.4	0	10,139
2030	0	10,035	10,035	0.3	0	10,043
2031	0	9,918	9,918	0.3	0	9,925
2032	0	9,856	9,856	0.3	0	9,862
2033	0	9,695	9,695	0.3	0	9,702
2034	0	9,623	9,623	0.2	0	9,629
2035	0	9,598	9,598	0.2	0	9,604
2036	0	9,634	9,634	0.2	0	9,640
2037	0	9,598	9,598	0.2	0	9,604
2038	0	9,598	9,598	0.2	0	9,604
2039	0	9,561	9,561	0.2	0	9,567
2040	0	8,103	8,103	0.2	0	8,108
Total	**0**	**204,128**	**204,128**	**6.7**	**0**	**204,297**
Annual Maximum	**0**	**11,869**	**11,869**	**0.6**	**0**	**11,883**

SOURCES: CALEEMOD (V.2016.3.2)

As presented in the table, short-term construction emissions of GHG associated are estimated to be a total of 204,297 MT CO_2e. This reflects a low of 388 in 2020 and a high of 11,883 MT CO_2e in 2020, emitted during each of the construction years (2020 through 2040). Construction GHG emissions tend to be highest during years when building construction activities would occur, as opposed to site preparation or other construction activities. As shown in Table 3.4-1, the proposed project's construction emissions would exceed the mass emissions threshold of 1,150 MT CO_2e/year for nearly all years of construction.

Long-Term Operational GHG Emissions: The long-term operational GHG emissions estimate for the Specific Plan incorporates potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation.

Estimated GHG emissions associated with the Specific Plan in 2035 are summarized in Table 3.4-2 and 3.4-3, below. Although buildout of the Plan Area is not expected until at least 2040, for the sake of a conservative analysis, the Plan Area operational emissions were modelled for full buildout by 2035, in order to provide a conservative analysis (due to federal and State requirements having the effect of reducing mobile and built-environment GHG emissions over time). As shown in the following tables, the annual 2035 GHG emissions associated with the Specific Plan would be approximately 51,939.2 MT CO_2e without any mitigation incorporated and 47,684.9 MT CO_2e with mitigation incorporated into the proposed project (as provided by CalEEMod). These mitigation measures therefore represent a decrease of 4,254.3 MT CO_2e in year 2035.

TABLE 3.4-2: OPERATIONAL GHG EMISSIONS 2035 (UNMITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Area	661.2	748.6	1,409.8	0.9	0.1	1,448.4
Energy	0	14,718.3	14.718.3	0.9	0.3	14,836.9
Mobile	0	29,989.3	29,989.3	1.2	0	30,020.5
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	145.0	439.1	584.1	15.0	0.4	1,066.5
Total	**2,649.7**	**45,895.3**	**48,545.0**	**126.9**	**0.7**	**51,939.2**

SOURCES: CALEEMOD (V.2016.3.2)

TABLE 3.4-3: OPERATIONAL GHG EMISSIONS 2035 (MITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Area	0	1,080.9	1,080.9	0.1	<0.1	1,088.6
Energy	0	14,718.3	14,718.3	0.9	0.3	14,836.9
Mobile	0	26,283.3	26,283.3	1.1	0	26,311.7
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	116.0	378.4	494.4	12.0	0.3	880.6
Total	**1,959.5**	**40,844.8**	**44,420.4**	**123.1**	**0.6**	**47,684.9**

SOURCES: CALEEMOD (V.2016.3.2)

Estimated GHG emissions associated with the Specific Plan in 2050 are summarized in Table 3.4-4 and 3.4-5, below. It should be noted that the same RPS standard as estimated for year 2035 was estimated for year 2050. Additionally, CalEEMod is highly limited to the extent that it can account for year 2050 reductions in GHG emissions, given the long timeframe involved. Given emerging technologies (such as affordable electric vehicles) and the high likelihood of increased federal and/or State regulation between 2035 and 2050, per capita emissions are likely to decrease further over this timeframe. Therefore, the year 2050 emissions results represent a conservative estimate. As shown in the following tables, the annual 2050 GHG emissions associated with the Specific Plan would be approximately 50,825.0 MT CO_2e without any mitigation incorporated and 46,779.4 MT CO_2e with mitigation incorporated into the proposed project (as provided by CalEEMod). These mitigation measures therefore represent a decrease of 4,045.6 MT CO_2e in year 2050.

It should also be noted that the proposed project incorporates some features into the design of the Plan Area that CalEEMod considers as "mitigation". Therefore, the unmitigated scenario (in Table 3.4-2) below further acts as a conservative estimate of unmitigated Plan Area emissions.

TABLE 3.4-4: OPERATIONAL GHG EMISSIONS 2050 (UNMITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Area	661.2	748.6	1,409.8	0.9	0.1	1,448.4
Energy	0	14,718.3	14.718.3	0.9	0.3	14,836.9
Mobile	0	29,879.2	29,879.2	1.1	0	28,906.2
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	145.0	439.1	584.1	15.0	0.4	1,066.5
Total	**2,649.7**	**44,785.2**	**47,434.9**	**126.8**	**0.7**	**50,825.0**

SOURCES: CALEEMOD (V.2016.3.2)

TABLE 3.4-5: OPERATIONAL GHG EMISSIONS 2050 (MITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Area	0	1,080.9	1,080.9	0.1	<0.1	1,088.6
Energy	0	14,718.3	14,718.3	0.9	0.3	14,836.9
Mobile	0	25,381.5	25,381.5	1.0	0	25,406.2
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	116.0	378.4	494.4	12.0	0.3	880.6
Total	**1,959.5**	**41,559.1**	**43,518.6**	**122.9**	**0.6**	**46,779.4**

SOURCES: CALEEMOD (V.2016.3.2)

The significance thresholds for GHG emissions should be related to compliance with AB 32 and SB 32, and the City of Salinas, as lead agency, has chosen to utilize a threshold of significance for GHG emissions based on the guidance from the MBARD and the City of Salinas, and as required by the Newhall Ranch decision. This threshold was independently derived by De Novo Planning Group, based on statewide GHG emissions and future-year employment and population projections. The rationale for using this threshold is outlined in the previous subsection, entitled "Thresholds of Significance".

As provided by the West Area Specific Plan, the proposed project is anticipated to include approximately 15,928 residents at project buildout. The proposed project would also have approximately 857 employees at project buildout (based on 571,500 total square feet of mixed use commercial at project buildout[2], and an employment density factor of 667 square feet per worker[3]). Therefore, with a total projected service population of 16,785, unmitigated operational GHG emissions of 51,939.2 MT CO_2e (in Year 2035), and mitigated operational GHG emissions of 47,684.9 MT CO_2e (in Year 2035), the proposed project would generate approximately 3.09 MT CO_2e/service population/year (in Year 2035), for operational emissions, under the unmitigated scenario. Under the mitigated scenario, the proposed project would generate approximately 2.84 MT CO_2e/service population/year (in Year 2035). These values are above the derived threshold of 1.94 MT CO_2e/service population/year for Year 2035.

For the purposes of this analysis, the service population in Year 2050 is assumed to be same as in Year 2035. Under such a scenario, unmitigated GHG emissions per service population in Year 2050 would be approximately 3.03 MT CO_2e/service population/year, and mitigated GHG emissions remain 2.79 MT CO_2e/service population/year. However, the service population threshold applied for Year 2050 is lower than in Year 2035, at 0.80 MT CO_2e/service population/year (and therefore more difficult at to achieve as compared to Year 2035). The GHG emissions modelled for Year 2050 would exceed this threshold by a substantial margin.

As described above, it is expected that the proposed project's GHG efficiency in the Year 2050 would be improved beyond that of Year 2035, given the high likelihood of technological progress of the

[2] As provided by the West Area Specific Plan: see Table 3 of the Initial Study for Salinas West Area Specific Plan (proposed project).

[3] As provided in Table 2 of the City of Salinas Nexus Studies Overview and Summary (February, 2016), for the "Retail/Restaurant/Personal Services" land use type.

next approximately thirty years, which would provide opportunities for additional reductions in per capita GHG emissions. One example of this is the likelihood of substantially increased electrification of vehicles from 2035 to 2050. Additionally, regulatory trends, such as increases in State renewable energy procurement requirements (i.e. the State RPS) may reduce per capita emissions from the use of electricity even further from 2035 to 2050, which would have a large effect on overall per capita GHG emissions of projects in California. Overall, full implementation of the *California's 2017 Climate Change Scoping Plan* by Year 2050 would greatly reduce GHG emissions in California. While it is unknown at this time what kind of technological innovations and/or additional regulatory standards would reduce GHG emissions from 2035 to 2050, and by what amount, it is expected that the per capita GHG efficiency of the proposed project in 2050 would be substantially lower than that as modelled by CalEEMod.

Conclusion: Short-term construction GHG emissions are a one-time release of GHGs and are not expected to significantly contribute to global climate change over the lifetime of the Specific Plan. Additionally, the implementation of the mitigation measures presented in Section 3.1: Air Quality o this EIR would reduce the overall annual GHG emissions associated with the Specific Plan.

The mitigation measures presented in Section 3.1: Air Quality require traffic calming measures, preferential carpool/vanpool parking spaces, and other actions meant to reduce vehicle miles travelled. The mitigation measure provided in Section 3.1: Air Quality require the consideration and implementation of feasible alternative energy infrastructure within the Plan Area. The mitigation measures presented in Section 3.1: Air Quality also ensure that the project proponent would consider and implement feasible strategies to encourage alternative energy use (e.g. solar PV) within the Plan Area. The proposed project would be required to use water efficient fixtures in all buildings, utilize water-efficient irrigation systems, as well as coordinate with the MBARD to consider the implementation of bicycle rental opportunities within the Plan Area.

Nevertheless, even after incorporation of the mitigation measures provided in Section 3.1: Air Quality, overall GHGs generated by the proposed project are expected to be greater than the applicable thresholds of 1,150 MT of CO_2e per year for construction emissions, 1.94 MT CO_2e/service population/year for operational emissions during Year 2035, and 0.80 MT CO_2e/service population/year for operational emissions during Year 2050.

To lessen the significant GHG effect of the proposed project, the Specific Plan would be required to implement the following mitigation measure. This mitigation measure would ensure that the City is demonstrating progress towards meeting post-2020 and post-2030 State GHG emissions reduction goals. The mitigation measure incorporates the recognition that the GHG emissions reduction landscape will change over time by requiring impacts of individual future development projects within the Plan Area to be assessed and mitigated through the CEQA process consistent with GHG reduction plans in effect at the time the individual projects are proposed. Each individual project would be required to develop a Greenhouse Gas Reduction Plan (GGRP), which would serve as a project-specific plan for the reduction of GHGs associated with individual projects. Individual projects would need to demonstrate consistency with a GHG threshold of significance, such as the per capita emissions thresholds derived under the previous "Thresholds of Significance" subsection,

of 1.94 MT CO_2e/service population/year for operational emissions during Year 2035, and 0.80 MT CO_2e/service population/year for operational emissions during Year 2050, as feasible.

The project would generate GHG emissions, directly and indirectly, that may have a significant impact on the environment. While the following mitigation measure would result in reduced GHGs, it is possible that individual projects within the Plan Area may not achieve GHG reductions needed for their individual impacts to be less than significant. Therefore, although the proposed project would be required to implement the following mitigation measure, the Specific Plan would have a ***significant and unavoidable*** impact on the potential to generate GHG emissions that may have a significant impact on the environment.

MITIGATION MEASURES

Mitigation Measure 3.4-1*: Prior to the approval of the tentative maps and development review permits, as applicable, pursuant to CEQA Guidelines section 15183.5(b), Plans for the Reduction of Greenhouse Gas Emissions, the project applicant shall prepare a Greenhouse Gas Reduction Plan (GGRP) aimed at achieving specific performance standards. The GGRP shall include the following:*

1) *The GGRP shall achieve a per capita operational emissions level of 1.94 MT CO_2e/service population/year by year 2035, and 0.80 MT CO_2e/service population/year by year 2050.*
2) *Calculation of GHG emissions projection using an acceptable modeling tool such as the most recent version of CalEEMod.*

GHG reduction measures may include building and site energy reduction measures, measures to reduce project-generated vehicle miles traveled, or other measures. Off-site measures such as participation in a community-wide GHG reduction program(s), if any are adopted, or payment of GHG reduction fees (carbon offsets) into a qualified existing program, if one is in place, may be considered after all feasible on-site reduction measures are considered. The effectiveness of the GHG reduction measures included in the GGRP must be verifiable based on evidence presented in the GGRP. Representative GHG reduction measures which may be considered may include, but are not limited to:

- *Measures identified by the California Air Pollution Control Officers' Association in Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures or updates to this document as may occur from time to time.*
- *Applicable measures identified in guidance from MBARD, if any, and/or in guidance provided by other regional air districts such as the Bay Area Air Quality Management District, Sacramento Metropolitan Air Quality Management District, San Luis Obispo County Air Pollution Control District, or other agencies with adopted GHG reduction guidance that is applicable on the date the project application is deemed complete by the City.*

If sufficient feasible GHG reduction measures are unavailable to reduce GHG emissions to below the threshold of significance, the project applicant shall include evidence in the GGRP to this effect. The GGRP shall be subject to review and approval of the City of Salinas Community Development Department prior to approval of the tentative map or development review application, as applicable.

Implementation of this mitigation measure shall not be required if the City has a qualified GHG reduction plan in place on the date a future individual project application is deemed complete, the qualified GHG reduction plan reflects the most recent legislatively-adopted GHG reduction targets (e.g., the 2030 target set by SB 32), includes an inventory of projected GHG emissions from development within the Plan Area, and includes GHG reduction measures applicable to development within the Plan Area whose implementation is required as a condition of approval of such projects.

Impact 3.4-2: Potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Less than Significant with Mitigation)

To date, neither the City of Salinas, nor any regional agency has prepared a qualified GHG reduction plan that is applicable to the proposed project. In addition, the City's current General Plan does not contain policies adopted for the purpose of reducing GHG emissions, including GHG emissions from development within the Specific Plan. The following provides an analysis of the proposed project's consistency with (1) the current version of the statewide Scoping Plan, (2) Executive Orders B-30-15 and S-03-05, and (3) 2008 Monterey Bay Regional Energy Plan.

Consistency with the CARB's *California's 2017 Climate Change Scoping Plan*: In accordance with AB 32, the CARB developed the first Scoping Plan in 2008 to outline the State's strategy to achieve 1990 level emissions by year 2020. In May 2014, the CARB released and adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012. A new version of the Scoping Plan was then adopted by the CARB in December 2017 (entitled *California's 2017 Climate Change Scoping Plan*). Since adoption of the 2008 Scoping Plan and the subsequent updates in 2014 and 2017, State agencies have adopted programs identified in the plan, and the Legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Building Standards (e.g., CALGreen and the 2016 Building and Energy Efficiency Standards), 33 percent Renewables Portfolio Standard (RPS), and changes in the corporate average fuel economy standards (e.g., Pavley I and California Advanced Clean Cars).

The new buildings constructed and operated within the Plan Area would be significantly more energy efficient than the current buildings in the surrounding area, many of which were constructed under previous versions of the Title 24 energy code. Likewise, plumbing fixtures and landscaping installed as part of the project would result in a decrease in per capita water use compared to existing land uses throughout the City and the region. The project would also need to operate in accordance with the goals of AB 341, which requires a 75 percent diversion rate of waste from landfills. Once built, the Plan Area would become part of existing development within the State that can be subjected to a variety of future State or federal GHG reduction measures intended to target existing development to the extent they are legally applicable, such as a more stringent RPS. Thus, to the extent that California may choose to require that more than 50 percent of its electricity be generated with renewable energy resources such as solar and wind, the electricity supplied to the project site could get cleaner and cleaner over time, without any need for any further actions by landowners within the Specific Plan. Additionally, the Plan Area's operational emissions would be

reduced as additional regulations are implemented by the CARB and other State agencies to comply with the statewide GHG reduction targets. For example, the project's transportation emissions would be expected to decline as vehicle efficiency standards are implemented beyond the Advanced Clean Cars program and the Low Carbon Fuel Standard is strengthened. Therefore, proposed project emissions would continue to decline beyond the buildout year due to regulations that would indirectly affect project emissions.

In the *First Update to the Climate Change Scoping Plan*, the CARB notes that California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 (CARB, 2014b). The update also elaborated on potential GHG reduction goals beyond 2020:

> *This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions (CARB, 2014b).*

Similarly, the CARB's *California's 2017 Climate Change Scoping Plan* (the latest version of the Scoping Plan) provides policies that are considered needed to meet the State's mid-term and long-term GHG emissions reduction targets. For example, *California's 2017 Climate Change Scoping Plan* describes that, although "zero net carbon buildings" are not feasible at this time, they will be necessary to achieve the 2050 target. The CARB's *California's 2017 Climate Change Scoping Plan* also provides the "Scoping Plan Scenario", which describes policies intended to meet the Governor's climate pillars, and the State's mid-term and long-term GHG emissions reduction targets.

Therefore, recognizing the CARB as an authoritative substantial evidence source in evaluating post-2020 GHG impacts, this analysis also evaluates whether buildout of the Specific Plan would interfere with the main programs the CARB has identified to support is conclusions that the State is on a trajectory to meet the 2030 and 2050 GHG targets – (1) initiative to install 12,000 MW of renewable distributed energy by 2020; (2) the California Building Standards Commission's goal to construct net-zero energy homes after 2020; (3) existing building retrofits under AB 758; (4) the reduction in GHG emissions in the electricity sector through the implementation of the 50 percent RPS under SB 350; (5) the ongoing implementation of the Low Carbon Fuel Standard (LCFS); (6) the reduction in GHGs and other pollutants from the transportation sector through the Mobile Source Strategy; (7) the approval and implementation of the Short-Lived Climate Pollutant strategy under SB 1384; (8) implementation of the California Sustainable Freight Action Plan; and (9) implementation of the Post-2020 Cap-and-Trade Program.

- **(1) Initiative to Install 12,000 MW of renewable distributed energy by 2020.** Buildout of the Specific Plan is not expected to interfere with the State's goal to install 12,000 MW of renewable distributed generation systems by 2020. As of November 1, 2017, almost 10,520

MW of distributed generation capacity was operating or installed in California, with an additional 440 MW pending (CEC, 2017). The data include about 5,900 MW of behind-the-meter solar, which far exceeds the State's California Solar Initiative (CSI) goal of 3,000 MW on residential and commercial sites by the end of 2016. In addition, California's existing programs aimed at supporting renewable distributed generation could add another 1,600 MW, if fully subscribed (CEC, 2017).

- **(2) California Building Standards Commission's goal to construct net-zero energy homes after 2020**. Likewise, the Specific Plan is not anticipated to interfere with the ability of the California Building Standards Commission's goal of constructing net-zero energy homes after 2020. The Specific Plan is expected to be achieve full buildout by approximately 2035 and would be constructed to comply with existing building energy standards at the time building permits are obtained. Therefore, the project would not interfere with the State's ability to mandate net-zero energy homes for new construction after 2020.

- **(3) Existing building retrofits under AB 758.** Moreover, buildout of the Specific Plan would not interfere with the State's implementation of building retrofits to further energy efficiency for existing buildings under AB 758. AB 758, the Comprehensive Energy Efficiency in Existing Buildings Law, tasked the CEC with developing and implementing a comprehensive program to increase energy efficiency in existing residential and nonresidential buildings that "fall significantly below the current standards in Title 24." (Pub. Resources Code, section 25943(a)(1).) Approximately 50 percent of existing residential and nonresidential buildings in California were constructed before California Building Energy Efficiency Standards went into effect in 1978. Other buildings constructed after 1978 also fall below current Title 24 standards and represent significant opportunities for energy efficiency improvements. Pursuant to AB 758, the CEC has developed an Existing Buildings Energy Efficiency Action Plan that identifies strategies to implement energy efficient renovations for such existing commercial, residential, and publicly owned buildings. Strategies include making information about a building's energy efficiency more readily available, educating the public about the cost-benefit of energy efficiency upgrades, making attractive financing more readily available, educating the public and contractors about available energy upgrades and code compliance requirements, and educating a work force capable of implementing energy upgrades. The project would be constructed in compliance with the applicable Title 24 standards and, therefore, would not interfere with CEC or other initiatives implemented to increase energy efficiency and reduce GHG emissions associated with buildings that do not adhere to Title 24 standards.

- **(4) 50 Percent RPS under SB 350**. Under SB 350, the State committed to reducing GHG remissions in the electricity sector through the implementation of the 50 percent RPS by 2030. The California Public Utilities Commission (CPUC) implements and administers RPS compliance, by regulating California's retail sellers of electricity, which include PG&E. The Specific Plan would not interfere with the RPS, since it would not affect any retail seller of electricity. In addition, the State is well on its way to meeting the 50 percent RPS requirement by 2030, according to data available from the CPUC (CPUC, 2018).

- **(5) Low Carbon Fuel Standard**. The Low Carbon Fuel Standard is designed to encourage the use of cleaner low-carbon fuels in California, encourage the production of those fuels, and therefore, reduce greenhouse gas emissions. The Specific Plan would not interfere with this State-level program.

- **(6) Mobile Source Strategy**. The CARB developed an updated Mobile Source Strategy in May, 2016. The actions contained in the Mobile Source Strategy are designed to deliver broad environmental and health benefits, as well as support much needed efforts to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth in the mobile sector. The Specific Plan would not interfere with this State-level program.

- **(7) Short-Lived Climate Pollutant strategy under SB 1383**. SB 1383 is a State program that provides a strategy to reduce short-lived climate pollutants. The goals of the program are to reduce methane and hydrofluorocarbon (HFC) emissions below 2013 levels by 2030, and a 50 percent reduction in anthropogenic black carbon emissions below 2013 levels by 2030. The Specific Plan would not interfere with this State-level program.

- **(8) California Sustainable Freight Action Plan**. This program is designed to improve freight system efficiency within the state by 25 percent by 2030. The Specific Plan would not interfere with this State-level program.

- **(9) Post-2020 Cap-and-Trade Program**. The CARB's first Scoping Plan in 2008 also recommended the development of a California Cap-and-Trade Program that links with other Western Climate Initiative partner programs to create a regional market system. On January 1, 2013, the CARB launched the second-largest GHG Cap-and-Trade Program in the world. The Cap-and-Trade Program establishes a hard and declining cap on approximately 85 percent of total statewide GHG emissions. Under the Cap-and-Trade Program, the CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. As the emissions cap is gradually reduced over time, and as additional sources are brought under the cap to include the vast majority of emissions in the State, the program will ensure that California remains on track to continually reduce emissions and meet the 2020 limit. Looking out into the future, the Cap-and-Trade Program will likely play a critical role in keeping California on the right emissions reduction trajectory to meet ongoing reduction targets at the lowest possible cost. The Cap-and-Trade Program is a vital component in achieving both California's near-and long-term GHG emissions targets (CARB, 2014b). While the Cap-and-Trade Regulation is not directly applicable to the WASP, it is worth noting that it represents an important component of the overall GHG reduction framework in the v State. If the CARB determines that sufficient reductions are not being achieved in the "uncapped sectors," the Cap-and-Trade Program can be adjusted to ensure that the State's overall GHG reduction targets are met.

Consistency with Executive Order B-30-15 and S-03-05: As described in the Regulatory Setting above, Governor Brown issued Executive Order B-30-15 in April 2015. It establishes a year 2030 GHG Reduction target of 40 percent below 1990 levels by 2030. This target was codified when the

Legislature enacted SB 32 in 2016. The 2030 target is much more aggressive than the 2020 target and will necessitate development of new, more aggressive GHG reduction requirements at the State and local levels. Separately, Executive Order S-03-05, issued in 2005, included a goal to reduce California's GHG emissions 80% below the 1990 levels by the year 2050.

As described under Impact 3.4-1, the Specific Plan would generate GHG emissions that could conflict with these long-term GHG Reduction targets, even with implementation of mitigation measures 3.1-1 through 3.1-9 contained within Section 3.1: Air Quality. However, implementation of Mitigation Measure 3.4-1 would ensure that GHG reduction measures required pursuant to it are consistent with the intent of current and future statewide GHG reduction legislation and regulations, and with current and future expectations of local, regional, and State stakeholders regarding the City's effort to reduce GHG emissions from new development, including Executive Order B-30-15 and S-03-05. Therefore, with implementation of Mitigation Measure 3.4-1, new development of the Plan Area would consistent with Executive Orders B-30-15 (and SB 32) and S-03-05.

Consistency with the 2008 Monterey Bay Regional Energy Plan: The *2008 Monterey Bay Regional Energy Plan* includes energy efficiency and renewable energy objectives for the AMBAG region. As part of achieving the objectives set out in this plan, AMBAG has (1) developed the AMBAG Energy Watch Program (a regional government partnership program with PG&E), (2) developed a "Green Business Directory" that provides a list of locally available products, and (3) has promoted the establishment of local ordinances for enhanced building energy standards for jurisdictions within the Monterey Bay region. The Specific Plan would not interfere with any of these objectives.

Conclusion: The Specific Plan would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, as described above. With implementation of the mitigation measures provided within Section 3.1: Air Quality and with implementation of Mitigation Measure 3.4-1, there would be a ***less than significant*** impact.

Impact 3.4-3: Project implementation may result in the inefficient, wasteful, or unnecessary use of energy resources (Less than Significant)

Appendix F of the CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed project would be considered "wasteful, inefficient, and unnecessary" if it were to violate State and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The proposed project is a large-scale Specific Plan, and incorporates residential, commercial, public/institutional, and open space uses. The amount of energy used by the proposed project during operation would directly correlate with the number, size, and type of project buildings, the energy efficiency of associated building equipment and appliances, and outdoor lighting, and energy use associated with other on-site buildings and activities. Other project energy uses include fuel used by vehicle trips generated during project construction and operation, fuel used by off-road construction vehicles during construction activities, and fuel used by project maintenance activities during project operation. The following discussion provides a detailed calculation of energy usage expected for the proposed project, for the unmitigated and mitigated scenarios, as provided by applicable modelling software (i.e. CalEEMod v2016.3.2 and the CARB EMFAC2014). Additional assumptions and calculations are provided within **Appendix B** of this EIR.

Electricity and Natural Gas: Electricity and natural gas used by the proposed project would be used primarily to generate energy for on-site buildings, lighting, and water pumping, treatment, and conveyance. As shown in the following tables, "Energy" is one of the categories that was modeled for GHG emissions. The total unmitigated and mitigated GHG emissions generated from the "Energy" category is 9,231.7 MT CO_2e. The following discussion includes a more detailed breakdown of energy consumption in terms of natural gas and electricity consumption. The proposed project would consider effective ways to encourage alternative energy use throughout the Specific Plan Area, as described by mitigation measure provided in *Section 3.1: Air Quality* of this EIR.

Natural Gas: Unmitigated natural gas energy consumption by land use for Year 2035 is presented in Table 3.4-6. This table also includes the GHG emissions that are generated by the natural gas use. These results are also applicable as estimates for the Year 2050 (as provided by CalEEMod) (see **Appendix B** of this EIR for further detail).

TABLE 3.4-6: NATURAL GAS USE AND GHG EMISSIONS BY LAND USE IN 2035 (UNMITIGATED & MITIGATED)

	Natural Gas Use	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Land Use	kBTU/year	MT/year			
Apartments Mid Rise	786,190	41.9	<0.1	<0.1	42.2
City Park	0	0	0	0	0
Condo/Townhouse	54,072,100	2,885.5	0.1	0.1	2,902.6
Elementary School	24,884,600	1,327.9	<0.1	<0.1	1,355.8
General Office Building	2,340,910	124.9	<0.1	<0.1	125.7
High School	31,479,300	1,679.9	<0.1	<0.1	1,689.8
Junior High School	16,691,500	890.7	<0.1	<0.1	896.0
Regional Shopping Center	879,270	46.9	<0.1	<0.1	47.2
Single Family Housing	39,557,600	2,110.9	<0.1	<0.1	2,123.5
Supermarket	1,281,360	68.4	<0.1	<0.1	68.8
Total	**171,186,640**	**9,177.1**	**0.2**	**0.2**	**9,231.7**

SOURCES: CALEEMOD (V.2016.3.2)

Electricity: Unmitigated electricity energy consumption by land use for Year 2035 is presented in Table 3.4-7. This table also includes the GHG emissions that are generated by the electricity use. These results are also applicable for the Year 2050 (as provided by CalEEMod) (see **Appendix B** of this EIR for further detail).

TABLE 3.4-7: ELECTRICITY USE AND GHG EMISSIONS BY LAND USE IN 2035 (UNMITIGATED & MITIGATED)

	Electricity Gas Use	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Land Use	kWh/year	MT/year			
Apartments Mid Rise	375,680	37.1	<0.1	<0.1	37.5
City Park	0	0	0	0	0
Condo/Townhouse	14,571,200	1,437.5	0.2	<0.1	1,454.2
Elementary School	7,273,750	717.6	0.1	<0.1	7259
General Office Building	2,549,690	251.5	<0.1	<0.1	254.4
High School	92,013,800	907.8	0.1	<0.1	918.3
Junior High School	4,878,920	481.3	0.1	<0.1	486.9
Regional Shopping Center	3,965,990	391.3	0.1	<0.1	395.8
Single Family Housing	11,011,300	1,086.3	0.1	<0.1	1,098.9
Supermarket	2,338,710	230.7	<0.1	<0.1	233.4
Total	**138,979,040**	**5,541.2**	**0.7**	**0.2**	**5,605.2**

SOURCES: CALEEMOD (V.2016.3.2)

These tables are representative of energy usage for both Years 2035 and 2050. According to CalEEMod's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial

End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. The energy use from residential land uses is calculated based on the Residential Appliance Saturation Survey (RASS). Similar to CEUS, this is a comprehensive energy use assessment that includes the end use for various climate zones in California.

It should be noted that the estimated electricity usage for water (pumping, treatment, and conveyance) generated by CalEEMod is a conservative estimate. Overall, water usage estimated by CalEEMod is assumed to be larger than would be used by the proposed project. In fact, the water demand for proposed project uses would represent a substantial net reduction in water usage, as compared water used for existing on-site agricultural uses (Cal Water, 2016). However, the proposed project incorporates three new on-site groundwater wells, which would be connected to the Salinas District of Cal Water, providing additional water supply to the City. Projected water pumped by the proposed project's three new wells would total approximately 2,238 acre-feet/year (AFY) at project buildout, whereas CalEEMod estimated overall project water consumption at 3,169 AFY for the proposed project. More specifically, total average design capacity of the three new wells at project buildout would be 5,812 AFY, but projected overall well pumping at proposed project buildout would be 38.5% of design capacity (Cal Water, 2016). Therefore, although the proposed project was designed to be able to provide an average of 5,812 AFY, it would only be expected to pump approximately (5,812 AFY x 38.5%) 2,238 AFY (Cal Water, 2016). Therefore, overall proposed project water consumption at 3,169 AFY upon project buildout represents a conservative estimate.

Electricity intensity factors used by CalEEMod were provided by CEC's *2006 Refining Estimates of Water-Related Energy Use in California* using the average values for Northern California. These values incorporate a factor for conveying water over relatively large distances, which is energy intensive. Although the proposed project's groundwater pumping is also an electricity-intensive activity, this groundwater is expected to be conveyed and used locally (within the Salinas District boundary), requiring relatively small amounts of electricity for distribution. Therefore, it was assumed that the CEC's 2006 average electricity intensity factors represent an effective proxy for the electricity intensity of the water generated by the proposed project's three on-site wells, despite being derived from different factors and assumptions.

On-road Vehicles (Operation): The proposed project would generate vehicle trips during its operational phase. A description of project operational on-road mobile energy usage is provided below.

According to the Traffic Study prepared for the proposed project (Fehr & Peers, 2018), and as described in more detail in Section 3.10 of this EIR, the project would generate approximately 52,094 net new total daily trips at full buildout, under the unmitigated scenario. In order to calculate operational on-road vehicle energy usage and emissions, De Novo Planning Group used default trip lengths generated by CalEEMod, which are based on the project location and urbanization level parameters that were selected within the model (i.e. "Monterey County" and "Urban", respectively). These values are provided by individual air districts (i.e. MBARD) or use a default average for the State, depending on the location of the proposed project (ENVIRON, 2013). CalEEMod also generated an assumed (default) breakdown of trip types: residential trip types were derived from

the 1999 Caltrans Statewide Travel Survey, and commercial trip types were provided from the Institute of Transportation Engineers (ITE) and an analysis of information provided for the South Coast Air Basin (SCAB) (ENVIRON, 2013). Based on trips lengths provided by these sources and the trip generation as provided by Fehr & Peers, the proposed project is estimated to generate a total of approximately 221,017 average daily vehicle miles travelled (Average Daily VMT) at project buildout. Using fleet mix data provide by CalEEMod (v2016.3.2), Year 2035 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2014, weighted average MPG factors for gasoline and diesel were derived. Therefore, upon full buildout, the proposed project would generate operational vehicle trips that would use a total of approximately 6,190 gallons of gasoline and 802 gallons of diesel per day, or 2,259,455 gallons of gasoline and 292,769 gallons of diesel per year.

On-road Vehicles (Construction): The proposed project would also generate on-road vehicle trips during project construction (from construction workers and vendors travelling to and from the Plan Area). De Novo Planning Group estimated the vehicle fuel consumed during these trips based the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2018 gasoline and diesel MPG factors provided by EMFAC2014 (Year 2018 factors were used for the entire construction schedule, representing a conservative approach). For the sake of simplicity, it was assumed that all construction worker light duty passenger cars and truck trips use gasoline as a fuel source, and all medium and heavy-duty vendor trucks use diesel fuel). Table 3.4-8, below, describes gasoline and diesel fuel consumed during each construction phase (in aggregate). As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed project would occur during the building construction phase. There is no feasible mitigation available that would reduce on-road mobile vehicle GHG emissions generated by the project construction activities (requiring the use of electric construction vehicles was deemed infeasible, given price and availability concerns). See **Appendix B** of this EIR for a detailed accounting of construction on-road vehicle fuel usage estimates.

TABLE 3.4-8: ON-ROAD MOBILE FUEL GENERATED BY PROJECT CONSTRUCTION ACTIVITIES – BY PHASE

Construction Phase	*# of Days*	*Total Daily Worker Trips[(a)]*	*Total Daily Vendor Trips[(a)]*	*Total Gallons of Gasoline Fuel[(b)]*	*Total Gallons of Diesel Fuel[(b)]*
Site Preparation	64	18	0	**567**	**0**
Grading	65	20	0	**640**	**0**
Underground Utilities	45	0	0	**0**	**0**
Paving	87	15	0	**642**	**0**
Building Construction	4,152	5,396	1,564	**11,024,722**	**7,323,026**
Architectural Coating	3,917	1,079	0	**2,079,761**	**0**
Total		**6,528**	**1,564**	**13,106,332**	**7,323,026**

NOTE: [(A)] PROVIDED BY CALEEMOD. [(B)]SEE APPENDIX B OF THIS EIR FOR FURTHER DETAIL

SOURCE: CALEEMOD (V.2016.3.2); EMFAC2014.

Off-road Vehicles (Construction): Off-road construction vehicles would use diesel fuel during the construction phase of the proposed project. A non-exhaustive list of off-road constructive vehicles

expected to be used during the construction phase of the proposed project includes: forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO_2 emissions expected to be generated by the proposed project (as provided by the CalEEMod output), and standard conversion factors (as provided by the U.S. Energy Information Administration), the proposed project would use a total of approximately 28,830 gallons of diesel fuel for off-road construction vehicles. Detailed calculations are provided in **Appendix B** of this EIR.

Other: Proposed project landscape maintenance activities would generally require the use fossil fuel (i.e. gasoline) energy. For example, lawn mowers require the use of fuel for power. As an approximation, it is estimated that landscape care maintenance for project residences would require approximately fifty individuals eight hours day per week, or 20,800 hours per year. Assuming an average of approximately 0.5 gallons of gasoline used per person-hour, the proposed project would require the use of approximately 10,400 gallons of gasoline per year to power landscape maintenance equipment. The energy used to power landscape maintenance equipment would not differ substantially from the energy required for landscape maintenance for similar projects.

The proposed project could also use other sources of energy not identified here. Examples of other energy sources include alternative and/or renewable energy (such as solar PV) and/or on-site stationary sources (such as on-site diesel generators) for electricity generation. However, these sources of energy are not planned at this time.

LEED Measures Incorporated into the Proposed Project: Although Leadership in Energy and Environmental Design (LEED) certification is not mandatory for the proposed project, the project applicants have selected practicable and economically feasible measures from the Green Building Rating System For New Construction & Major Renovations, Version 2009, that will be incorporated into the proposed project (as provided in the West Area Specific Plan). A listing of the LEED measures, and the LEED rating points for each LEED measure, are listed below in Table 3.4-9. The proposed project would incorporate these LEED measures either as components of the Specific Plan or based on the mitigation measures contained within this EIR.

TABLE 3.4-9: SPECIFIC PLAN LEED MEASURES

Category	*Checklist*	*Description*	*Points*
Sustainable Sites	SS Prerequisite 1: Construction Activity Pollution Prevention	Control soil erosion, waterway sedimentation and airborne dust generation.	0
Sustainable Sites	SS Credit 4.4: Parking Capacity and Car Sharing	Size of parking lot to meet but not exceed local zoning.	3
Materials and Resources	MR Prerequisite 1: Storage and Collection of Recyclables Required	Provide easily-accessible dedicated area for the collection and storage of materials for recycling.	0
Indoor Environmental Quality	IEQ Credit 4.2: Low-Emitting Materials – Paints and Coatings	Paints and coatings used on the interior of the building must comply with low-VOC requirements.	1

SOURCE: LEED 2009 FOR NEW CONSTRUCTION AND MAJOR RENOVATIONS

Conclusion: The proposed project would use energy resources for the operation of project buildings (electricity and natural gas), for on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed project, and from off-road construction activities associated with the proposed project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through statewide and local measures.

The proposed project would be in compliance with all applicable federal, State, and local regulations regulating energy usage. For example, PG&E, the electric and natural gas provider to the proposed project, is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the statewide RPS to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. PG&E is expected to achieve at least a 33% mix of renewable energy resources by 2020, and 50% by 2030. Moreover, energy delivered by Community Choice Energy Providers such as Monterey Bay Community would provide carbon-free energy. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed project. These regulations would require the proposed project buildings to achieve a high level of energy efficiency. For example, part 6 of the latest Title 24 building energy efficiency standards would require improvements for attics, walls, water heating, and lighting, as compared with the previous version of these standards. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

Furthermore, as described previously, the implementation of Mitigation Measures 3.1-1 through 3.1-14 (as provided by Section 3.1 Air Quality) would reduce project energy usage (including from electricity, natural gas, and on-road vehicle gasoline and diesel sources). Overall, the incorporation of mitigation measures would ensure that the proposed project would avoid and reduce inefficient, wasteful, and unnecessary consumption of energy. The proposed project would comply with all existing energy standards, including those established by the City of Salinas, the local air district (MBARD), and the State of California, and would not be expected to result in significant adverse impacts on energy resources. For these reasons, the proposed project would not cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the threshold as described by Appendix F of the *CEQA Guidelines*. This is a ***less than significant*** impact.

Impact 3.4-4: Cumulative impact on climate change from increased project-related greenhouse gas emissions (Cumulatively Considerable and Significant and Unavoidable)

As the California Supreme Court has emphasized, all CEQA analyses of the environmental effects of GHG emissions are inherently cumulative in character. "[B]ecause of the global scale of climate change, any one project's contribution is unlikely to be significant by itself. *** 'With respect to climate change, an individual project's emissions will most likely not have any appreciable impact

on the global problem by themselves, but they will contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the project's incremental addition of greenhouse gases is 'cumulatively considerable' in light of the global problem, and thus significant.'" (*Center for Biological Diversity v. California Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 219, quoting (Crockett, *Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World* (July 2011) 4 Golden Gate U. Envtl. L.J. 203, 207–208.) Thus, the analysis below considers the entire planet as a backdrop while focusing on whether the proposed project's incremental contribution to worldwide GHG emissions is cumulatively considerable.

In California, there has been extensive legislation passed with the goal of reducing GHG emissions. The legislative goals are as follows: 1) 2000 levels by 2010, 2) 1990 levels by 2020, and 3) 40% below 1990 levels by 2030. An additional goal -- 80% below the 1990 levels by the year 2050 – was set by Governor Schwarzenegger through S-03-05. To achieve the legislative goals, the CARB has developed regional GHG emission reduction targets for the automobile and light truck sectors (the largest single source of GHG emissions) for 2020 and 2035. The regional GHG emission reduction targets for each region in California were established by the CARB.

As described in Impact 3.4-2, implementation of the proposed project will still generate GHG emissions that would not otherwise exist without the proposed project. Given the length of construction activities for a project of this size, the construction emissions would be a long-term release of approximately 168,734.3 MT CO_2e. The operational emissions would be a long-term release totaling approximately 51,939.2 MT CO2e per year without mitigation, and 47,684.9MT CO_2e per year with mitigation. The City of Salinas must weigh the economic and social benefits of development against the environment impacts associated with development. The City of Salinas's planning efforts included targeted growth that accommodates the economic and social needs of the community, while recognizing and seeking to mitigate environmental impacts when growth occurs. The use of New Urbanism principles, which emphasize compact, walkable communities, and which were incorporated into the design of the proposed project, would help minimize GHG emissions generated by the proposed project. Further, the proposed project would be required to implement mitigation measures that are intended to reduce GHG emissions to the maximum extent feasible. The State of California continues to implement measures that are intended to reduce emissions on a State-wide scale (i.e. vehicle fuel efficiency standards in fleets, low carbon fuels, etc.) that are consistent with AB 32 and SB 32. These types of statewide measures will benefit the proposed project (and city as a whole) in the long-term as they come into effect; however, the City does not have the jurisdiction to create far-reaching (i.e. statewide) measures to reduce GHG emissions. On a project-by-project case, the City of Salinas evaluates a project and the potential to impose project-specific mitigation, which has been done through this GHG analysis. However, because it is possible that individual projects within the Plan Area may not achieve GHG reductions needed for their individual impacts to be less than significant, implementation of the Specific Plan would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact to GHGs.

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This section discloses and analyzes the potential impacts associated with hazards and hazardous materials related to the Specific Plan Area and general vicinity, and analyzes the potential for exposure of people to hazards and hazardous materials, as the West Area Specific Plan is built and operated in the future. This section is based in part on the following technical studies: Phase I Western Area Specific Plan of the Boronda Road Future Growth Area (BRFGA) (Geocon, 2016), and Limited Phase II Environmental Site Assessment and Geohazards Study Western Area Specific Plan of the Boronda Road Future Growth Area (BRFGA) (Geocon, 2016), as provided in **Appendix E** of this EIR.

The documents listed above are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at the offices of the City of Salinas Community Development Department at 65 West Alisal Street, Salinas, California 93901.

One comment letter was received during the public review period from the Santa Rita Union School District regarding hazards and/or hazardous materials. The comment was related to potential hazards near school sites. The comment letter is contained in **Appendix A** of this EIR.

3.5.1 ENVIRONMENTAL SETTING

PHYSICAL SETTING

The Plan Area is currently in agricultural production used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. The approximate 797-acre Specific Plan Area is surrounded by suburban uses including residential and commercial uses, as well as other agricultural land uses. McKinnon Elementary School, which is surrounded by agricultural fields, is located in the southwestern portion of the Specific Plan Area near the intersection of McKinnon Street and East Boronda Road. A new high school is currently under construction on Rogge Road located in the northern portion of the site.

There are several small clusters of buildings located on the northern, western, and eastern edges of the Specific Plan Area. The clusters of buildings include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation. Due to the long-term use of the land for agricultural purposes, the Specific Plan Area has the potential for certain environmental conditions related pesticide and herbicide use that could have caused hazardous residual products to accumulate in the soil.

Residential development is located to the northwest, west, and south of the Specific Plan Area. The residential development consists primarily of single-family and multifamily dwellings. La Joya Elementary School and Bolsa Knolls Middle School are located within the residential area northwest of the Specific Plan Area. Santa Rita Elementary School is located within the residential area west of the Specific Plan Area.

To the southwest adjacent to the Plan Area is the Gateway Center Specific Plan area and across Boronda Road to the southwest, is the Harden Ranch Plaza Specific Plan, which is a major retail shopping center. Another commercial shopping center, Shaker Square is located to the southeast at the intersection of Boronda Road and Natividad Road.

Plan Area Topography

The elevation of the Specific Plan Area is approximately 134 feet above mean sea level (MSL). The overall topography of the Specific Plan Area is nearly flat, with little change in elevation. The overall slope across the Specific Plan Area is from northeast to southwest at approximately 0.3%. There are no natural streams or water bodies within or immediately adjacent to the Specific Plan Area.

Geologic Conditions

Specific Plan Area geologic information was obtained from the *Geologic Map of the Monterey Quadrangle* (California Geological Survey [CGS], 2002). The Specific Plan Area is located in the southern Salinas Valley in the Coast Ranges geomorphic province. The Salinas Valley is bounded by the Gabilan Range to the east, the Sierra de Salinas Mountains to the south and west, and by Monterey Bay (Pacific Ocean) to the northwest. The northern Salinas Valley is filled with a thick sequence of Pleistocene to recent age sedimentary deposits both continental and marine in origin. The referenced geologic map indicates that the Specific Plan Area is underlain by Quaternary alluvial fan deposits (CGS, 2002).

Soil Conditions

Information concerning soil conditions in proximity to the Specific Plan Area was obtain from review of the United States Department of Agriculture's (USDA) Web Soil Survey (http://websoilsurvey.nrcs. usda.gov/app/HomePage.htm). Information available on Web Soil Survey indicates that surficial onsite soil is predominantly classified as Chualar loam, which is a moderately well-drained soil that formed on alluvial fans from fine-loamy alluvium derived from igneous and metamorphic rock.

HAZARDS ASSESSMENT

For the purposes of this EIR, "hazardous material" is defined as provided in California Health & Safety Code, Section 25501:

- Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

"Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous waste" is a subset of hazardous materials. For the purposes of this EIR, the definition of hazardous waste is essentially the same as that in the California Health & Safety Code, Section 25517, and in the California Code of Regulations (CCR), Title 22, Section 66261.2:

- Hazardous wastes are wastes that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

CCR Title 22 categorizes hazardous waste into hazard classes according to specific characteristics of ignitibility, corrosivity, reactivity, or toxicity. Hazardous waste with any of these characteristics is also known as a Resource Conservation and Recovery Act (RCRA) waste.

Hazardous materials can be categorized as hazardous non-radioactive chemical materials, radioactive materials, toxic materials, and biohazardous materials. The previous definitions are adequate for non-radioactive hazardous chemicals. Radioactive and biohazardous materials are further defined as follows:

- Radioactive materials contain atoms with unstable nuclei that spontaneously emit ionizing radiation to increase their stability.
- Radioactive wastes are radioactive materials that are discarded (including wastes in storage) or abandoned.
- Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute groundwater.
- Biohazardous materials include materials containing certain infectious agents (microorganisms, bacteria, molds, parasites, and viruses) that cause or significantly contribute to increased human mortality or organisms capable of being communicated by invading and multiplying in body tissues.
- Medical wastes include both biohazardous wastes (byproducts of biohazardous materials) and sharps (devices capable of cutting or piercing, such as hypodermic needles, razor blades, and broken glass) resulting from the diagnosis, treatment, or immunization of human beings, or research pertaining to these activities.

There are countless categories of hazardous materials and hazardous wastes that might be found on any given property based on past uses. Some common examples include agrichemicals (chlorinated herbicides, organophosphate pesticides, and organochlorine pesticides, such as such as Mecoprop (MCPP), Dinoseb, chlordane, dichloro-diphenyltrichloroethane (DDT), and dichloro-diphenyl-dichloroethylene (DDE)), petroleum based products (oil, gasoline, diesel fuel), a variety of more common household chemicals including paints, cleaners, and solvents, and asbestos-containing or lead-containing materials (e.g., paint, sealants, pipe solder).

As previously noted, the Specific Plan Area was assessed for environmental hazards in the Phase 1, Environmental Site Assessment (ESA). The objective of the Phase 1 ESA was to provide an evaluation of current and historical use of the Specific Plan Area to assess whether such use has, or is expected to, result in environmental degradation of the Specific Plan Area.

Records Review

This section summarizes an Environmental Data Resources (EDR) review of readily available agency records for the Specific Plan Area and properties and facilities in the surrounding vicinity. The EDR review included a search of Federal, State, and local databases. Table 3.5-1 includes a summary of this search.

TABLE 3.5-1: ENVIRONMENTAL DATA RESOURCES

DATABASE NAME	*SEARCH RADIUS (MILES)*	*NUMBER OF LISTINGS*
FEDERAL DATABASES		
RCRA-LQG (Resource Conservation and Recovery Act [RCRA] – Large Quantity Generators [LQG])	0.375	1
RCRA-SQG (Small Quantity Generators [SQG])	0.375	1
STATE, LOCAL, AND TRIBAL DATABASES		
ENVIROSTOR (DTSC Electronic Database)	1.125	9
LUST (Leaking Underground Storage Tank)	0.625	4
SLIC (Spills, Leaks, Investigation, and Cleanup)	0.625	1
UST (Underground Storage Tank)	0.375	3
AST (Aboveground Storage Tank)	0.375	3
CA FID UST (Facility Inventory Database [FID])	0.375	3
ADDITIONAL ENVIRONMENTAL RECORDS		
SWRCY (Recycler Database)	0.625	1
SCH (School Property Evaluation Program)	0.375	5
Historical (HIST) UST	0.375	4
SWEEPS UST	0.375	4
FINDS	0.125	2
HIST CORTESE	0.5	1
Certified Uniformed Program Agency (CUPA)	0.375	17
HAZNET	0.125	4
EDR US Historical Auto Stations	0.375	5
EDR US Historical Cleaners	0.375	7
* Indicates that the Plan Area is listed in the database.		

SOURCE: GEOCON, 2016 PHASE I WESTERN AREA SPECIFIC PLAN OF THE BORONDA ROAD FUTURE GROWTH AREA (BRFGA)

Four facilities within the Specific Plan Area were listed in various databases and are summarized below:

Proposed Elementary School, "Mortensen Property"– According to the ENVIROSTOR and SCH databases, multiple investigations have been conducted on site parcel 211-011-008. A Preliminary Environmental Assessment (PEA) report was prepared for this site parcel and is available on the Department of Toxic Substances Control (DTSC), EnviroStor website. A Salinas Union High School District (SUHSD) high school is currently being constructed at the site. Soils impacted with total petroleum hydrocarbons as diesel (TPHd) and motor oil (TPHmo), organochlorine pesticides (OCPs),

and polycyclic aromatic hydrocarbons (PAHs), related to former agricultural uses, were removed in April 2016. A Removal Action Completion Report was reviewed by DTSC and the report was approved on November 28 2016.

Fontes Farm, 630 East Boronda Road – According to the HIST UST Listings database, this property had two 1,000-gallon underground storage tanks (USTs) that stored contents registered as "regular" and "unleaded." The SWEEPS UST database also lists two 1,000-gallon USTs that purportedly contain leaded and unleaded motor vehicle (M.V.) fuel. The USTs were active as of July 1985. According to the CUPA Listings database, this property is actively billed for hazardous materials onsite, but the database also has two listings that are inactive. Based on the lack of reported spills or releases, this business appears unlikely to have impacted the Specific Plan Area.

Salinas Berry Farms-Madolora, 261 Natividad Road – According to the CUPA Listings database, this property was billed for hazardous materials stored onsite. Both databases list this facility as inactive. Based on the lack of reported spills or releases, this former business appears unlikely to have impacted the Specific Plan Area.

Triangle Farms, Inc.-Bondesen Ranch, 239 Natividad Road – According to the Aboveground Storage Tank (AST) database, this property had a 9,200-gallon AST; the contents stored in the AST are unknown. According to the CUPA Listings database, this property was billed for hazardous materials stored onsite. Based on the lack of reported spills or releases, this business appears unlikely to have impacted the Specific Plan Area.

OFFSITE PROPERTIES

Table 3.5-2 summarizes information regarding properties less than ⅛-mile from the Specific Plan Area (¼-mile for LUST facilities) that are listed on one or more of the databases searched by EDR, the status of their listings, and their potential, if any, to impact (or to have impacted) the Specific Plan Area.

TABLE 3.5-2: OFFSITE ENVIRONMENTAL RECORDS

BUSINESS	*ADDRESS*	*APPROXIMATE DISTANCE FROM THE PLAN AREA*	*DATABASE*	*PERTINENT INFORMATION/POTENTIAL TO IMPACT THE PLAN AREA*
McKinnon Elementary School	E. Boronda Road/ McKinnon Street	Located within the Plan Area boundaries but appears as "offsite" in the EDR report	SCH, ENVIRO-STOR	According to the ENVIROSTOR database, this property was investigated for past pesticide use. No pesticide contamination was reported at concentrations exceeding applicable screening levels; therefore a "no further action" determination was granted and the school was constructed. This property appears unlikely to have impacted the Plan Area.
Higashi Farms-Alexndr Rch (Rio Mesa Farms)	1151 Rogge Road	1,500 feet to the north (upgradient)	AST, CUPA Listings	According to the AST database, this property had a 1,500-gallon AST (unknown contents). According to the CUPA Listings database, this property was billed for hazardous materials stored onsite. Both

BUSINESS	*ADDRESS*	*APPROXIMATE DISTANCE FROM THE PLAN AREA*	*DATABASE*	*PERTINENT INFORMATION/POTENTIAL TO IMPACT THE PLAN AREA*
				databases list this facility as inactive. Based on the lack of reported spills or releases, this former facility appears unlikely to have impacted the Plan Area.
A Oseguera Company, Inc.	1099 Rogge Road	500 feet to the northeast (upgradient)	AST, CUPA Listings	According to the AST database, this property had a 2,500-gallon AST (unknown contents). According to the CUPA Listings database, this property was billed for hazardous materials stored onsite. Based on the lack of reported spills or releases, this former facility appears unlikely to have impacted the Plan Area.
Connie Ruiz	69 Norman Way	50 feet to the northwest (upgradient)	HAZNET	According to the HAZNET database, this property disposed of 0.4 ton of hazardous waste to a landfill. The waste category was not reported. Based on the other database listings for this property (i.e., ENVIROSTOR, Hist Cal-Sites, etc.), this former facility appears unlikely to have impacted the Plan Area.
CVS Pharmacy #1300 (Longs Drugs #479)	662 E. Boronda Road	300 feet southeast (downgradient)	RCRA-LQG, HAZNET, FINDS, CUPA Listings	According to the RCRA-LQG database, this business generates 1,000 kilograms or more of hazardous waste during a calendar month. The waste is likely pharmaceutical and/or related to photograph processing. There are no records reporting spills or releases. Based on its downgradient position relative to the Plan Area, this facility is unlikely to have impacted the Plan Area.
Replanet, LLC	640 East Boronda Road	300 feet southeast (downgradient)	SWRCY, HAZNET	According to the HAZNET and SWRCY databases, this facility stores and transfers glass, plastic, aluminum and other metals offsite for disposal and/or recycling. Based on its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Gonzales Motorcross Racing	13450 Garfield Circle	50 feet west (cross-gradient)	EDR US Hist Auto Stat	According to the EDR US Hist Auto Stat database, this business was an auto service facility in 2005. This business is not listed on any other databases and, no other pertinent information about this business was provided under this listing. Based on its cross-gradient position relative to the Plan Area, this business appears unlikely to have impacted the Plan Area.
Turners Automotive	94 Russell Road	100 feet west (cross-gradient)	EDR US Hist Auto Stat	According to the EDR US Hist Auto Stat database, this was an auto repair facility in 2001.This business is not listed on any other databases and, no other pertinent information about this business was

BUSINESS	*ADDRESS*	*APPROXIMATE DISTANCE FROM THE PLAN AREA*	*DATABASE*	*PERTINENT INFORMATION/POTENTIAL TO IMPACT THE PLAN AREA*
				provided under this listing. Based on its cross-gradient position relative to the Plan Area, this business appears unlikely to have impacted the Plan Area.
Deep Steam Carpet & Upholstery Cleaning	94 Penzance Street	400 feet north (upgradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this carpet and upholstery cleaning service operated in 2006. Although it is upgradient relative to the Plan Area, the apparent residential development at this address in 2006 suggests that this facility was not a commercial facility and therefore is unlikely to have impacted the Plan Area.
Proposed Elementary School #5 (Harrod Property)	NE of East Boronda/ Natividad Road intersection	150 feet east (cross-gradient)	SCH, ENVIROSTOR	According to the ENVIROSTOR database, this property was investigated for past pesticide use. Pesticide contamination was found, but the health risk evaluation determined that the contamination was not a threat to human health; therefore a "no further action" determination was granted and it was determined suitable for unrestricted land use. This property appears unlikely to have impacted the Plan Area.
Settrini Ranch	250 Natividad Road	100 feet east (cross-gradient)	HIST UST, CUPA Listings, CA FID UST, SWEEPS UST	According to the HIST UST, SWEEPS UST, CA FID UST, and CUPA Listing databases, a 1,000-gallon UST is present on this facility that reportedly contained regular gasoline. According to the CUPA Listing database, this facility is actively billed for hazardous materials stored onsite. As a spill or release from this UST has not been reported, this former facility appears unlikely to have impacted the Plan Area.
Ocean Steam Cleaning	18857 Lenny Street	400 feet east (cross-gradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this cleaning service operated in 2010. Based on the apparent residential development at this address in 2010, and its cross-gradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
The Cleaning Co.	15 Yale Circle	200 feet south (downgradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this cleaning service operated in 2008. Based on the apparent residential development at this address in 2008, and its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
7-Eleven #32264 (Southland Store 32264)	1992 Natividad Road	50 feet south (downgradient)	UST, CUPA Listings	According to the UST and CUPA Listings databases, this facility is actively billed for hazardous materials onsite. There are no available records of past spills or releases,

BUSINESS	*ADDRESS*	*APPROXIMATE DISTANCE FROM THE PLAN AREA*	*DATABASE*	*PERTINENT INFORMATION/POTENTIAL TO IMPACT THE PLAN AREA*
				and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Firestone Store #36F7	150 Northridge Mall	1,500 feet southwest (downgradient)	Hist UST, CUPA Listings	According to the Hist UST and CUPA Listings databases, this facility is actively billed for hazardous materials stored onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
100 Harden Parkway, LP	1907 Dartmouth Way	500 feet south (downgradient)	CUPA Listings	According to the CUPA Listings databases, this facility was historically billed for hazardous materials onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Natividad Elementary School	Arcadia Street/ Emerald Drive	4,500 feet south (downgradient)	SCH, ENVIROSTOR	According to the ENVIROSTOR database, this property was investigated for past pesticide use. No pesticide contamination was reported at concentrations exceeding applicable screening levels; therefore a "no further action" determination was granted and the school was constructed. This property appears unlikely to have impacted the Plan Area.
Nordic Carpet & Upholstery Cleaning	13433 Jackson Street	500 feet east (cross-gradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this carpet and upholstery cleaning service operated in 2008. Based on the apparent residential development at this address in 2008, this facility appears unlikely to have impacted the Plan Area.
Towing Depot	218 Boronda Road, Bldg D-7	50 feet south (downgradient)	CUPA Listings	According to the CUPA Listings databases, this facility was historically billed for hazardous materials stored onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Autoworx Service	218 Boronda Road, Bldg C-3	50 feet south (downgradient)	CUPA Listings	According to the CUPA Listings databases, this facility was historically billed for hazardous materials stored onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.

BUSINESS	*ADDRESS*	*APPROXIMATE DISTANCE FROM THE PLAN AREA*	*DATABASE*	*PERTINENT INFORMATION/POTENTIAL TO IMPACT THE PLAN AREA*
Ralph Freilingers Auto Service	55 San Juan Grade	200 feet west (cross-gradient)	EDR US Hist Auto Stat	According to the EDR US Historical Auto Stations database, this auto service facility operated in 2008. Based on the apparent residential development at this address in 2008, and its cross-gradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Rogge Road School	1301 Rogge Road	1,000 feet north (upgradient)	SCH, ENVIRO-STOR	According to the ENVIROSTOR database, this property was investigated for past pesticide use. No pesticide contamination was reported at concentrations exceeding applicable screening levels; therefore a "no further action" determination was granted and the school was constructed. This property appears unlikely to have impacted the Plan Area.
CA Water Service Company, Station 103	19610 Rogge Road	1,000 feet north (upgradient)	CUPA Listings	According to the CUPA Listings databases, this facility is actively billed for hazardous materials stored onsite. There are no available records of past spills or releases. Although it is upgradient of the Plan Area, this facility appears unlikely to have impacted the Plan Area.
District Office	303 San Juan Grade Road	2,500 feet northeast (upgradient)	CA FID UST, SWEEPS UST, HIST UST	According to the CA FID UST and SWEEPS UST databases, this facility is actively billed for hazardous materials onsite. There are no available records of past spills or releases, and due to its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
Garcias Carpet Cleaners	200 Clinton Court	1,000 feet south (downgradient)	EDR US Hist Cleaners	According to the EDR US Hist Cleaners database, this carper cleaning service operated in 2004 and 2009. Based on the apparent residential development at this address in 2009, and its downgradient position relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.
AT&T California-NE120 (Pacific Bell-SLNSCA11, T-Mobile SF05824A)	33 San Juan Grade Road	200 feet west (cross-gradient)	CUPA Listings, SWEEPS UST, UST	According to the CUPA Listings, SWEEPS UST, and UST databases, this facility has a 4,000-gallon UST onsite that is used to store diesel. This is actively billed for hazardous materials stored onsite. There are no available records of past spills or releases, although it is cross-gradient to the Plan Area, this facility appears unlikely to have impacted the Plan Area.

BUSINESS	*ADDRESS*	*APPROXIMATE DISTANCE FROM THE PLAN AREA*	*DATABASE*	*PERTINENT INFORMATION/POTENTIAL TO IMPACT THE PLAN AREA*
Cecil's Chevron	307 San Juan Grade Road	2,500 feet northeast (upgradient)	UST, EDR Hist Auto Stat, CUPA Listings	According to the UST and CUPA Listings databases, this facility is actively billed for hazardous material stored onsite, likely in one or multiple USTs. There are no available records of past spills or releases. Although it is upgradient relative to the Plan Area, this facility appears unlikely to have impacted the Plan Area.

SOURCE: GEOCON, 2016 PHASE I WESTERN AREA SPECIFIC PLAN OF THE BORONDA ROAD FUTURE GROWTH AREA (BRFGA)

GEOTRACKER AND ENVIROSTOR

GeoTracker and the DTSC's EnviroStor website databases (http://www.envirostor.dtsc.ca.gov/public/) for information regarding environmental assessment and cleanup within the Specific Plan Area, or on properties/facilities within ¼-mile of the Specific Plan Area. No information for the Specific Plan Area, or on properties/facilities within ¼-mile of the Specific Plan Area is available on the GeoTracker web database. Information available and reviewed on the DTSC's EnviroStor website is summarized below by facility.

McKinnon Elementary School, 2100 McKinnon Street — According to statements on the DTSC's EnviroStor website, a PEA report was prepared prior to the construction of the McKinnon Elementary School (APN 211-231-059). According to the EDR database search, the primary contaminants of concern were organochlorine pesticides (OCPs). A "no further action (NFA)" determination was granted to the McKinnon Elementary School by the DTSC on November 22, 2000, based on the conclusions of the report. A NFA determination concluded that there is no risk to potential site users by chemicals present onsite and that the property is suitable for unrestricted future land use. McKinnon Elementary School was completed in 2002.

Proposed High School, 1100 Rogge Road — The following documents are for the Salinas Union High School District high school currently being constructed on APN 211-011-008:

- PEA report prepared by Kleinfelder, Inc. (Kleinfelder), dated March 2007 and approved by DTSC as Final on April 4, 2007.
- Supplemental Site Investigation (SSI) prepared by Kleinfelder, dated January 2014 (revised April 2014), and approved by DTSC on May 2, 2014.
- Removal Action Work Plan (RAW) prepared by Kleinfelder, dated February 18, 2015 (revised May 8, 2015), and approved by DTSC on October 16, 2015.
- DTSC Work Notice dated January 2016.
- DTSC email confirmation (November 10, 2016) of soil removal.

Summaries of these documents are provided below:

Preliminary Environmental Assessment: A Preliminary Environmental Assessment (PEA), performed by Kleinfelder, consisted of the collection and analysis of surface and subsurface soil samples collected in an agricultural area and a residential area (in the northern portion of the property) for NOA, polychlorinated biphenyls (PCBs), OCPs, polycyclic aromatic hydrocarbons (PAHs), California Assessment Manual 17 metals (including lead), and total petroleum hydrocarbons (TPH). NOA and PCBs were not detected at concentrations that exceeded their respective laboratory reporting limits in the surface and subsurface soil samples. Metal concentrations (including lead) detected in the surface and subsurface soil samples did not exceed their respective regulatory limits. Elevated concentrations of TPH as diesel (TPHd) and motor oil (TPHmo) were detected in the upper six to twelve inches of soil around a 55-gallon oil drum near a demolished building in the residential area. One PAH, dibenz (a,h) anthracene, was detected in two surface samples near the oil drum. Elevated concentrations of chlordane and dieldrin were detected in the soil samples collected at a residence, a storage structure, and the demolished structure in the residential area. The PEA did not identify any contaminants of concern in the surface and subsurface soil samples collected in the agricultural area.

Kleinfelder recommended that, prior to the demolition of the structures in the residential area, a Supplemental Site Investigation (SSI) be conducted to determine the extent of TPH and PAH in the soils near the oil drum and the extent of OCPs in the soils near the residence, storage structure, and demolished structure. Kleinfelder also recommended the excavation and removal of soils in these areas once the extent of contamination has been defined by the SSI.

Supplemental Site Investigation: The SSI consisted of additional surface and subsurface soil sampling for OCPs, PAHs, TPH, and benzene, toluene, ethyl benzene, and xylenes (BTEX) to determine the extent of contamination in the residential area. Laboratory analysis identified elevated concentrations of chlordane, dieldrin, and heptachlor epoxide in the soil samples collected within the upper three feet of soil near the residence, storage structure, and demolished structure in the residential area. Kleinfelder recommended removal of approximately 105 cubic feet of soil from the residential area and confirmation sampling following the excavation.

Removal Action Work Plan: The objective of the remedial approach described in the Removal Action Work Plan (RAW) was to mitigate potential risk to human health and the environment by excavation and disposal of approximately 110 cubic yards of contaminated soil. The soil was contaminated with OCPs, TPH, and PAHs. The DTSC approved the RAW on October 16, 2015.

DTSC Work Notice: The DTSC issued a Work Notice for Soil Cleanup Work in January 2016.

DTSC Email Confirmation of Soil Removal: The DTSC indicated in an email on November 10, 2016, that the soil removal was completed in April 2016. A Removal Action Completion Report was completed on November 28, 2016. The SUHSD high school is currently under construction, and is expected to be open for the 2019-2020 academic year.

MONTEREY COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

A records search for the 12 assessor's parcels located in the Specific Plan Area was requested from the Monterey County Environmental Health Department. The Department indicated that they had no documents related to the Specific Plan Area. However, two copies of two Permits to Operate were received from Mr. Bill Tarp of Triangle Farms (APNs 211-231-012 and -013) who is the owner and user of the parcels. Mr. Tarp provided the copies during an interview with a De Novo representative on December 28, 2015. The permits are for:

- Triangle Farms, Inc., 118 San Juan Grade Road
    - Hazardous Materials Release Response Plan and Inventory
- Triangle Farms, Inc. – Bondesen Ranch
    - Aboveground Petroleum Storage
    - Hazardous Materials Release Response Plan and Inventory
    - Hazardous Waste Generator and On site Hazardous Waste Treatment

MONTEREY COUNTY RESOURCE MANAGEMENT AGENCY

Specific Plan Area records were requested from the Monterey County Resources Management Agency. The records included the Rogge Road High School Site Acquisition EIR (Section 2.7 Hazards and Hazardous Materials), and a Natural Gas Pipeline Risk Analysis, dated July 26, 2006, for the *Proposed Salinas Union High School District Site, 1100 Rogge Road*.

MONTEREY BAY AIR RESOURCES DISTRICT

Records were requested from the Monterey Bay Air Resources District (MBARD) for the Specific Plan area. The MBARD identified two records of violations within the Specific Plan Area. A violation was issued to Oesuguerra Harvest Farm, a tenant on APN 211-011-008, for open burning of unauthorized materials on July 15, 2009. A violation was issued to ProSource Farm, a tenant on APN 211-011-011, for open burning of unauthorized materials on September 13, 1996. No other violations were reported.

Historical Use

Historical use of property within the Specific Plan Area and adjacent properties was evaluated through review of historical aerial photographs, historical topographic maps, and city directories. This section summarizes the information obtained from these sources.

AERIAL PHOTOGRAPHS

Historical aerial photographs provided by EDR were reviewed for the years 1956, 1966, 1968, 1971, 1981, 1987, 1998, 2005, 2009, 2010, and 2012 for indications of past land uses that had the potential to have impacted the Specific Plan Area through the use, storage or disposal of hazardous

substances and/or petroleum. Table 3.5-3 summarizes observations of the Specific Plan Area and adjacent properties on the aerial photographs.

TABLE 3.5-3 SUMMARY OF AERIAL PHOTOGRAPHY OBSERVATIONS

YEAR	OBSERVATIONS	
	PLAN AREA	ADJACENT PROPERTIES
1956-1968 (1" = 1,000')	Agricultural fields (row crops) were present within the Plan Area. Structures were present in the southwestern portion and two residence areas were present on the eastern edge of the Plan Area.	Agricultural fields and a structure were adjacent to the Plan Area to the east. Agricultural fields were adjacent to the south and southwest of the Plan Area. A residential neighborhood was adjacent to the Plan Area on the northwest.
1971-1981 (1" = 1,000')	Conditions were similar to those observed on the 1968 photograph.	Conditions were similar to those observed in the 1968 photograph, with the addition of a residential neighborhood northwest of the Plan Area in 1971 and to the southwest in 1981. The resolution of the 1981 photograph is poor.
1987 (1" = 1,000')	Conditions were similar to those observed on the 1981 photograph.	Conditions were similar to those observed on the 1981 photograph.
1998 (1" = 500')	Conditions were similar to those observed on the 1987 photograph.	Conditions were similar to those observed in the 1987 photograph, with the addition of residential neighborhoods south of the Plan Area.
2005 (1" = 500')	Conditions were similar to those observed on the 1998 photograph with the addition of the McKinnon Elementary School.	Conditions were similar to those observed on the 1998 photograph.
2009-2012 (1" = 500')	Conditions were similar to those observed on the 2005 photograph.	Conditions were similar to those observed on the 2005 photograph.

SOURCE: GEOCON, 2016 PHASE I WESTERN AREA SPECIFIC PLAN OF THE BORONDA ROAD FUTURE GROWTH AREA (BRFGA)

As described in Table 3.5-3, row crops were present within the Specific Plan Area from sometime prior to 1956 until the present. The agricultural use of the Specific Plan Area dating back to at least 1956 suggests that OCPs and metals such as arsenic and lead may be present in soil within the Specific Plan Area. No other land uses that would suggest the presence of RECs were observed within the Specific Plan Area or adjacent properties through the aerial photography assessment.

TOPOGRAPHIC MAPS

Historical topographic maps provided by EDR were reviewed for the years 1910, 1912, 1940, 1947, 1948, 1950, 1968, 1975, and 1984. Table 3.5-4 summarizes the observations of the Plan Area and adjacent properties on the historical topographic maps.

TABLE 3.5-4: TOPOGRAPHIC MAPS EVALUATION

YEAR	OBSERVATIONS	
	PLAN AREA	ADJACENT AND VICINITY PROPERTIES
1910 (1: 31,680)	No Plan Area features or land uses are depicted.	Three of the four roads that bound the Plan Area (Rogge Road, Natividad Road, and San Juan Grade Road) are depicted to the north, east, and west of the Plan Area.
1912 (1: 62,500)	Similar to the 1910 map.	Similar to the 1910 map.
1940 (1: 62,500)	One small structure is depicted on the northern side of the Plan Area. Alleys with seven structures are depicted on the western edge of the Plan Area abutting San Juan Grade Road.	Similar to the 1912 map with more development in Salinas encroaching from the west. Three structures are visible north of the Rogge Road and ten structures are visible east of Natividad Road.
1947 (1:62,500, 1:24,000)	The cluster of structures south of Rogge Road had been labeled "Sage." Many of the structures on the western edge of the Plan Area abutting San Juan Grade Road are no longer depicted, but some have been added in clusters. Intermittent streams are depicted draining the northwestern portion of the Plan Area.	Similar to the 1940 map.
1948 (1:25,000)	Similar to the 1947 maps.	Similar to the 1947 maps.
1950-1975 (1:25,000)	Similar to the 1948 maps.	The residential neighborhood northwest of the Plan Area (southeast of the intersection of San Juan Grade Road and Rogge Road) is shaded in purple indicating new development since the prior map.
1984 (1:24,000)	An intermittent pond is depicted in the northeastern corner of the Plan Area. Additional structures (likely residential) are also depicted on the southeastern and southwestern portions of the Plan Area.	Similar to the 1975 map.

SOURCE: GEOCON, 2016 PHASE I WESTERN AREA SPECIFIC PLAN OF THE BORONDA ROAD FUTURE GROWTH AREA (BRFGA)

The topographic maps do not depict any other land uses that would suggest the presence of RECs within the Specific Plan Area or adjacent properties.

CITY DIRECTORIES

EDR prepared an abstract of city directories for the Specific Plan Area, including city, cross reference and telephone directory listings. EDR included information from directories at approximate five-year intervals, if available, from 1960 to 2013. Directories are provided by Street name: E. Boronda Road, Natividad Road, Bogge Road, and San Juan Grade Road.

The names associated with addresses listed in the EDR report consist of various individuals and commercial businesses. None of the listed commercial businesses suggest the storage or use of hazardous substances or petroleum within the Specific Plan Area or adjacent properties.

Site Reconnaissance

This section summarizes observations of the Specific Plan Area and surrounding properties made during a site reconnaissance. Cord Dennig, Senior Staff Scientist with Geocon, performed a site reconnaissance December 28, 2015. Mr. Dennig performed the site reconnaissance by walking throughout the Specific Plan Area, along the Specific Plan Area perimeter, and observing Specific Plan Area features and conditions. The offsite survey was performed by making observations of adjacent properties from the Specific Plan Area and public roads.

ONSITE SURVEY

The following descriptions are based on observations of the 12 parcels that make up the approximately 796-acre Specific Plan Area made during a site visit on December 28, 2015.

APN 211-011-002, 86 San Juan Road: This parcel contains residential buildings, barns, and other outbuildings. At the time of the site visit, access to this property was not available. Mr. Dennig observed three drums stored next to a shed in the eastern portion of the parcel. The contents of these drums are not known. There appears to be an existing well also located in the eastern portion of this parcel next to the drums. There is piping, valves, a centrifugal sand separator, which is typically associated with a water supply well. The condition of the well is unknown.

APN 211-011-003: This parcel contains residential buildings, a barn, a fertilizer AST and a storage yard at the western end of the parcel. There is a CUPA permit posted next to the approximately 3,000-gallon fertilizer AST; no fuel storage was visible at the time of the site visit. Several old ASTs are stored adjacent to the barn; they are not in use.

APN 211-011-008 and APN 211-011-011, 1100 Rogge Road: Parcel APN 211-011-008 is entirely agricultural land. Parcel APN 211-011-011 has an abandoned farm residence in the northern portion of the parcel. The abandoned farm residence includes an old residential water well that is apparently also no longer used. The abandoned farm residence includes a residential structure, garage and barn, all of which are empty.

The Salinas Union High School District is currently constructing a high school at the site; however the school was not under construction at the time of the site visit. As described previously, the DTSC's EnviroStor website (ID 60000165) included information on the high school. Several reports have been completed for the parcels that include: a PEA in March 2007, Supplemental Site Investigation dated April 2014, a RAW approved by DTSC in October 2015, and a DTSC Work Notice from January 2016.

APN 211-011-009: This parcel is primarily agricultural but includes a residence, several agricultural buildings, including a garage and a storage building in its southeastern portion. An approx. 1,000-

gallon diesel AST is present north of the garage. Fertilizer buckets and an unused AST were observed in a building east of the garage.

APN 211-011-010: This approximately 1.7-acre parcel consists of a residence, warehouse, several out buildings, and a storage yard. The parcel is located between APN 211-011-009 and APN 211-231-013 and forms a somewhat continuous 900-foot long area of agricultural operations buildings and equipment storage yards that occupy all three parcels along Natividad Road.

APN 211-231-012 and 211-231-013: These two parcels comprise Triangle Farms. The majority of the parcels are used for agricultural purposes with support structures that include: a residence, wooden water tank and tower (no longer used), water supply well, storage buildings, equipment and vehicle storage, hydraulic oil and motor oil storage in drums, fertilizer storage (dry and bulk liquids), and diesel, gasoline, and waste oil ASTs.

APN 211-231-016: This parcel is entirely agricultural land with unpaved access roads around the perimeter.

APN 211-231-059: This 11.46-acre parcel is occupied by the current McKinnon Elementary School.

APNs 211-231-067 and 211—231-068 (formerly APNs 211-231-060 and 211-231-061): These two parcels are used for agricultural purposes and have unpaved access roads around the perimeter.

OFFSITE SURVEY

Adjacent properties consisted of the following:

North	Single/multifamily residences and similar agricultural land.
East	Agricultural fields.
South	Single/multifamily residences.
West	Single/multifamily residences.

During site surveys, no evidence of RECs was observed on the properties adjacent to Specific Plan Area.

Interviews

Bill Tarp is the owner and operator of Triangle Farms (APN 211-231-012 & -013). Mr. Tarp has been farming the property since 1986. Prior to 1986, the property was farmed by Mr. Tarp's father. As far as Mr. Tarp knows, the entire property was initially developed as a farm and has not had any other industrial or commercial uses.

According to Mr. Tarp, there have never been any USTs on this property and he does not believe that a gas station/service station has ever existed on the property. There is no known use of Transite™ or other asbestos-containing pipe on the property; all irrigation pipe is high-pressure

steel. There has been no unauthorized waste dumping on the property, other than occasional used tires. No construction debris has been dumped on the property.

Mr. Tarp stated that pesticide application is performed by outside companies, including The Dune Company of Salinas, NH3 Services Company, Inc., and Crop Production Services Inc. Pesticides are not mixed on the property.

Mr. Tarp is not aware of any environmental liens, land use limitations, environmental regulatory actions or environmental cleanups on the property or adjoining/adjacent properties.

Mr. Tarp states that there was formerly an agricultural well at the corner of San Juan Grade Road and Boronda Road; this location is outside the Specific Plan Area. He also indicated that there was an old residential well at the abandoned homestead on parcel 211-011-011 (site of the proposed high school). The well has since been destroyed.

3.5.2 REGULATORY SETTING

FEDERAL

The primary federal agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the Environmental Protection Agency (EPA), Department of Labor Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Several laws governing the transport, storage, and use of hazardous materials are governed by these agencies as well as oversight for contaminated sites cleanup. Federal laws and regulations that are applicable to hazards and hazardous materials are presented below.

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. CERCLA was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances

releases. CERCLA deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for State assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual certification. To qualify for certification, a state must adopt the minimum federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

STATE

The primary State agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the California Office of Emergency Services (OES), California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Water Quality Control Board, and the California Air Resources Board. Several laws governing the generation, transport, and disposal of hazardous materials are administered by these agencies. State laws and regulations that are applicable to hazards and hazardous materials are presented below.

California Health and Safety Code

Cal-EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. Many of these regulations are embodied in the California Health and Safety Code. The code includes regulations that govern safe drinking water, substances control, land reuse and revitalization, remediation, restoration, and methamphetamine contaminated cleanups.

California Code of Regulations Title 22 and Title 26

The California Code of Regulations (CCR) Title 22 provides State regulations for hazardous materials, and CCR Title 26 provides regulation of hazardous materials management. In 1996, Cal/EPA established the "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program) which consolidated the six administrative components of hazardous waste and materials into one program.

California Environmental Protection Agency

Cal/EPA was created in 1991. It unified California's environmental authority in a single cabinet-level agency and brought California Air Resources Board, State Water Resources Control Board, Regional Water Quality Control Boards, CalRecycle, Department of Toxic Substance Control, Office of Environmental Health Hazard Assessment, and the Department of Pesticide Regulation under one agency. These agencies were placed within the Cal/EPA "umbrella" for the protection of human health and the environment to ensure the coordinated deployment of State resources. Their mission is to restore, protect, and enhance the environment and ensure public health, environmental quality, and economic vitality.

Department of Toxic Control

The Department of Toxic Control, a department of Cal/EPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. The Department of Toxic Control regulates hazardous waste primarily under the authority of the Federal Resource Conservation and Recovery Act and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Government Code section 65962.5 requires the Department of Toxic Control and the Department of Health Services (now the Department of Public Health) to maintain a list (commonly known as the Cortese List) of hazardous waste facilities and sites, contaminated drinking water wells, sites listed by the State Water Resources Control Board as having underground storage tank leaks or a discharge of hazardous wastes or materials into the water or groundwater, and sites with a known migration of hazardous waste/material.

California Office of Emergency Services

To protect public health and safety as well as the environment, the California Office of Emergency Services is responsible for establishing and managing statewide standards for business and area plans related to the handling and release, or threatened release, of hazardous materials. The California Office of Emergency Services requires basic information regarding hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and health risks) to be available to firefighters, public safety officers, and regulatory agencies. Typically, this information should be included in business plans to prevent or mitigate impacts on the environment or the health and safety of individuals from the release, or threatened release, of these materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code, Article 1, Hazardous Materials Release Response and Inventory Program (Sections 25500 to 25520), and Article 2, Hazardous Materials Management (Sections 25531 to 25543.3).

Title 19 of the California Code of Regulation (CCR) establishes minimum statewide standards for hazardous materials business plans. These plans must include the following: 1) a hazardous material

inventory in accordance with Sections 2729.2 to 2729.7, emergency response plans and procedures in accordance with Section 2731, and 3) training program information in accordance with Section 2732. Business plans should contain basic information regarding the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the State. Each business would prepare a hazardous materials business plan if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following:

- 500 pounds of a solid substance;
- 55 gallons of a liquid;
- 200 cubic feet of compressed gas;
- A hazardous compressed gas in any amount; or
- Hazardous waste in any quantity.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration is the primary agency responsible for worker safety related to the handling and use of chemicals in the workplace. California Occupational Safety and Health Administration standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337–340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings (8 CCR 5192 outlines standards for the preparation of Health and Safety Plans).

Regulations pertaining to protecting public health and safety from lead contamination related to construction (including disturbance of soils containing lead) lead are also promulgated by California Occupational Safety and Health Administration (8 CR 1532.1). These regulations address allowable exposure, exposure assessment, methods of compliance, respiratory protection and protective equipment/clothing, and employee/working training.

California Code of Regulations, Title 22 §66261.20-24

Soils having concentrations of contaminants higher than certain acceptable levels must be handled and disposed of as hazardous waste when excavated. The California Code of Regulations, Title 22, § 66261.20-24 contains technical descriptions of characteristics that would cause a soil to be classified as a hazardous waste.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

In January 1996, the Cal/EPA adopted regulations implementing the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. The program has six elements: 1) hazardous waste generators and hazardous waste on-site treatment; 2) underground storage tanks; 3) aboveground storage tanks; 4) hazardous materials release response plans and inventories; 5) risk management and prevention programs; and 6) Uniform Fire Code hazardous materials management plans and inventories. The plan is implemented at the local level. The local agency that is responsible

for the implementation of the Unified Program is the Certified Unified Program Agency. The Monterey County Department of Environmental Health Department is designated as the Certified Unified Program Agency.

The California Hazardous Materials Release Response Plans and Inventory Law of 1985

The California Hazardous Materials Release Response Plans and Inventory Law requires that any business that handles hazardous materials prepare a business plan, which must include the following:

- Details, including floor plans, of the facility and business conducted at the site;
- An inventory of hazardous materials that are handled or stored on site;
- An emergency response plan; and
- A safety and emergency response training program for new employees with annual refresher courses.

State Water Resources Control Board Underground Storage Tank Program

The State Water Resources Control Board established regulations governing prevention of leaks from underground storage tanks. There are published standards and requirements for installation, tank construction, tank testing, leak detection, spill containment and overfill protection. California underground storage tank laws and regulations give local agencies (counties, cities, or other local agencies) authority throughout the State to issue permits for tank operation and to enforce tank testing requirements within their jurisdiction. In Monterey County, the Monterey County Department of Environmental Health Department issues permits for the operation of underground storage tanks and oversees the installation, operation and removal.

Hazardous Materials Transportation Regulations

The State has also adopted U.S. Department of Transportation regulations for the intrastate movement of hazardous materials. State regulations are contained in 26 CCR. In addition, the State regulates the transportation of hazardous waste originating in the State and passing through the State as found in 22 CCR, Division 4.5, Chapter 11. Both regulatory programs apply in California. The two State agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans).

California Vehicle Code Section 32000

Common carriers are licensed by the CHP, pursuant to California Vehicle Code Section 32000. This section requires the licensing of every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time, and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards.

California Accidental Release Prevention Program

The California Accidental Release Prevention Program regulations became effective January 1, 1997, replacing the California Risk Management and Prevention Program. The California Accidental Release Prevention Program was created to prevent the accidental release of regulated substances. It covers businesses that store or handle certain volumes of regulated substances at their facilities. A list of regulated substances is found in Section 2770.5 of the California Accidental Release Prevention Program regulations. If a business has more than the listed threshold quantity of a substance, an accidental release prevention program must be implemented and a risk management plan may be required. The California Office of Emergency Services is responsible for implementing the provisions of California Accidental Release Prevention Program.

California Aboveground Petroleum Storage Act

The California Aboveground Petroleum Storage Act (Health & Safety Code § 25270 et seq.) requires the owner or operator of a tank facility, with an aggregate storage capacity of greater than or equal to 1,320 gallons of petroleum, prepare and implement a Spill Prevention Control and Countermeasure Plan in accordance with U.S. Code of Federal Regulations, Title 40, part 112 (40CFR112). The Certified Unified Program Agency (Monterey County Department of Environmental Health) is required to conduct inspections at tank facilities with an aggregate storage capacity greater than or equal to 10,000 gallons of petroleum at least every three years. The purpose of the inspection is to determine whether the owner or operator is in compliance with the Spill Prevention Control and Countermeasure Plan requirements of the California Aboveground Petroleum Storage Act.

LOCAL

City of Salinas General Plan

The City of Salinas General Plan Safety Element contains the following policies related to hazardous materials:

SAFETY ELEMENT

Policy S-3.2: Ensure that hazardous materials used in residential, business and industry are properly handled and that information on their handling and use is available to residents, fire protection and other safety agencies.

Policy S-3.3: Work with federal and state agencies to identify toxic disposal or leakages and pursue prompt cleanup.

Policy S-3.4: Work with the State, agribusiness and agricultural worker organizations to ensure that agricultural use of pesticides and fertilizers do not negatively affect public health and safety.

Policy S-3.5: Limit hazardous waste facilities within the planning area to transfer stations, which shall be limited to the collection, temporary storage, and transfer of small quantity generator and household hazardous waste as specified in the Monterey County Hazardous Waste Management Plan.

Policy S-3.6: Limit the location of a Hazardous Waste Transfer Station to land designated for General Industrial use and ensure that the station conforms to the siting criteria in the Monterey County Hazardous Waste Management Plan.

Policy S-3.7: Reduce the risk from ground transportation hazards, such as rail, truck, and roadway systems.

Certified Unified Program Agency (CUPA)

The California Environmental Protection Agency designates specific local agencies as Certified Unified Program Agencies (CUPA), typically at the county level. The Monterey County Health Department Hazardous Materials Management Services is designated as the CUPA designated for Monterey County. The Department is responsible for the implementation of Statewide programs within its jurisdiction, including: Underground Storage Tanks with hazardous substances (USTs), Hazardous Materials Business Plan (HMP) requirements, California Accidental Release Prevention (Cal-ARP) program, etc. Implementation of these programs involves permitting, inspecting, providing education/guidance, investigations, and enforcement.

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The following CEQA Guidelines Appendix G topics were dismissed as less than significant during the Initial Study and NOP process.

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

These topics will not be discussed further in this EIR; please refer to the Initial Study located in **Appendix A** of this EIR for further information on these topics. Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact from hazards and hazardous materials if it will:

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- Create a significant hazard to school sites due to siting or the placement of infrastructure.

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: Potential to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment (Less than Significant with Mitigation)

A Phase I ESA was performed for the Specific Plan Area. The majority of the Specific Plan Area is currently in agricultural production used extensively for row crops (i.e., lettuce, cauliflower, broccoli, and strawberries). Several small clusters of buildings located on the northern, western, and eastern edges of the Specific Plan Area include residences, barns, warehouses, ASTs, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides, diesel fuel, gasoline, waste oil, and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the Specific Plan Area has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase I ESA identified the following RECs in connection with the Specific Plan Area:

- Current and historical use of the Specific Plan Area as agricultural lands and application of pesticides and herbicides may have had impacted Plan Area soils with organochlorine pesticides (OCPs) and arsenic.

- Soil in the area of the structures used to support the agricultural operations may be negatively impacted by metals (specifically lead from lead-based paint on older buildings); OCPs from termiticide application; PCBs from window caulking or glazing in old buildings; and TPH as gasoline, diesel, and motor oil.

A Phase II ESA was conducted to evaluate the potential presence of OCPs and arsenic (chemicals of potential concern, COPC) in shallow onsite soils due to the historic agricultural use within the Specific

Plan Area. The Phase II ESA included analysis of surface soil samples collected from areas throughout the Specific Plan Area.

The results of the Phase II ESA show that residual OCP concentrations are present in the onsite shallow soils, but at concentrations less than U. S. EPA residential Regional Screening Levels (RSLs). Reported arsenic concentrations are within the range of naturally occurring background levels. Additional assessment of soil in the Specific Plan Area's agricultural fields for OCPs and arsenic does not appear to be warranted at this time.

It is recommended that an evaluation of the soil around the agricultural operations support buildings (residences, warehouses, barns, etc.) be performed before the buildings are demolished, or around the perimeters of the foundations if structures have already been removed. Additionally, based on the age of these structures, it is possible that asbestos-containing materials and/or lead-containing paint are present in the building materials. An asbestos-containing materials and lead-containing paint survey should be considered prior to demolition of the Specific Plan Area structures.

CONCLUSION

The hazards assessments included site reconnaissance, interviews, historical land use research, database research, and soils testing. The project has the potential to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment. The following mitigation measures will reduce the potential risk of hazards as identified in the hazards assessment. With implementation of the following mitigation measures, the proposed project would have a ***less than significant*** impact with regards to this environmental issue.

MITIGATION MEASURES

Mitigation Measure 3.5-1: *Prior to issuance of grading permits or building permits, (including the issuance of demolition permits for agricultural support buildings) as applicable, the applicant shall hire a qualified consultant to:*

1) *Provide a final evaluation of the soils around the agricultural operations support buildings (residences, warehouses, barns, etc.) before they are demolished. If toxic levels of residual agrichemicals or surface staining are found, the contaminated soil shall be excavated and disposed of at an off-site disposal facility permitted to accept such waste. Any contaminated areas shall be remediated by the project applicant in accordance with recommendations made by the Monterey County Health Department Hazardous Materials Management Services, Regional Water Quality Control Board, Department of Toxic Substances Control, or other appropriate federal, State, or local regulatory agencies.*

2) *Investigate structures for asbestos-containing materials and lead. If asbestos-containing materials and/or lead are found in the buildings, a Cal-OSHA certified ACBM and lead based paint contractor shall be retained to remove the asbestos-containing materials and lead in accordance with U.S. EPA and California Occupational Safety and Health Administration (Cal/OSHA) standards. In addition, all activities (construction or demolition) in the vicinity of*

these materials shall comply with Cal/OSHA asbestos and lead worker construction standards. Any ACBM and lead shall be disposed of properly at an appropriate offsite disposal facility.

Mitigation Measure 3.5-2: *Prior to the issuance of grading permits, existing water wells within the grading area shall be destroyed under permit from the City of Salinas and/or the Monterey County Health Department, as applicable. Any destruction of these facilities shall be in accordance with the Monterey County Well Standards for Abandonment/Destruction. The project applicant shall provide the City of Salinas with a copy of the permit and a report or other information documenting the appropriate destruction of these facilities.*

Mitigation Measure 3.5-3: *Prior to the issuance of building permits, the water well or wells that will be providing water for the applicable portion of the Plan Area, shall be constructed and tested for water quality under permit from the Monterey County Health Department. The project applicant shall provide the City of Salinas with a copy of the permit and a report or other information documenting the appropriate construction and operation of these facilities.*

Impact 3.5-2: Create a significant hazard to school sites due to siting or the placement of infrastructure (Less than Significant with Mitigation)

The Specific Plan Area is not anticipated to have businesses or uses that would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

New and existing infrastructure would be located near existing and planned schools within the Specific Plan Area. The Specific Plan Area (at buildout) includes three elementary schools, one middle school, and one high school (see Section 3.9, Public Services, for additional details on schools within the Planning Area). Existing and planned infrastructure that relates to hazards located within close proximity to these existing and proposed schools include:

- Water well construction and operation (proposed as shown in Section 2.0, Figure 2-6).
- Natural Gas Pipelines (existing as shown on Figure 3.5-1).
- Overhead electrical transmission lines (existing lines located along Boronda Road, proposed realignment along El Dorado Drive as shown in Section 2.0, Figure 2-6).

Three water well sites are proposed within the Specific Plan Area. The locations are denoted in Section 2.0 (Project Description) Figure 2-6 (Specific Plan/Illustrative Plan). These proposed facilities (along with any required treatment facility) will be subject to the approval of a Conditional Use Permit by the City, and are subject to standards and permitting requirements of the Monterey County Health Department as described in Mitigation Measure 3.5-3.

During operation, the Salinas District of California Water Service (Cal Water Salinas District) is expected to provide potable water service to the Specific Plan Area. According to Cal Water's Assessment Report, it is expected that the proposed wells within the Specific Plan Area have a high probability of meeting current drinking water quality standards. As a hedge against possible future

changes in water quality, Cal Water may make provisions for on-site treatment with the design of the wells for the Specific Plan development. To ensure high quality drinking water, Cal Water tests its municipal source water at the source and in the distribution system for compliance with drinking water standards. In 2015, Cal Water conducted tests on approximately 68,000 water samples to ensure compliance with both State and federal drinking water standards. Additionally, all well sites will be screened by a minimum 6-foot tall masonry wall that limits access to the wells. This access exclusion minimizes potential hazards to adults or children as a result of well placement. The well sites are also to be designed with drainage plans to prevent flooding from storm events or well failure. It is not anticipated that well failure would result in flooding given the continual maintenance regime during operational use. However, in the event of a failure, flooding would be directed into the storm drainage system to prevent flooding. The likelihood of a well causing flooding is considered low, given that the well pump would be shut down in the event of any failure, and without the pump there would not be significant pressure to cause significant flooding.

PG&E operates an existing 4.0-inch steel natural gas transmission pipeline located along Rogge Road and Natividad Road on the perimeter of the Specific Plan Area. The locations of natural gas transmission pipelines near the Specific Plan Area are shown on Figure 3.5-1. California Code of Regulations (CCR) Title 5, Article 2 (School Sites) § 14010 (Standards for School Site Selection) (h) identifies that sites shall not be located near an above-ground water or fuel storage tank or within 1,500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study. Education Code section 17213 (a)(3) states that pipelines carrying natural gas to supply the school site or neighborhood are permitted, and the CCR Title 5, Article 2 § 14011 requires a school district, in selecting a site for a new school, to issue written findings stating that the site does not contain pipelines which carry hazardous wastes or substances other than a natural gas supply line to that school or neighborhood. As stated previously, the Rogge Road High School Site Acquisition EIR (Section 2.7 Hazards and Hazardous Materials) included a Natural Gas Pipeline Risk Analysis for the proposed Salinas Union High School District school site located along Rogge Road adjacent to the pipeline alignment. The EIR concluded that the likelihood of a pipeline incident is low to medium, and included a mitigation measure, which requires the school district to prepare a natural gas pipeline emergency plan. Additionally, CCR § 14010 (d) places additional standards if the proposed school site is within 1,500 feet of a railroad track easement, and includes the presence of high pressure gas lines near the tracks that could rupture in the event of a derailment. The nearest railroad lines are located along the southern portion of the City, approximately 2.5 miles from the Specific Plan Area at the nearest point. Thus, rail operations would not impact safety or school site selection in relation to nearby natural gas infrastructure in the Specific Plan Area.

The natural gas pipeline network is designed to provide adequate distribution of natural gas to meet the demands of residents within the City of Salinas and the Specific Plan Area. Any future development of schools sites would be required to comply with school siting standards including potential requirments for a site specific gas pipeline risks analysis.

Existing overhead electrical transmission lines along Boronda Road are proposed for realignment along a portion of El Dorado Drive as shown in Section 2.0 (see Figure 2-6). California Code of

Regulations Title 5, Article 2 (School Sites) § 14010 (Standards for School Site Selection) (c) requires setbacks from overhead power lines by transmission type. The electrical transmission lines within the Plan Area would be 60 kV, with applicable setbacks.

The proposed project includes mitigation measures that ensure water well construction comply with standards and requirements for well construction established by the Monterey County Health Department. Operation of onsite wells will be regulated by Cal Water and will included water quality testing to ensure water quality meets State and federal drinking water standards. Additionally, well uses within the Specific Plan Area will be screened from adjacent uses.

CONCLUSION

As described previously, the proposed project does not pose significant hazards from existing natural gas transmission piping, and mitigation measures identified previously under Impact 3.5-1 would ensure water well construction and abandonment impacts would be less than significant. However, implementation of the project may create a significant hazard to school sites due to siting or the placement of infrastructure (i.e., the due to the citing of school sites near power lines). The following mitigation measure ensures all future electrical transmission alignments are required to comply with California Code of Regulations Title 5, Article 2 (School Sites) § 14010 (Standards for School Site Selection) setback requirements. As such, Implementation of the proposed project would have a ***less than significant*** impact with regards to this environmental issue.

MITIGATION MEASURES

Mitigation Measure 3.5-4: *The property line of all school sites (even if it is a joint use agreement as described in subsection (o) of § 14010) shall be at least the following distance from the edge of respective power line easements as identified in the California Code of Regulations Title 5, Article 2. School Sites § 14010. Standards for School Site Selection (c).*

- *100 feet for power lines that are between 50 and 133 kV.*

Impact 3.5-3: Cumulative impact related to hazards and hazardous materials (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography, where sufficient inventory data is available to define it. The cumulative context for the analysis of cumulative hazards and human health impacts is all of Monterey County, which includes the entire Salinas Planning Area. This geographic and political extent was chosen because it encompasses hazards potentially present over a wide geographic extent (i.e. it covers both local and regional hazards). For example, smaller-scale local hazards, such as the use of hazardous materials during construction and potential contamination, are generally site specific, whereas more regional hazard topic areas, such as implementation of emergency response or emergency evacuation plans, may cover geographic areas beyond the areas that are within the direct land use authority of a local jurisdiction, and are normally coordinated between varied city and county functions.

Cumulative development within the region is expected to include buildout of the various General Plans within Monterey County. The West Area Specific Plan, in conjunction with cumulative development in the region, includes areas designated for development of a variety of urban, agricultural, and open space uses as defined by the applicable General Plans. Cumulative development would include continued operation of existing developed area and development of new facilities as allowed under each land use designation.

New development would inevitably increase the use of some hazardous materials within the region, resulting in potential health and safety effects related to hazardous materials use. Any use of hazardous materials must be managed in accordance with federal, State, and local (including Monterey County) regulations to minimize any risk.

For the most part, potential risks from hazardous materials associated with new and future development would be confined to commercial and industrial areas. There are no specific commercial or industrial users that are proposed with the West Area Specific Plan that would pose a risk related to hazardous materials. Specific users would be required to obtain a conditional use permit, which would allow the City to evaluate any use of hazardous materials in their business operations before the use is approved.

Hazardous materials incidents, if any, are typically site-specific and involve accidental spills or inadvertent releases. Associated health and safety risks generally are limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Hazard-related impacts tend to be site-specific and project-specific.

The proposed project includes the approval and subsequent implementation of an approximately 797-acre Specific Plan Area that includes residential, mixed use commercial, a community park, neighborhood parks, small parks, schools, and open space (with supplemental storm water detention/retention basins). These uses are not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Additionally, these uses are not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed Specific Plan land uses are not expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Mitigation measures have been included to minimize the risk of on-site hazards.

CONCLUSION

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts. The proposed project would not have cumulatively considerable impacts associated with hazards and hazardous materials. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to hazards and hazardous materials.

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CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.5-1: Natural Gas Transmission Pipelines

Legend

- City of Salinas
- West Area Specific
- Natural Gas Transmission Pipeline

N

0 500 1,000

Feet

1:18,000

Sources: PG&E Gas Transmission Pipeline System Map; Monterey County GIS.
Map date: June 20, 2016. Boundary update: February 25, 2019.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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This section describes the regulatory setting, regional hydrology and water quality, impacts that are likely to result from project implementation, and measures to reduce potential impacts to water quality. This section is based in part on the following documents, reports and studies: *City of Salinas General Plan* (City of Salinas, 2002), *Final Environmental Impact Report, Salinas General Plan* (City of Salinas, 2002), *Draft Hydrology and Water Quality Technical Study for West Area Specific Plan EIR* (Balance Hydrologics, Inc., 2016, see **Appendix F** of this EIR), *City of Salinas Stormwater Management Plan Update* (City of Salinas, 2013b), *California's Groundwater Bulletin 118, Central Coast Hydrologic Region* (Department of Water Resources [DWR], 2003), *California's Groundwater* (DWR, 2003), *and Web Soil Survey* (NRCS, 2019).

The documents listed above are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at the offices of the City of Salinas Community Development Department at 65 West Alisal Street, Salinas, California 93901.

Two comments were received during the public review period for the Notice of Preparation: one from the Northern Salinas Valley Mosquito Abatement District regarding State Guidelines as it pertains to Mosquito Best Management Practices, and one from the Monterey County Resource Management Agency, regarding stormwater runoff during flooding.. No other comments related to hydrology and water quality were received during the public review period for the Notice of Preparation.

3.6.1 ENVIRONMENTAL SETTING

REGIONAL HYDROLOGY

Monterey County is located in the Salinas Valley Groundwater Basin. The Salinas Valley is the largest coastal groundwater basin in Central California. It lies within the southern Coast Ranges between the San Joaquin Valley and the Pacific Ocean, and is drained by the Salinas River. Salinas Valley extends approximately 150 miles from the headwaters to the mouth of the River at Monterey Bay (Pacific Ocean), draining approximately 5,000 square miles.

Water for urban and agricultural use in the Salinas planning area is pumped from wells. Much of the groundwater supply in the planning area is generated through recharge of the basin via the Salinas River. No imported water sources are available and water supplies are limited to the watershed and underlying aquifer. The high dependence on ground water and the growth in water demand by urban and agricultural users has put a strain on ground water resources of the Salinas Valley.

The City of Salinas is located in the Lower Salinas River Watershed. The Lower Salinas River Watershed is the name given by the Regional Water Quality Control Board (RWQCB), Central Coast Region, to the lower portion of the Salinas River and the Salinas Reclamation Canal. Although composed of several sub-watersheds, the name Lower Salinas River Watershed is commonly used to define the geographic scope of Total Maximum Daily Load (TMDL) projects in the region. The Lower Salinas River Watershed is the watershed area of the Salinas River from Gonzales Road downstream to its confluence with Moss Landing Harbor.

The Lower Salinas River Watershed area is characterized by both ephemeral and perennial stream reaches, as the Lower Salinas River runs dry during the summer months, and the lower Reclamation Ditch flows year-round. Surface water sources include precipitation, releases from reservoirs, groundwater, and return flows from agricultural irrigation. Mean annual precipitation in the area ranges from approximately 13 to 16 inches per year with the majority of precipitation occurring between November and April. Land use in the Lower Salinas River Watershed includes intensive agriculture as well as the urban centers of Salinas, Castroville and Prunedale.

Climate

The Salinas Valley is oriented northwest-southeast and is parallel to the Pacific Coast (Monterey Bay). The proximity of the ocean to the open valley mouth, along with prevailing northwesterly winds, tend to give Salinas a moderate climate year-round. The average temperature is 68.2 degrees, with summer temperatures in the 70-degree range, dipping at night into the 50-degree range. Winter temperatures are generally in the low 60-degree range, dropping at night into the middle 30-degree range.

Rainfall in the Specific Plan Area and contributing watershed is relatively uniform across the area. Average annual rainfall is calculated to be approximately 15.5 to 16.1 inches. The most recent annual data shows rainfall in north Salinas of 13.4 inches in 2018 (University of California, 2019). Average rainfall depths have been estimated to be 2.4 to 2.5 inches for the 10-year, 24-hour event and 4.0 to 4.2 inches for the 100-year, 24-hour event. Monthly evapotranspiration in the project vicinity varied from 1.5 to 4.7 inches in 2015, with a total for that year of 38.0 inches.

Watersheds

A watershed is a region that is bound by a divide that drains to a common watercourse or body of water. Watersheds serve an important biological function, oftentimes supporting an abundance of aquatic and terrestrial wildlife including special-status species and anadromous and native local fisheries. Watersheds provide conditions necessary for riparian habitat.

The State of California uses a hierarchical naming and numbering convention to define watershed areas for management purposes. This means that boundaries are defined according to size and topography, with multiple sub-watersheds within larger watersheds. Table 3.6-1 shows the primary watershed classification levels used by the State of California. The second column indicates the approximate size that a watershed area may be within a particular classification level, although variation in size is common.

TABLE 3.6-1. STATE OF CALIFORNIA WATERSHED HIERARCHY NAMING CONVENTION

WATERSHED LEVEL	*APPROXIMATE SQUARE MILES (ACRES)*	*DESCRIPTION*
Hydrologic Region (HR)	12,735 (8,150,000)	Defined by large-scale topographic and geologic considerations. The State of California is divided into ten HRs.
Hydrologic Unit (HU)	672 (430,000)	Defined by surface drainage; may include a major river watershed, groundwater basin, or closed drainage, among others.
Hydrologic Area (HA)	244 (156,000)	Major subdivisions of hydrologic units, such as by major tributaries, groundwater attributes, or stream components.

WATERSHED LEVEL	APPROXIMATE SQUARE MILES (ACRES)	DESCRIPTION
Hydrologic Sub-Area (HSA)	195 (125,000)	A major segment of an HA with significant geographical characteristics or hydrological homogeneity.

SOURCE: CALIFORNIA DEPARTMENT OF WATER RESOURCES, 2012.

Additionally, the United States Geological Survey (USGS) maintains a national database of watersheds in the United States. The USGS maintains a hierarchical system of hydrologic units, with each unit assigned a Hydrologic Unit Code (HUC). There are currently six levels in the hierarchy, represented by HUC codes from 2 to 12 digits long, called regions, subregions, subbasins, watersheds, and subwatersheds. Each level in the hierarchy is nested within the previous level. Table 3.6-2 shows the system's hydrologic unit levels and their characteristics.

TABLE 3.6-2. USGS WATERSHED HIERARCHY NAMING CONVENTION

HYDROLOGIC UNIT	LEVEL	DIGIT	NUMBER OF HUCS	NAME
Region	1	2	22	Two-Digit Hydrologic Unit
Subregion	2	4	219	Four-Digit Hydrologic Unit
Basin	3	6	378	Six-Digit Hydrologic Unit
Subbasin	4	8	2,283	Eight-Digit Hydrologic Unit
Watershed	5	10	17,828	Ten-Digit Hydrologic Unit
Subwatershed	6	12	97,442	Twelve-Digit Hydrologic Unit

SOURCE: UNITED STATES GEOLOGICAL SURVEY, WATERSHED BOUNDARY DATASET, 2016.

The western portion of the Specific Plan Area is located in the Alisal Slough-Tembladero Slough subwatershed and the eastern portion of the Specific Plan Area is located in the Natividad Creek-Gabilan Creek subwatershed. The "subwatershed" (i.e. twelve-digit hydrologic unit) represents the most fine-grained level of data available for watersheds from the USGS. Figure 3.6-1 provides a map of these subwatersheds within the Specific Plan Area.

Hydrologic Region

Monterey County is located in the Central Coast Hydrological Region. The Central Coast Hydrological Region covers approximately 7.22 million acres (11,300 square miles) in central California. This Hydrological Region includes all of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara counties, most of San Benito County, and portions of San Mateo, Santa Clara, and Ventura counties. Significant geographic features include the Pajaro, Salinas, Carmel, Santa Maria, Santa Ynez, and Cuyama valleys; the coastal plain of Santa Barbara; and the Coast Range. Major drainages in the region include the Salinas, Cuyama, Santa Ynez, Santa Maria, San Antonio, San Lorenzo, San Benito, Pajaro, Nacimiento, Carmel, and Big Sur Rivers.

The Central Coast Hydrological Region has 50 delineated groundwater basins. Within this region, the Gilroy-Hollister Valley and Salinas Valley groundwater basins are divided into four and eight subbasins, respectively. Groundwater basins in this Hydrological Region underlie about 2.39 million acres (3,740 square miles) or about one-third of the Hydrological Region.

Locally, groundwater is a critical source of water supply. An estimated 95 percent of all water used in Monterey County is derived from groundwater wells. With nearly 200,000 acres of land under cultivation in the Salinas Valley, agricultural pumping exceeds 495,000 acre-feet per year.

Groundwater pumped from the Salinas Valley Groundwater Basin since 2011 has been steady, with a high of 19,060 acre-feet in 2013 and a low of 14,659 acre-feet in 2015. Combined with urban and other uses, total water pumped in the Salinas Valley is approximately 520,000 acre-feet per year. Monterey County Water Resources Agency (MCWRA) has estimated that the annual non-drought overdraft of the Salinas Basin is approximately 45,300 acre-feet per year. During droughts, the annual overdraft can escalate to between 150,000 and 300,000 acre-feet per year.

Aquifers are varied and range from large extensive alluvial valleys with thick multilayered aquifers and aquitards to small inland valleys and coastal terraces. Several of the larger basins provide a dependable and drought-resistant water supply to coastal cities and agricultural lands.

Conjunctive use of surface water and groundwater is a long-standing practice in the region. Several reservoirs including Hernandez, Twitchell, Lake San Antonio, and Lake Nacimiento are operated primarily for the purpose of groundwater recharge. The concept is to maintain streamflow over a longer period than would occur without surface water storage and thus provide for increased recharge of groundwater. Seawater intrusion is an emerging problem throughout portions of the basin. In the Salinas Valley Groundwater Basin, seawater intrusion was first documented in the 1930s and has most recently been observed more than five miles inland.

Groundwater

The City of Salinas is located in the Salinas Valley Groundwater Basin Area. The Salinas Valley Groundwater Basin is un-adjudicated and currently in overdraft. A basin management plan has been developed and the California Department of Water Resources (DWR) has listed the basin as a high priority. The California State Water Resources Control Board (SWRCB) has initiated adjudication proceedings in the event that MCWRA is not able to effectively reduce the overdraft. In a letter dated June 12, 1997 to MCWRA, the SWRCB initiated the Salinas Valley Groundwater Adjudication process by holding a public hearing as specified in Section 2101 of the Water Code. This potential adjudication proceeding was due to a concern by the SWRCB of seawater intrusion and nitrate contamination in the groundwater basin. In March of 1998, the SWRCB cited that MCWRA had made significant progress on addressing some of the issues it needed to accomplish in order to address that Board's concerns. In the same letter, the SWRCB stated that it "considers the water quality problems in the Salinas Valley to be among the most critical water resources issue in the State" and consequently "encourages continued cooperation from all of the stakeholders to find a local solution for the groundwater problems."

Water quality concerns have been addressed through the Nitrate Management Program established by the MCWRA, as well as the public planning processes that have led to the Salinas Valley Water Project. The implementation of the Salinas Valley Water Project, the Well Relocation Project, the Urban Recycled Water Project, and the Salinas River Fish Habitat Monitoring Program complement efforts that are currently taking place in the Salinas River watershed in assisting DWR and SWRCB in meeting statewide priorities.

The Monterey County Groundwater Management Plan was prepared in May 2006. The purpose of the Plan is "to provide a comprehensive overview of the Salinas Valley Groundwater Basin and to

recommend various management strategies for the basin." This is the most recent Groundwater Management Plan for the region.

In 2017, the Salinas Valley Basin Groundwater Sustainability Agency (SVGSA) was formed to develop a comprehensive groundwater sustainability plan by 2020.

The Salinas Valley Groundwater Basin is divisible into eight area subbasins: 180/400-Foot Aquifer; Eastside Aquifer; Forebay Aquifer; Upper Valley Aquifer; Paso Robles Area; Seaside Area; Langley Area; and Corral de Tierra Area.

Groundwater pumping throughout the Salinas Valley has contributed to the overdraft of the groundwater basin. MCWRA numbers indicate that water levels have declined in all four basin areas. However, the minor declines in the Upper Valley and Forebay areas appear to be in response to drought conditions. Releases from the San Antonio and Nacimiento Reservoirs serve to recharge the Upper Valley and Forebay and have historically stabilized groundwater levels in these two areas. Declines since 1987 are believed to be the result of reduced recharge supplies.

Seawater intrusion has extended into the 180 Foot aquifer (to within one mile of Cal Water's closest well[1]). When possible, Cal Water, the water purveyor for the Specific Plan Area, shifts groundwater pumping from the 180 Foot and Eastside aquifers to wells further south and in the 400 Foot aquifer of the Pressure Area.

Groundwater levels in District wells experience an annual variance of approximately 35 feet. Since 1961, the average static groundwater levels in District wells has changed elevation during drought years. In 1976 and 1977, the running average level declined by 20 feet. Recovery occurred in 1982 and 1983 when storm runoff refilled local reservoirs increasing groundwater recharge. With extended drought conditions commencing in 1987, the running average elevation again declined and by the summer of 1992 had dropped by 35 feet. However, between 2011 and 2015, despite four years of drought, average static groundwater levels remained relatively constant. The latest annual data for the Salinas Valley Groundwater Basin (Fall 2017 through Fall 2018) shows that groundwater levels increased by an average of approximately 2.0 feet (Monterey County Water Resources Agency, 2019) during this period.

Much of the groundwater in the region is characterized by calcium sulfate to calcium sodium bicarbonate sulfate water types because of marine sedimentary rock in the watersheds. Aquifers intruded by seawater are typically characterized by sodium chloride to calcium chloride, and have chloride concentrations greater than 500 mg/L. In several areas, groundwater exceeds the MCL for nitrate.

A total of 31 wells currently supply water in the City of Salinas Cal Water Service Area. Design capacity of the wells in production prior to 2018 (28 total) is 27,880 gallons per minute (gpm) or 40 million gallons per day (mgd) or 44,843-acre feet per year (AFY). Cal Water has completed work on

[1] California Water Service Company. 2010 Urban Water Management Plan – Salinas District. Adopted June 2011. Page 45.

three additional wells with average design capacity of 1,200 gpm for a total of 3,600 gpm or 5.18 mgd, which is equivalent to 5,812 AFY.

LOCAL SETTING

The topography of the Specific Plan Area is nearly flat, with little change in elevation. The overall slope from northeast to southwest is approximately 0.3%, and there are no natural streams or water bodies present. Although this area is currently being farmed, it contains limited development. Most agricultural activity on-site and in the immediate vicinity has consisted of cultivation of various types of row crops. The site has been heavily disturbed for years from agricultural practices.

Groundwater

The western portion of the Specific Plan Area is located in the Alisal Slough-Templadero Slough watershed and the eastern portion of the Specific Plan Area is located in the Natividad Creek-Gabilan Creek watershed. Surficial soils are primarily alluvium formed by alluvial fan deposits, with incomplete separation of the pressure aquifers from the surface by aquitards. Groundwater underlying the Specific Plan Area has direct connection to the surface and lies at depths of 40 to 60 feet.

Over-drafting of the pressure aquifers (confined by aquitards) and surface aquifers in the lower Salinas Valley continues to be a problem, resulting in seawater intrusion into the aquifers. The extent of seawater intrusion in the pressure aquifers is limited to areas west of Highway 101. Impact of seawater intrusion on aquifers underlying the Specific Plan Area is negligible. However, recharge of the aquifers via infiltration from surface flows and steams (Santa Rita and Gabilan in the Plan Area) supports groundwater quality in the underlying aquifers and helps to limit seawater intrusion to the west. Therefore, maintenance of recharge to the groundwater basin is an important priority. Also see Chapter 3.11 for groundwater and water supply information.

GROUNDWATER QUALITY

Groundwater quality data reported in the Monterey Bay and Salinas Valley Groundwater Ambient Monitoring and Assessment shows that water quality for the 400-foot aquifer (a confined aquifer in the lower Salinas Valley, which is located approximately 400 feet below the valley floor) in the vicinity of the Specific Plan Area meets current drinking water standards for all constituents except Radon-222.

Nitrate contamination of surficial aquifers and some deeper aquifers used for water supply is a significant problem in the Salinas Valley. “Technical Report 4: Groundwater Nitrate Occurrence” states that numerous water supply wells in the Salinas Valley have been “closed” due to nitrate contamination. Further, the report states that, as of 1988, 48 percent of the monitoring wells located in the unconfined aquifer regions had nitrate measurements which exceed the nitrate maximum concentration limit (MCL) for drinking water. The report identifies rising trends in groundwater nitrate concentrations from 1978 through 2007, with the eastside area (where the Specific Plan Area is located) average nitrate concentrations increasing from 40 milligrams per liter (mg/L) to 105 mg/L during that period (Center for Watershed Sciences UC Davis, 2012). The California Groundwater

Ambient Monitoring and Assessment Program (GAMA) special study on nitrate fate and transport in the Salinas Valley states that geochemical and isotopic results for groundwater samples containing nitrate have a signature consistent with inorganic fertilizers, demonstrating that the primary source of nitrate contamination of Salinas Valley groundwater is agriculture. As of 2018, a program to provide replacement drinking water is available to those residents whose drinking water supplies are contaminated with nitrate, including residents located in the Salinas Valley (including the East Side, 180/400, Forebay, and Upper Aquifers) (State Water Resources Control Board, 2018).

GROUNDWATER DEMAND IN THE PLAN AREA

An estimated 90% of the land in the Plan Area or 720 acres is presently used for cultivation of irrigated crops – lettuce and various vegetables (strawberries, broccoli, cauliflower, and alfalfa). Between two and three crops are grown annually. General cropping practice is to rotate crops. While as many as three crops can be produced in a year, normal practice is to grow two crops. Irrigation is by sprinkler or drip systems, which are supplied by groundwater pumped from agricultural wells in the area.

Groundwater recharge from irrigated agricultural land is a function of many variables including weather, hydrologic conditions, irrigation practices, crops, soil types, soil conditions, etc. One approach to determining recharge is to collect data and make estimates of monthly irrigation, monthly precipitation, runoff, plant evapotranspiration, evaporation, initial soil moisture and the soil's available water holding capacity. (Recharge is the net of irrigation and precipitation minus water losses associated with other factors).

Cal Water (2015) estimates that current recharge to the groundwater is:

- Strawberries: 1.9 ft./acre/crop
- Broccoli, cauliflower, alfalfa: 4.04 ft./acre/crop

As previously mentioned, general farming practice is to rotate crops. If strawberries, broccoli and cauliflower are the crops being cultivated over the course of 1 year, with ½ of the required irrigation water for strawberries and the other ½ for broccoli and cauliflower or alfalfa, the overall average irrigation rate for existing irrigated acres in the Plan Area is estimated at:

0.5 (1.9) + 0.5(4.04) = 2.97 or 3.0 acre-feet/acre/year or 3.0 ft./year

Estimated groundwater pumping for existing irrigated agricultural use in the Plan Area is:

2 x 3.0 ft./year x 720 acres = 4,320 AFY

The estimated 4,320 AFY ground water pumping for existing agricultural use in the West Area Specific Plan is 2,947 AFY more than the total buildout estimated demand for the West Area Specific Plan, which is 1,373 AFY. Therefore, the total buildout estimated water demand for the West Area Specific Plan is projected to use less water than required for current irrigated agricultural uses.

The estimated amount of recharge from existing irrigated agriculture use is:

0.3 x 4,320 AFY = 1,296 AFY

Estimated net consumptive water use by existing irrigated agriculture use in the Plan Area is 3,024 AFY (Cal Water, 2015).

Drainage

The City's storm drainage system consists of approximately 74 miles of the larger storm drains from 24- to 84-inches in diameter, as well as some 18-inch drainage pipes. The City's system also contains many local storm drains that are 18-inches and smaller in diameter that were not modeled. Most of the existing pipes are reinforced concrete pipe or cast-in-place concrete.

The Salinas River Storm Drainage Pump Station and Blanco Detention Basin are located at the site of the former wastewater treatment plant at the southwest City boundary. A 66-inch corrugated metal outfall conveys flows to the Salinas River. During low flow conditions, gravity discharge can occur. When the flow increases, it is pumped to the river. The pump station has two pumps with a peak capacity of 110 cubic feet per second (cfs). If inflow exceeds the pump station capacity, it is stored temporarily in the Blanco Detention Basin, which has a capacity of 36 acre-feet (AF) with freeboard, and up to 50 AF when the freeboard is used and the basin is completely full.

There are three small lift stations to drain localized low spots at major underpasses. Two lift stations are owned and operated by the City: one at the Alisal Street underpass, and one at Front and Market Streets. The third lift station on North Main Street (north of Market Street) is owned and operated by Caltrans.

The City's storm drainage system conveys runoff to the following major receiving waters: Reclamation Ditch, Carr Lake, Gabilan Creek, Natividad Creek, Santa Rita Creek, Markley Swamp, and the Salinas River. The existing City of Salinas storm drainage system is shown in Figure 3.6-2.

The Reclamation Ditch is a major drainage channel that flows from east to west through the City. Most of the City drains to the Reclamation Ditch, which was constructed in 1917 following formation of Reclamation District No. 1665. Carr Lake is a dry lakebed on the Reclamation Ditch that now functions as detention storage for the ditch during winter rainy periods.

Natividad Creek and Gabilan Creek originate north of the City, then flow south through the City and drain to the Carr Lake area. At Carr Lake, both Gabilan and Natividad Creeks are tributary to the Reclamation Ditch. During major storms with high backwater in the Reclamation Ditch, these creeks overflow at their downstream end and inundate areas of Carr Lake.

The total incorporated area that drains to the Reclamation Ditch system within the City is about 13 square miles, and comprises most of the northern and eastern areas of the City.

The Santa Rita Creek watershed is a small watershed of about 0.5 square mile in the northwestern part of the City. The Markley Swamp watershed is a small watershed of about 2 square miles on the west side of the City. Both these small watersheds drain out of the City to the west and south. Runoff from Santa Rita Creek and Markley Swamp eventually reaches the Reclamation Ditch to the west of the City boundary.

The Salinas River watershed comprises about 2.5 square miles of the southwestern part of the City that drains to the southwest corner of the City. Runoff is then conveyed south to the Salinas River.

Flooding

Flooding events can result in damage to structures, injury or loss of human and animal life, exposure of waterborne diseases, and damage to infrastructure. In addition, standing floodwater can destroy agricultural crops, undermine infrastructure and structural foundations, and contaminate groundwater.

Predicted flood conditions in the vicinity of the Specific Plan Area are shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) panels 06053C0207G, 06053C0209G, 06053C0228G, and 06053C0226G. Delineated flood zones are limited to a small area designated as shaded Zone X immediately east of San Juan Grade Road and south of Norman Way (located in the northwest corner of the Specific Plan Area). Flood conditions in this area are classified as shaded Zone X ("Other Flooded Areas"), which are limited to flooding of less than one-foot depth or less than one acre during the 1-percent annual chance flood and/or are areas of 0.2-percent annual chance flood. The extent of flooding is naturally limited by existing topography. The parts of the Specific Plan Area outside of the shaded Zone X are designated unshaded Zone X - minimal flood hazard, and would not be expected to have a flood hazard up to the level of the 0.2-percent annual chance flood. Lands designated as unshaded Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

Figure 3.6-3 shows the flood boundaries as delineated by the FEMA FIRM and USACE.

Dam Failure

The Specific Plan Area is not located within any dam failure inundation area. Potential inundation from the Nacimiento Dam and the San Antonio Dam are shown in Figure 3.6-4. Dam failure is generally a result of structural instability caused by improper design or construction, instability resulting from seismic shaking, or overtopping and erosion of the dam. Larger dams that are higher than 25 feet or with storage capacities over 50 acre-feet of water are regulated by the California Dam Safety Act, which is implemented by the California Department of Water Resources, Division of Safety of Dams (DSD). The DSD is responsible for inspecting and monitoring these dams. The Act also requires that dam owners submit to the California Office of Emergency Services inundation maps for dams that would cause significant loss of life or personal injury as a result of dam failure. The Monterey County Multi-Jurisdictional Hazard Mitigation Plan (MCMHMP) outlines the mitigation strategy for reducing potential losses identified in the vulnerability analysis section of the MCMHMP.

Stormwater Quality

Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures,

contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm which can produce significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminates in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Urban stormwater runoff was managed as a non-point discharge (a source not readily identifiable) under the Federal Water Pollution Control Amendments of 1972 (PL 92-500, Section 208) until the mid-1980's. However, since then, the Federal Environmental Protection Agency has continued to develop implementing rules which categorize urban runoff as a point source (an identifiable source) subject to National Pollution Discharge Elimination System (NPDES) permits. Rules now affect medium and large urban areas, and further rulemaking is expected as programs are developed to meet requirements of federal water pollution control laws.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

Some runoff from the Specific Plan Area currently flows to Santa Rita Creek via existing storm drains and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system with inlets along Boronda Road at the east side of the Specific Plan Area currently receive runoff from the Specific Plan Area and will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

Multiple agencies have water quality monitoring sites along Gabilan Creek, Natividad Creek, and in the Carr Lake Basin. California State University, Monterey Bay (CSUMB) (Casagrande and Watson 2007) summarized water quality conditions at these monitoring sites in their evaluation of the potential benefits of conversion Carr Lake into a multiple-use park. Their comments on the trends in water quality at Carr Lake include the following:

- Water quality conditions are variable, but generally are degraded by intensive agriculture and urban land uses;
- During summer and when water is present, dissolved oxygen, nutrients, suspended sediment, and fecal coliform concentrations commonly exceed established water quality objectives; and
- During winter, high suspended sediment and nutrient concentrations are common.

In 2014, CSU Monterey Bay measured streamflow and water quality in the Reclamation Ditch as part of their Central Coast Watershed Studies program. The sampling data for points along the Reclamation Ditch closest to Carr Lake were taken at the Boronda Road and Davis Road sites. Measurements were taken between November 11 and December 2, 2014. Low dissolved oxygen levels (DO) were not found, nor were high salinity or total dissolved solids (TDS) measurements. High turbidity appeared to be correlated, as expected, to rainfall related runoff.

303(d) Impaired Water Bodies: Section 303(d) of the federal Clean Water Act requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

According to the California Water Quality Control Monitoring Council, which was created in 2007 via a Memorandum of Understanding (MOU) signed by the Secretaries of the California Environmental Protection Agency (Cal/EPA) and the California Natural Resources Agency, there are many areas within Monterey County which are considered Section 303(d) impaired waterbodies. Those areas in the regional vicinity of the Specific Plan Area include Gabilan Creek, Natividad Creek, and Santa Rita Creek.

3.6.2 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the water resources of the State and nation (including Monterey County), including the Federal Emergency Management Agency, the US Environmental Protection Agency, the State Water Resources Control Board, and the nine Regional Water Quality Control Boards, including the Central Coast Regional Water Quality Control Board. The following is an overview of the federal, State and local regulations that are applicable to the proposed Project.

FEDERAL

Clean Water Act (CWA)

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

Federal Emergency Management Agency (FEMA)

The City of Salinas is a participant in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of

protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the Department of Water Resources and FEMA to insure the proper implementation of FEMA floodplain management regulations.

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.).

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and its implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years, and are therefore to be updated regularly. The SWRCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from industrial and construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Coast Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

The California Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer systems (MS4s). Under phase I of the MS4 permit program, the California RWQCB issued an NPDES permit to the City of Salinas which regulates development within city limits (RWQCB – Central Coast Region, 2012). This permit imposes multiple regulations on the City of Salinas in operating its storm sewer system (MS4), including the following key requirements:

1) Listed impairments to receiving waters from the Specific Plan Area (Santa Rita Creek, Gabilan Creek, Reclamation Ditch) include: nitrate, ammonia, fecal coliforms, E. Coli, Turbidity, priority organics, pesticides, copper, sediment toxicity, low oxygen, chlorpyrifos, and low pH.

2) Discharges which contribute to exceedances of water quality standards and are not reduced to the maximum extent practicable are prohibited.

3) Projects in future growth areas (including the project) are required to manage rainfall at the source using uniformly distributed decentralized controls, natural treatment, and volume reduction BMPs (e.g. bio-retention, vegetated swales, filter strips) as the first means of meeting stormwater management criteria.

4) Erosion and sediment control BMPs shall be installed to reduce pollutant discharges from construction areas and to control ongoing sediment production from slopes and channels.

5) Soil stabilization shall be implemented on disturbed areas immediately following the completion of earth disturbing activities.

6) Source control BMPs shall be implemented in projects to minimize the discharge of pollutants.

7) A 100-ft setback must be retained along Gabilan and Natividad Creeks and along wetlands not associated with streams established by the Salinas General Plan COS-17; for all other wetlands, a 30-ft setback shall be maintained.
8) Ground disturbance activities shall not be conducted in existing riparian vegetation and habitat.

Additionally, the NPDES permit identifies one Total Maximum Daily Load limitation; fecal coliform concentrations in receiving waters must not exceed 200 MPN/100 mL. Discharges to receiving waters which may result in an exceedance of this criterion must be planned for an preventative measures established.

STATE

Clean Water Act (CWA)

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for stormwater discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2013-001-DWQ-DWQ) for small municipal separate storm sewer systems.

California Water Code

The Federal Clean Water Act places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the States, although this does establish certain guidelines for the States to follow in developing their programs and allows the Environmental Protection Agency to withdraw control from States with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and each of the RWQCBs power to protect water quality, and is

the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region the regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

The Water Code Section 13260 requires all dischargers of waste that may affect water quality in waters of the state to prepare and provide a water quality discharge report to the RWQCB. Section 13260a-c is as follows:

(a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:

(1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

(2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.

(3) A person operating, or proposing to construct, an injection well.

(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Each person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.

LOCAL

City of Salinas General Plan

The Salinas General Plan establishes the following policies relative to hydrology and water quality in the General Plan:

LAND USE ELEMENT

Policy LU-8.1: Actively coordinate and work with MCWRA to provide and maintain necessary flood control facilities.

Policy LU-8.2: Apply appropriate development standards and fees to improve present drainage systems and provide adequate storm water detention basins and sedimentation ponds with new construction.

Policy LU-8.3: Require new development, to the extent feasible, to provide flood control facilities that are visually attractive and ecologically beneficial, and require on-going maintenance of the facilities by the development through a maintenance district.

Policy LU-8.4: Continue the use of Carr Lake as a reclamation/flood control facility in addition to its other functions in addressing water quality, enhancing traffic/circulation, and creating recreational opportunities.

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-1.5: Cooperate with the Monterey County Water Resources Agency, the State Water Resources Control Board and the Regional Water Quality Control Board to implement programs that address the two primary causes of poor water quality in the planning area: salt water intrusion and nitrate contamination.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

City of Salinas General Plan EIR

The following mitigation measures were established in the City of Salinas General Plan EIR to reduce impacts to hydrology and water quality:

> **Mitigation Measure HW1.** The City will implement Implementation Program COS-1 on an ongoing basis and in response to development proposals. Implementation Program COS-1 requires new development projects and substantial rehabilitation projects to incorporate Best Management Practices (BMPs) pursuant to the National Pollutant Discharge Elimination System (NPDES) permit to ensure the City complies with applicable state and federal regulations.
>
> **Mitigation Measure HW4.** The City will implement Implementation Program COS-3 on an ongoing basis. Implementation Program COS-3 requires the City, consistent with County of Monterey Draft General Plan Policy ER6.3, if adopted, to cooperate with Monterey County, the Regional Water Quality Control Board Central Coast (Region 3) and the Monterey County Water Resources Agency (MCWRA), providing technical assistance when necessary to help

identify, protect, and preserve critical aquifer recharge areas so that their function is maintained and ground water quality is not further degraded.

Mitigation Measure HW5. The City will implement Implementation Program LU-17, on an ongoing basis. Implementation Program LU-17 requires, as a condition of project approval, new development to provide adequate storm water and flood management facilities to control direct and indirect erosion and discharges of pollutants and/or sediments so that "no net increase in runoff" occurs as a result of the proposed project. In order to determine the facility and Best Management Practices (BMP) needs, the City will require, when necessary, a hydrological/drainage analysis to be performed by a certified and City-approved engineer, with the cost of said analysis the responsibility of the project applicant.

City of Salinas Municipal Code

In 2012 the Central Coast RWQCB adopted Order No. R3-2012-0005, which is the City's NPDES Permit (Permit No. CA0049981) for municipal storm water and urban runoff discharges within the City. To comply with the permit, the City developed a variety of storm water management programs to effectively prohibit non-storm water discharges and to reduce the discharge of pollutants to the maximum extent practicable, including the *Storm Water Management Plan* (SWMP). The SWMP is based on the requirements and guidelines contained in the City's NPDES Permit, as well as relevant portions of other local and regional storm water guidance documents and programs. In compliance with the Phase I regulations, the SWMP is a comprehensive document designed to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The SWMP includes all of the required and recommended control programs for municipal facilities, industrial facilities, and commercial facilities. The SWMP programs include urban runoff control policies, outreach and education efforts, site visits and inspections. These programs guide the implementation of specific stormwater BMPs.

Chapter 29 of the Salinas Municipal Code, known as the "City of Salinas Storm Water Management and Discharge Control Ordinance" states:

> The purpose and intent of this chapter is to ensure the health, safety and general welfare of citizens, and protect the water quality of watercourses and water bodies in a manner pursuant to and consistent with the requirements of the NPDES permit issued to the city of Salinas by the California Regional Water Quality Control Board and the Federal Clean Water Act (33 U.S.C. Section 1251 et seq.) by reducing pollutants in urban storm water discharges to the maximum extent practicable and by effectively prohibiting non-storm water discharges to the storm sewer drain system. The provisions of this chapter shall be implemented and enforced in such a manner as to prevent or reduce downstream erosion, to protect stream habitat and to implement controls for the post-development runoff and discharges. To that end, development within the jurisdictional authority of the city of Salinas shall be done in a manner consistent with low impact development guidance set forth in the Storm Water Development Standards document established by the city of Salinas.

City of Salinas Stormwater Development Standards for New and Redevelopment Projects

Local stormwater management regulations are provided in the "Stormwater Development Standards for New and Redevelopment Projects", referred to as the Stormwater Development Standards (SWDS). This update of the SWDS was made in part to incorporate the requirements of the updated NPDES permit issued to the City.

The purpose of these SWDS is to assist project applicants for new and redevelopment projects in complying with stormwater management requirements set forth by both the City of Salinas and the Central Coast RWQCB. New and redevelopment projects are required to implement Low Impact Development (LID) principles. The Stormwater Development Standards contain both stormwater design requirements and LID design guidance. LID features are intended to minimize the impacts of urban runoff to receiving waters and to promote healthy watersheds. LID features are designed to capture and treat runoff from relatively frequent rainfall events and are designed to promote infiltration. Table 3.11-14 from Section 3.11: Utilities [reproduced below] provides a summary of applicable City of Salinas requirements to the Specific Plan Area.

SWDS SECTION	*APPLICABLE PROJECT IMPACT*	*LIMITATION OR SPECIFICATION*
2.1.1	Runoff generated by all portions of the specific plan	Include in treatment design
2.2.1	Changes in ground surface	1) Minimize impervious area 2) Limit disturbances of natural drainage features 3) Minimize compaction of highly permeable soils 4) Minimize clearing grading of native vegetation
2.2.1	Pollution source control	BMPs must be applied to all impervious areas and incorporate landscaping that minimizes runoff and promotes infiltration
2.2.4	Retention of runoff from impervious areas	Discharges from all rainfall events up to 0.98 inches of rainfall in 24 hours (95th percentile storm event) shall be prevented using retention and infiltration
2.2.5	Control of peak storm flows	Post development peak storm flows shall not exceed pre-project peak flows for the 2- through 100-year events. A calibrated continuous simulation hydrologic model must be used to evaluate stormwater control measures.
3.3.2.1	Proximity of BMPs to potable water wells	Minimum of 100 feet separation
3.3.2.3	Depth from infiltration BMPs to groundwater	Minimum of 5 feet for indirect infiltration features and 10 for direct infiltration features
4.5.1 and 4.6	Attenuation of peak flows to pre-project conditions	Reduction of the 100-year peak post project flow to the 10-year peak pre-project flow is not required. "Peak matching" (section 2.2.5) is sufficient. Adequate mitigation of the 2-year peak flow is assumed if the 10-year peak project flow is reduce to pre-project discharge.
5.9	Detention of discharges flowing to Carr Lake	Monterey County Water Resources Agency criteria will be met (see below).
5.9	Detention/retention facility sizing calculations	24-hour duration storms shall be used for detention facility sizing.

SWDS SECTION	*APPLICABLE PROJECT IMPACT*	*LIMITATION OR SPECIFICATION*
6.1.4	Control of potential groundwater contamination	Only indirect infiltration (infiltration after treatment in a BMP) is allowed when there is potential for contaminant spills or transportation of contaminants from contributing areas.

City of Salinas Stormwater Master Plan

The City of Salinas Storm Water Master Plan (May, 2004) updates the storm drainage information in the City's 1992 Sewage and Drainage Master Plan, which updated the 1972 Sewage and Drainage Survey. Since 1992, the City has experienced extensive development, particularly in the northern portion of its service area. In addition, the City's General Plan has been amended over the years.

To address these changes and adequately plan for storm drainage facilities for existing and future users, the City requested that Camp Dresser & McKee Inc. prepare an update to the 1992 Master Plan. The City of Salinas Storm Water Master Plan presents the updated City of Salinas Storm Drainage Master Plan.

According to the *Hydrology and Water Quality Technical Study* completed for the project, the City of Salinas Storm Water Master Plan makes the following statements and conclusions regarding the potential effects of urbanization in the Specific Plan Area:

- Existing storm drains within Salinas are at maximum capacity and cannot accept increased peak flows without causing additional flooding.
- Certain reaches of Santa Rita Creek through the city are already at capacity and cannot accept increased peak flow rates without flooding.
- Detention storage will be required for all new development that contributes to the Markley Swamp stormwater sub-system and to the Santa Rita Creek stormwater sub-system.
- Detention storage will be required for all new development in the West Area Specific Plan area that contributes to Gabilan Creek, to avoid adversely impacting Carr Lake and the Reclamation Ditch.
- The hydraulic capacity of the Boronda Road storm drain flowing to Gabilan Creek is 50 cfs for the 42-inch segment and 120 cfs for the 48-inch segment.

The Stormwater Master Plan also identifies two potential stormwater detention basins within the proposed Specific Plan Area: a 40 AF capacity basin east of San Juan Grade Road (draining to the Santa Rita Creek stormwater sub-basin) and a 40 AF capacity basin immediately north of Boronda Road near McKinnon Street (draining to the Markley Swamp stormwater sub-basin). The plan states that these basins would be added during development of the Specific Plan Area.

Reclamation Ditch Watershed Impact Fee/Draft Nexus Study Summary Report

The Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley. The final draft (August 2006) of the

MCWRA's *Reclamation Ditch Watershed Impact Fee/Nexus Study Summary Report* ("Draft Nexus Study"), while not adopted, provides useful background information related to the current state of the Reclamation Ditch system.

The MCWRA has imposed regulations for floodplains in the County. Pertinent regulations include the following:

1. Lands within the FEMA FIRM identified 1-percent annual chance flood floodplain, Special Flood Hazards Areas (SFHA), and areas within 200 feet of a river or with 50 feet of a watercourse are subject to these regulations.
2. No construction is allowed within regulatory floodways or Zones AE.
3. Any encroachment into a regulatory floodway shall not result in any increase of base flood elevations.
4. All construction shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

(Note: All development in City of Salinas, including development in the Reclamation Ditch Watershed, must meet city flood damage prevention regulations.)

Salinas Flood Damage Prevention Ordinance

Article VI, Flood Damage Prevention, of the City's Municipal Code outlines the methods of reducing flood losses for subdivisions and other proposed developments via construction standards. The standards apply to all areas of special flood hazards within the jurisdiction of the City of Salinas.

In all areas of special flood hazards the following standards are required:

(a) Anchoring.

(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(2) All manufactured homes shall meet the anchoring standards of Section 9-55.4.

(b) Construction Materials and Methods.

(1) All new construction and substantial improvements shall be constructed with flood-resistant materials as specified in FEMA Technical Bulletin TB 2-93 or the most recent update, and utility equipment resistant to flood damage;

(2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage;

(3) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

(4) Require within Zones AH or AO adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

(c) Elevation and Floodproofing.

(1) Residential construction, new construction or substantial improvement of any structure shall have the lowest floor, including basement, elevated as follows:

(A) In an AO Zone, elevated above the highest adjacent grade to a height exceeding the depth number specified in feet on the FIRM by two feet, or elevated at least two feet above the highest adjacent grade if no depth number is specified;

(B) In an A Zone, elevated two feet (minimum) above the base flood elevation; such base flood elevation shall be determined by methods in Section 9-54.3(b) of this article.

(C) In all other zones, elevated two feet (minimum) above the base flood elevation.

Water Quality Control Plan for the Central Coastal Basin

The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

3.6.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with hydrology and water quality if it will:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, run-off or flooding on- or off-site;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place a structure within a 1-percent annual chance flood zone that would impede or redirect flood flows;
- Expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Result in inundation by seiche, tsunami or mudflow.

IMPACTS AND MITIGATION

Impact 3.6-1: The proposed project has the potential to violate water quality standards or waste discharge requirements during construction (Less than Significant with Mitigation)

According to the United States Environmental Protection Agency, polluted stormwater runoff is a leading cause of impairment to the nearly 40 percent of surveyed U.S. water bodies which do not meet water quality standards. Over land or via storm sewer systems, polluted runoff is discharged, often untreated, directly into local water bodies. Soil erosion is one of the most common sources of polluted stormwater runoff during construction activities. When left uncontrolled, storm water runoff can erode soil and cause sedimentation in waterways, which collectively result in the destruction of fish, wildlife, and aquatic life habitats; a loss in aesthetic value; and threats to public health due to contaminated food, drinking water supplies, and recreational waterways.

Mandated by Congress under the Clean Water Act, the NPDES Stormwater Program is a comprehensive two-phased national program for addressing the non-agricultural sources of stormwater discharges which adversely affect the quality of our nation's waters. The program uses the National Pollutant Discharge Elimination System (NPDES) permitting mechanism to require the implementation of controls designed to prevent harmful pollutants, including soil erosion, from being washed by stormwater runoff into local water bodies. The construction activities for the proposed project would be governed by the General Permit 2009-0009-DWQ (amended by 2010-0014-DWQ & 2012-0006-DWQ), which states:

> *"…Particular attention must be paid to large, mass graded sites where the potential for soil exposure to the erosive effects of rainfall and wind is great and where there is potential for significant sediment discharge from the site to surface waters. Until permanent vegetation is established, soil cover is the most cost-effective and expeditious method to protect soil particles from detachment and transport by rainfall. Temporary soil stabilization can be the single most important factor in reducing erosion at construction sites. The discharger is required to consider measures such as: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary*

vegetation, and permanent seeding. These erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. Erosion control BMPs should be the primary means of preventing storm water contamination, and sediment control techniques should be used to capture any soil that becomes eroded…"

General Permit 2009-0009-DWQ (amended by 2010-0014-DWQ & 2012-0006-DWQ) further states that:

"Sediment control BMPs should be the secondary means of preventing storm water contamination. When erosion control techniques are ineffective, sediment control techniques should be used to capture any soil that becomes eroded. The discharger is required to consider perimeter control measures such as: installing silt fences or placing straw wattles below slopes. These sediment control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed…Inappropriate management of run-on and runoff can result in excessive physical impacts to receiving waters from sediment and increased flows. The discharger is required to manage all run-on and runoff from a Specific Plan Area. Examples include: installing berms and other temporary run-on and runoff diversions…All measures must be periodically inspected, maintained and repaired to ensure that receiving water quality is protected. Frequent inspections coupled with thorough documentation and timely repair is necessary to ensure that all measures are functioning as intended…"

Grading, excavation, removal of vegetation cover, and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. To ensure that construction activities are covered under General Permit 2009-0009-DWQ (amended by 2010-0014-DWQ & 2012-0006-DWQ), projects in California must prepare a Stormwater Pollution Prevention Plan (SWPPP) containing Best Management Practices (BMPs) to reduce erosion and sediments to meet water quality standards. Such BMPs may include: temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover. The BMPs and overall SWPPP is reviewed by the Regional Water Quality Control Board and the City of Salinas as part of the permitting process. The SWPPP, once approved, is kept on site and implemented during construction activities and must be made available upon request to representatives of the RWQCB and/or the City of Salinas.

In accordance with the NPDES Stormwater Program, Mitigation Measure 3.6-1 ensures compliance with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

CONCLUSION

The proposed project has the potential to violate water quality standards or waste discharge requirements during construction. Mitigation Measure 3.6-1 requires the use of BMPs during construction activities in order to reduce erosion, control sediment, and manage runoff from the Plan Area. The BMPs may include: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. The use of these measures would prevent polluted, non-treated runoff from entering the nearby storm drains and waterways. The various RWQCBs have evaluated the effectiveness of the types of BMPs required by Mitigation Measure 3.6-1 and have determined that BMPs are known to be effective in protecting receiving waters[2]. Also, current agricultural operations in the Plan Area (baseline conditions) lead to some levels of erosion and downstream turbidity, as well as other pollution entering the drainage system. The proposed project would result in the elimination of the agricultural runoff, which would be replaced with the development of a controlled storm drainage system implementing the latest BMPs. With implementation of Mitigation Measure 3.6-1, the proposed project would have a ***less than significant*** impact relative to this topic.

MITIGATION MEASURES

Mitigation Measure 3.6-1: *Prior to issuance of grading permits, the project proponent shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the City of Salinas prior to submitting to the RWQCB to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ). The SWPPP shall be designed with Best Management Practices (BMPs) that the RWQCB has deemed to be effective at reducing erosion, controlling sediment, and managing runoff. These include: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Sediment control BMPs, installing silt fences or placing straw wattles below slopes, installing berms and other temporary run-on and runoff diversions. These BMPs are only examples of what should be considered and shall not preclude the use of equally or more effective new or innovative approaches currently available or being developed. Final selection of BMPs will be subject to approval by City of Salinas. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

Impact 3.6-2: The proposed project has the potential to violate water quality standards or waste discharge requirements during operation (Less than Significant with Mitigation)

The long-term operations of the proposed project (all phases) could result in long-term impacts to surface water quality from urban stormwater runoff. The proposed Project would result in new

[2] Refer to "Review of Stormwater Best Management Practices at Large Construction Sites" by the Los Angeles RWQCB; Available online:
http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/bmp/largeconstreport-august-06.pdf

impervious areas associated with roadways, driveways, parking lots, buildings, and landscape areas. Normal activities in these developed areas include the use of various automotive petroleum products (i.e. oil, grease, and fuel), common household hazardous materials, heavy metals, pesticides, herbicides, fertilizers, and sediment. Within urban areas, these pollutants are generally called nonpoint source pollutants. The pollutants pollutant levels vary based on factors such as time between storm events, volume of storm event, type of uses, and density of people.

As shown in Figure 3.11-3 (Section 3.11: Utilities), the proposed drainage infrastructure (conceptual level) includes primary storm drain piping along Natividad Road, East Boronda Road, San Juan Grade Road, parallel to El Dorado Drive through the West Area Specific Plan area, and an east-west line along new Road C. Altogether, these pipelines total roughly 25,000 feet in length. Five combination supplemental detention/water quality basins and water retention basins are planned for the southwest, northwest, central and southeast parts of the area. The open space areas in the specific plan will primarily be utilized for the supplemental storm water detention and retention basins, which will serve the West Area Specific Plan. All lots, parks and open space uses will include parcel-based BMPs so that each parcel will, at a minimum, treat all storm water before any leaves the site. Any storm water that cannot be infiltrated on site due to low infiltration rates will be directed to supplemental retention/detention basins. Parcel-based retention is required to the maximum extent practicable.

Following treatment in a water quality treatment/detention basin, storm water which is not retained in a retention basin will discharge to the four existing storm drain inlets: Natividad Road at East Boronda Road, Santa Rita Creek at San Juan Grade Road, Dartmouth Way at East Boronda Road, and McKinnon Street at East Boronda Road.

The project will discharge storm water to Santa Rita Creek and to the existing City storm drain system. The downstream storm drain system will convey these flows and discharge them to Markley Swamp, Gabilan Creek and Carr Lake and then to the Reclamation Ditch. Listed impairments of these receiving waters (RWQCB – Central Coast Region, 2012) include: nitrate, ammonia, fecal coliforms, E. Coli, turbidity, priority organics, pesticides, copper, and low pH. If runoff from the Specific Plan Area were not treated, increases in the listed water quality impairments for these receiving waters would be likely.

The NPDES permit granted to the City of Salinas by the Central Coast RWQCB (RWQCB – Central Coast Region, 2012) prohibits discharges which contribute to exceedances of water quality standards and requires that source control BMPs are implemented to minimize discharge of pollutants. The permit defines one Total Maximum Daily Load limitation for these receiving waters: fecal coliform concentrations must not exceed 200 MPN/100 Ml. Untreated stormwater discharges have the potential to contribute fecal coliforms to receiving waters, due to the presence animal wastes in impervious and landscaped areas.

The City of Salinas Stormwater Development Standards for New and Redevelopment Projects (City of Salinas, 2013a) require the following water quality practices:

I. Pollution source control for all impervious areas using BMPs; and

II. Retention of all rainfall events up to the 95th percentile 24-hour rainfall event.

Stormwater discharges from the Specific Plan Area, if not treated, would violate the City of Salinas NPDES permit as well as the City of Salinas stormwater development standards, and would likely contribute to violations of the receiving water TMDL for fecal coliforms. Water quality treatment will be provided through the combination of both LID (source control) and BMP (treatment control) methods and facilities. The project has incorporated space for bio-swales along many of the proposed roads. Local surface runoff will either sheet flow to or be collected and conveyed through the bio-swales. In addition to the LID features, runoff from the Specific Plan Area will be treated by the neighborhood detention, water quality, and retention basins as well as water quality basins located within the parks throughout the West Area. The neighborhood water quality basins are treatment control BMPs designed to collect overflow from adjacent overland surface flow and concentrated pipe discharge, treat runoff by attenuating flows to allow settlement of sediments, and then overflow back to the downstream storm drain system.

CONCLUSION

The proposed project has the potential to violate water quality standards or waste discharge requirements during operation. Mitigation Measure 3.6-2 requires submittal of a Stormwater Control Plan that includes calculations, BMPs and plan of sufficient detail to confirm that contaminant loadings to receiving waters will be reduced to the maximum extent practicable. Mitigation Measures 3.6-3 and 3.6-4 require submittal of detailed plans and calculations for the water quality BMPs, water quality detention basins, and supplemental retention and peak flow control. The BMPs will be designed to meet regulatory requirements and to reduce peak flows during storm events below peak flows under pre-project conditions. The various RWQCBs have evaluated the effectiveness of the types of BMPs required by Mitigation Measures 3.6-2 through 3.6-4 and have determined that BMPs are known to be effective in protecting receiving waters. With implementation of Mitigation Measures 3.6-2 through 3.6-4, the proposed project would have a ***less than significant*** impact relative to this topic.

MITIGATION MEASURES

Mitigation Measure 3.6-2:

Prior to the approval of site improvement plans, the project applicant shall submit to the Salinas Public Works Department a Stormwater Control Plan detailing plans and calculations for water quality best management practices (BMPs) and water quality detention/retention basins designed to meet the applicable regulatory requirements and to reduce contaminant loadings to receiving waters to the maximum extent practicable.

*The Improvement Plans shall be consistent with the City's NPDES permit requirements at the time of permitting. The NPDES permit granted to the City of Salinas by the Central Coast RWQCB (*RWQCB – Central Coast Region*, 2012) requires the following:*

I. *Erosion and Sediment Control BMPs – Erosion control and sediment control BMPs shall be designed, installed, and maintained to reduce the discharge of pollutants from construction sites to the maximum extent practical (MEP) and protect water quality;*

II. *Erosion and sediment from slopes and channels shall be controlled by implementing an effective combination of erosion control (source control) and other sediment control BMPs; and*

III. *Soil Stabilization – Stabilization of disturbed areas shall, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased.*

Additionally, the Improvement Plans shall be consistent with the requirements of the City's Stormwater Development Standards for New and Redevelopment Projects. The City of Salinas Stormwater Standards for New and Redevelopment Projects (City of Salinas, 2013a) require the following practices:

I. *Limit disturbance of creeks and natural drainage features and provide setbacks according to the City's latest NPDES permit;*

II. *Minimize compaction of highly permeable soils; and*

III. *Limit clearing and grading of native vegetation to the minimum needed to build the project and provide fire protection.*

Mitigation Measure 3.6-3: *Prior to the approval of site improvement plans, the project applicant shall submit to the Salinas Public Works Department a Stormwater Control Plan detailing plans and calculations for water quality best management practices (BMPs) and water quality detention basins designed to prevent to the maximum extent practicable the creation of new sources of polluted runoff. The detailed plans and calculations shall be subject to review and approval by the Salinas Public Works Department.*

Mitigation Measure 3.6-4: *Prior to the approval of site improvement plans, the project applicant shall submit to the Salinas Public Works Department detailed plans and calculations for supplemental retention and peak flow control. BMPs will be designed to meet regulatory requirements and to reduce peak flows during storm events below peak flows under pre-project conditions. The detailed plans and calculations shall be subject to review and approval by the Salinas Public Works Department.*

Impact 3.6-3: The proposed project has the potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge (Less than Significant with Mitigation)

The quantity of ground water in the Salinas Valley has been declining for decades, as evidenced by the substantial lowering of water levels in the aquifers. Impacts on groundwater in the Salinas area are an important consideration in any development plan. See Impact 3.11-6 in Chapter 3.11:

Utilities, for further discussions regarding groundwater demand, groundwater supplies, groundwater recharge, and saltwater intrusion. Impacts related to groundwater supplies and interference with groundwater recharge are considered in two ways: (1) conversion of pervious surfaces (which allow for groundwater recharge), and (2) use of groundwater as a water supply (which reduces the amount of local groundwater supply).

GROUNDWATER RECHARGE

The proposed project would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge in those areas. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potential; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering existing surface water courses and existing storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study (see **Appendix F**) indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible. Consequently, infiltration into the ground water aquifers will be maximized to the extent possible through the storm drainage design.

The proposed project will modify the movement of water across the land surface and the infiltration of rain water into the groundwater system. The aquifers underlying the Plan Area are impacted by nitrate contamination. Groundwater in the project vicinity is subject to increasing salinity due to seawater intrusion from Monterey Bay. This impairment affects use of the groundwater for potable water supplies and use for irrigation. The project, if no means were provided to preserve infiltration of rainwater, would likely reduce net infiltration of rain water and runoff into the groundwater system and reduce the diluting effect of this fresh water supply. The net impact would be a further increase in sea water intrusion and build-up of contaminants in the groundwater in the Salinas basin. However, the proposed project without mitigation would also likely decrease the amount of nitrates entering the groundwater from the Plan Area, due to elimination of agricultural activity including fertilizer application. Surface water quality detention basins and BMPs also have the potential to add to groundwater contamination levels if they are not properly designed and sited.

The BMPs proposed as part of the development plan are designed to infiltrate as much storm water runoff as practicable into the ground. The predicted impact of the development, including retention basins and BMPs, is to decrease the volume of runoff from the Plan Area during large rainfall events and eliminate discharges completely for storms up to 0.98 inches in 24 hours. A portion of the retained runoff (and likely the vast majority given the sandy soils) will infiltrate into the ground, helping to replenish the aquifers. The proposed BMPs are designed to trap contaminants and to beneficially make use of nutrients in the vegetated swales and planted areas. In addition, application rates of fertilizers on urbanized areas is less than that typically used in intensive agriculture. The

aggregate effect of the proposed development will, therefore, be to decrease the loading of nutrients (in particular, nitrates) into the groundwater.

GROUNDWATER SUPPLIES

The proposed project would provide three new wells to be constructed as development progresses. The first well would be operational approximately at the time of or before the first certificate of occupancy is issued.

As noted previously, an estimated 90% of the land in the Plan Area or 720 acres is presently used to grow irrigated crops – lettuce and various vegetables (strawberries, broccoli, cauliflower, and alfalfa). Estimated groundwater pumping for existing irrigated agricultural use in the Plan Area is 4,320 AFY.

The estimated 4,320 AFY groundwater pumping for existing agricultural use in the West Area Specific Plan is 2,947 AFY more than the total buildout estimated demand for the West Area Specific Plan, which is 1,373 AFY. Therefore, the total buildout estimated water demand for the West Area Specific Plan is projected to use less water than required for current irrigated agricultural uses. The estimated amount of recharge from existing irrigated agriculture use is 1,296 AFY. Estimated net consumptive water use by existing irrigated agriculture use in the Plan Area is 3,024 AFY.

As discussed in Chapter 3.11: Utilities, the total estimated outdoor annual water demand for the Plan Area at build-out would be 412 AFY. If 20% of outdoor use infiltrates below the plant root zone and recharges groundwater, then 0.20 x 412 = 82 AFY or 6% of estimated average annual demand is estimated to recharge to the groundwater system.

The overall effect of the proposed project to groundwater resources would be beneficial, as the proposed project would reduce groundwater pumping compared to the existing conditions.

CONCLUSION

The proposed project, without mitigating features, would reduce infiltration of rainwater and runoff into the local groundwater system due to the increase in impermeable area. This may deplete groundwater supplies or interfere substantially with groundwater recharge. The total annual rainfall depth in an average year is approximately 16 inches and the project surface area is approximately 797 acres, producing an annual rainfall volume of approximately 1,060 AF. Nearly all of this area is currently in agriculture, while the proposed project could convert as much as 60 percent of the area to impervious surfaces, resulting in a reduction in groundwater recharge in the range of 400 to 600 AF. However, the proposed stormwater BMPs and retention basins are designed to reduce runoff below that which occurs currently during storm events and, therefore, increase groundwater recharge from the Plan Area to the extent possible. Additionally, the overall effect of the proposed project on groundwater pumping would be beneficial, as the proposed project would reduce groundwater pumping compared to existing conditions. Implementation of the following mitigation would ensure that impacts related to groundwater recharge would be ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.6-5: *Prior to the approval of site improvement plans, the project applicant shall site, and design and include an Operation and Maintenance Plan for stormwater retention/infiltration basins and infiltration promoting BMPs sufficient to assure that there is no reduction in groundwater recharge. In order to assure there is no reduction in recharge, the plan shall result in circumstances which maintain infiltration to support baseflow and interflow to wetlands and surface waters, and deep vertical infiltration to groundwater. The site, design, and installation shall be consistent with the requirements of the City's Stormwater Development Standards for New and Redevelopment Projects. The contents of the site, design, and installation shall be included in a stormwater control plan. The stormwater control plan shall be reflected on the Improvement Plans, subject to review and approval by the Salinas Public Works Department.*

Mitigation Measure 3.6-6: *Prior to the approval of site improvement plans, the project applicant shall site, design, and include an Operation and Maintenance Plan for post-construction BMPs and supplemental stormwater detention basins in accordance with City of Salinas stormwater development standards. Maintenance procedures (including frequency of procedure, cleaning schedules, applicant responsibility for each procedure, performance standards, or other means) and funding mechanisms shall be established for those facilities to assure adequate long-term performance and success in treating the water and controlling infiltration into the groundwater. The Improvement Plans and Operation and Maintenance Plan shall be subject to review and approval by the Salinas Public Works Department.*

Impact 3.6-4: The proposed project has the potential to alter the existing drainage pattern in a manner which would result in substantial erosion, siltation, flooding, or polluted runoff (Less than Significant)

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff entering existing surface water courses and storm drains. The calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

The proposed project will not alter drainage patterns in a manner which will cause flooding, erosion, or siltation. Surface runoff from the area will be managed via parcel-based LID measures, detention/retention basins, and flow reducing BMPs to prevent local flooding within the site. These features will also reduce peak flows from the Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions. Sediment in the stormwater flows will be captured in detention ponds designed to prevent siltation. Flooding, erosion, or siltation is not anticipated by the proposed project given the storm drain design and best management practices that will be implemented.

The proposed project would not alter the existing drainage pattern in a manner which would result in substantial erosion, siltation, flooding, or polluted runoff. With the implementation of mitigation measures already presented above, and with the design and construction of the improvements

included in the proposed storm drainage system, the proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.6-5: The proposed project has the potential to otherwise substantially degrade water quality (Less than Significant)

Section 303(d) of the federal Clean Water Act (CWA) requires States to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

Important water quality concerns for the Carr Lake, Santa Rita Creek, and Gabilan Creek receiving waters include: turbidity, nutrients, and fecal coliforms. Urbanized areas also produce contaminants such as heavy metals, oils and greases, pesticides, nutrients from landscape fertilizers, and household chemicals. The water quality BMPs and water quality detention basins which are included in the proposed development are designed to capture and retain the urban-associated contaminants as well as reduce turbidity and nutrients which may be mobilized in the developed areas. The water quality detention basins will also trap suspended solids and nutrients which enter the Plan Area from the up slope properties which will continue to be farmed or used for livestock grazing. The proposed development is anticipated to reduce loading of contaminants, nutrients, and turbidity to the receiving waters relative to existing conditions.

In accordance with the NPDES Stormwater Program, Mitigation Measure 3.6-1 above requires an approved SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the RWQCB has deemed effective in controlling erosion, sedimentation, runoff during construction activities. Such BMPs shall include: temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover or other equally or more effective measures. The BMPs and overall SWPPP are submitted to the RWQCB and the City of Salinas as part of the permitting process. The SWPPP is kept on site and implemented during construction activities and must be made available upon request to representatives of the RWQCB and/or the City of Salinas. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude equally or more effective new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB.

CONCLUSION

The proposed project would not otherwise substantially degrade water quality. The use of BMPs are intended to treat runoff close to the source during the construction and long term operational phase of the project to reduce stormwater quality impacts. The mitigation measure listed below complies with existing regulatory requirements. Implementation of proposed project would have a ***less than significant*** impact relative to this topic.

MITIGATION MEASURES

Implement **Mitigation Measure 3.6-1**.

Impact 3.6-6: Place housing or structures that would impede/redirect flows within a 1-percent annual chance flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map (Less than Significant)

As shown on Figure 3.6-3, no portion of the Specific Plan Area is located within a 1-percent annual flood hazard zone. A small flood hazard area is identified as shaded Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in shaded Zone X ("Other Flooded Areas") are limited to less than one-foot depth or less than one acre during the 1-percent annual chance flood event and/or are subject to flooding between the 1-percent and 0.2-percent annual chance flood events. The extent of flooding is naturally limited by existing topography. Lands designated as unshaded Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. The proposed project does not include the construction of a bridge or other facility within a creek/stream/river channel that would present a risk of impeding or redirecting flows.

CONCLUSION

The project would no place housing or structures that would impede/redirect flows within a 1-percent annual chance flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding and/or impedance or redirection of flows will not be induced by the proposed project. As a result, the proposed project would have a ***less-than-significant*** impact relative to this topic.

Impact 3.6-7: The proposed project has the potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, seiche, tsunami, or mudflow (Less than Significant)

A tsunami is a sea wave caused by a submarine earthquake, landslide, or volcanic eruption. Tsunami can cause catastrophic damage to shallow or exposed shorelines. The Specific Plan Area is approximately 9 miles from the coast, which is sufficiently distant to preclude effects from a tsunami. Additionally, tsunami inundation maps for the area show no risk of tsunami inundation for the Specific Plan Area.

Seiches are changes or oscillations of water levels within a confined water body. Seiches are caused by fluctuation in the atmosphere, tidal currents or earthquakes. The effect of this phenomenon is a standing wave that would occur when influenced by the external causes. The Specific Plan Area is not adjacent to any lakes that pose significant a risk from a seiche event.

A mudflow is a type of mass wasting or landslide, where earth and surface materials are rapidly transported downhill under the force of gravity. Mudflow events are caused by a combination of factors, including soil type, soil profile, precipitation, and slope. Mudflow may be triggered by heavy rainfall that the soil is not able to sufficiently drain or absorb. As a result of this super-saturation, soil and rock materials become unstable and eventually slide away from their existing location. Soils most susceptible to mudflow are saturated, loose, non-plastic, uniformly graded, and fine-grained sand deposits. The Specific Plan Area is relatively flat making the potential of on-site mudflows low. The foothills of the Gabilan Range are located approximately 3.0 miles north of the Plan Area. Additionally, no information regarding mud flow potential in the Specific Plan Area was found. The contributing watershed for the area is very small and the Specific Plan Area is not proximate to conditions (e.g., steep slopes, unstable soils, narrow canyons subject to flash flooding) which could produce mudflows. The site is also elevated sufficiently above sea level to preclude any risk of inundation due to sea level rise.

Portions of the Salinas Valley have been identified as subject to flood risk due to failure of the San Antonio or Nacimiento Dams, which are located in the upper reaches of the Salinas River watershed; the Plan Area is not located within an identified inundation zone. As shown in Figure 3.6-4, the elevation of the Specific Plan Area and its distance from the Salinas River channel make it extremely unlikely that failure of either dam or failure of any of the levees located along the Salinas River channel would cause flooding of the plan area. No other levees or dams exist in the vicinity of the Specific Plan Area.

CONCLUSION

The proposed project would not result in the exposure of people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, seiche, tsunami, or mudflow. This impact is considered ***less than significant***.

Impact 3.6-8: Cumulative increases in peak stormwater runoff from the plan area (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography. The cumulative context for the analysis of cumulative stormwater runoff impacts is best addressed on a regional/watershed basis (geography), as such an area captures flows occurring both upstream and downstream of the project site. Because water resources are highly interconnected, the cumulative setting is based on Monterey County, which is located in the Central Coast Hydrological Region. With respect to surface waters, some runoff from the Specific Plan Area currently flows to Santa Rita Creek and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system with inlets along Boronda Road

at the east side of the Specific Plan Area currently receives runoff from the Specific Plan Area and will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

Implementation of the West Area Specific Plan would increase the amount of impervious surfaces in the Specific Plan Area, which, without intervention, could increase peak stormwater runoff rates and volumes on and downstream of the Specific Plan Area. The West Area Specific Plan includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area.

Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the site. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

CONCLUSION

With the design and construction of flood control improvements, the West Area Specific Plan would not increase peak stormwater runoff. The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures would control peak stormwater runoff.

The proposed project would not have cumulatively considerable impacts associated with stormwater runoff. Overall, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to stormwater runoff.

Impact 3.6-9: Cumulative impacts related to degradation of water quality (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography. The cumulative context for the analysis of cumulative water quality impacts is best addressed on a regional/watershed basis (geography). Because water resources are highly interconnected, the cumulative setting is based on Monterey County which is located in the Central Coast Hydrological Region. With respect to surface waters, some runoff from the Specific Plan Area currently flows to Santa Rita Creek and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system with inlets along Boronda Road at the east side of the Specific Plan Area currently receives runoff from the Specific Plan Area and

will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

The project will discharge storm water to Santa Rita Creek and to the existing City storm drain system. As shown in Figure 3.11-3 (within Section 3.11: Utilities), the proposed drainage infrastructure (conceptual level) includes primary storm drain piping along Natividad Road, East Boronda Road, San Juan Grade Road, parallel to El Dorado Drive through the Plan Area, and an east-west line along new Road C. Altogether, these pipelines total roughly 25,000 feet in length. Parcel-based retention and five combination supplemental detention/water quality basins and water retention basins are planned for the southwest, northwest, central and southeast parts of the area. Following treatment in a water quality treatment/detention basin, storm water which is not retained in a supplemental retention basin will overflow to the four existing storm drain inlets: Natividad Road at East Boronda Road, Santa Rita Creek at San Juan Grade Road, Dartmouth Way at East Boronda Road, and McKinnon Street at East Boronda Road.

Development of the West Area Specific Plan could contribute to a cumulative increase in urban pollutant loading, which could adversely affect water quality. Cumulative development in the Salinas area, including within the Plan Area, would also result in increased impervious surfaces that could increase the rate and amount of runoff, thereby potentially adversely affecting existing surface water quality through increased erosion and sedimentation. The primary sources of water pollution include: runoff from roadways and parking lots; runoff from landscaping areas; non-stormwater connections to the drainage system; accidental spills; and illegal dumping. Runoff from roadway and parking lots could contain oil, grease, and heavy metals; additionally, runoff from landscaped areas could contain elevated concentrations of nutrients, fertilizers, and pesticides.

The West Area Specific Plan is required to comply with Mitigation Measure 3.6-1, which requires the development and approval of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will include BMPs to regulate stormwater quality for the Specific Plan Area. In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, Mitigation Measure 3.6-1 ensures compliance with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB), Central Coast Region, has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude the use of equally or more effective new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB and the City of Salinas and are an existing regulatory requirement.

While there are no assurances that other projects in the County would incorporate the same degree or methods of treatment as the West Area Specific Plan, several of the projects within the City of Salinas would phase out existing agricultural runoff discharges from their respective sites and, similar to the West Area Specific Plan, could provide some level of water quality improvement. Also, each project in the City that would discharge stormwater runoff would be required to comply with NPDES discharge permits from the RWQCB, which adjusts requirements on a case-by-case basis to avoid significant degradation of water quality. Therefore, while a greater quantity of urban runoff

may result from implementation of other future projects, because of an increase in impervious surfaces, the associated surface water quality impacts would be expected to be less than significant because of improved or similar quality of runoff compared to existing conditions.

CONCLUSION

Compliance with City and County water quality protection regulations, approval from the RWQCB, and implementation of Mitigation Measure 3.6-1 would ensure that the West Area Specific Plan minimizes impacts to surface water quality. The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures would control storm water quality. The proposed project would not have cumulatively considerable impacts associated with water quality. Overall, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for degradation of water quality.

Impact 3.6-10: Cumulative impacts related to degradation of groundwater supply or recharge (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography. Because water resources are highly interconnected, the cumulative setting is the Salinas Valley Groundwater Basin Area. The Salinas Valley is the largest coastal groundwater basin in Central California, and is drained by the Salinas River. Salinas Valley extends approximately 150 miles from the headwaters to the mouth of the River at Monterey Bay, draining approximately 5,000 square miles. The western portion of the Specific Plan Area is located in the Alisal Slough-Templadero Slough watershed and the eastern portion of the Specific Plan Area is located in the Natividad Creek-Gabilan Creek watershed.

The West Area Specific Plan would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge in those areas. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potential; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible. Consequently, infiltration into the ground water aquifers will be maximized to the extent possible through the storm drainage design.

There are currently three water supply wells located on-site. These wells would be destructed and abandoned prior to development of the Plan Area. The project would provide three new wells (and

potentially a treatment facility) to be constructed as development progresses. The first well would be operational at the time of the issuance of the first Certificate of Occupancy. The assumption for the design capacity of the three new Specific Plan area wells is 1,200 gpm each. The first well that would be functioning in 2020 would add 1,200 gpm capacity, or 1,937 AFY. Thus, in 2020, the total design capacity of wells serving the City of Salinas including the Specific Plan Area would be 52,592 AFY (44,843 AFY + 5,812 AFY + 1,937 AFY = 52,592 AFY).

In addition to constructing new wells, the project will modify the movement of water across the land surface and the infiltration of rain water into the groundwater system. The aquifers underlying the Plan Area are impacted by nitrate contamination. Groundwater in the project vicinity is subject to increasing salinity due to seawater intrusion from Monterey Bay. Both of these impairments affect use of the groundwater for potable water supplies and use for irrigation. The proposed project, if no means were provided to preserve infiltration of rainwater, would likely reduce net infiltration of rain water and runoff into the groundwater system and reduce the diluting effect of this fresh water supply. The net impact would be a further increase in sea water intrusion and build-up of contaminants in the groundwater in the Salinas basin. However, the proposed project, without mitigation, would also likely decrease the amount of nitrates entering the groundwater from the Plan Area, due to elimination of agricultural activity including fertilizer application. Surface water quality detention basins and BMPs also have the potential to add to groundwater contamination levels if they are not properly designed and sited.

The proposed project, without mitigating features, would reduce infiltration of rainwater and runoff into the local groundwater system due to the increase in impermeable area. The total annual rainfall depth in an average year is approximately 16 inches and the project surface area is approximately 797 acres, producing an annual rainfall volume of approximately 1,060 AF. Nearly all of this area is currently in agriculture, while the proposed project could convert as much as 60 percent of the area to impervious surfaces, resulting in a reduction in groundwater recharge in the range of 400 to 600 AF.

CONCLUSION

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures require maintaining water quality standards and preserving the infiltration of rainwater within the aquifer. The proposed project would not have cumulatively considerable impacts associated with groundwater supply/recharge. Overall, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for degradation of groundwater supply or recharge.

Impact 3.6-11: Cumulative impacts related to flooding (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for the analysis of cumulative flooding impacts is best addressed on a regional/watershed basis (geography). Because water resources are highly interconnected, the cumulative setting is based on Monterey County which is located in the Central Coast Hydrological

Region. With respect to surface waters, some runoff from the Specific Plan Area currently flows to Santa Rita Creek and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system with inlets along Boronda Road at the east side of the Specific Plan Area currently receives runoff from the Specific Plan Area and will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

As shown on Figure 3.6-3, predicted flood conditions in the vicinity of the Specific Plan Area are shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels 06053C0207G, 06053C0209G, 06053C0228G, and 06053C0226G. No portion of the Specific Plan Area is located within a 1-percent annual chance flood hazard zone. A small flood hazard area is identified as shaded Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in shaded Zone X ("Other Flooded Areas") are limited to less than one-foot depth or less than one acre during the 1-percent annual chance flood and/or are subject to flooding between the 1-percent and 0.2-percent annual chance flood events. The extent of flooding is naturally limited by existing topography. Lands designated as unshaded Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project. Therefore, the West Area Specific Plan is not at risk of the 1-percent annual chance flood.

Future development projects in the area could result in additional discharges of stormwater during storm events. When combined, these future development projects could, in theory, lead to an incremental increase in peak stormwater runoff, and potential incremental increases in downstream flood elevations. However, in order to ensure that future development projects in the County do not increase downstream flood elevations, the Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley which helps collect surface water stormwater flows to ensure stormwater during storm events does not increase downstream flood elevations.

Additionally, Article VI (Flood Damage Prevention) of the City's Municipal Code outlines the methods of reducing flood losses for subdivisions and other proposed developments via construction standards. The standards apply to all areas of special flood hazards within the jurisdiction of the City of Salinas, including the West Area Specific Plan Area.

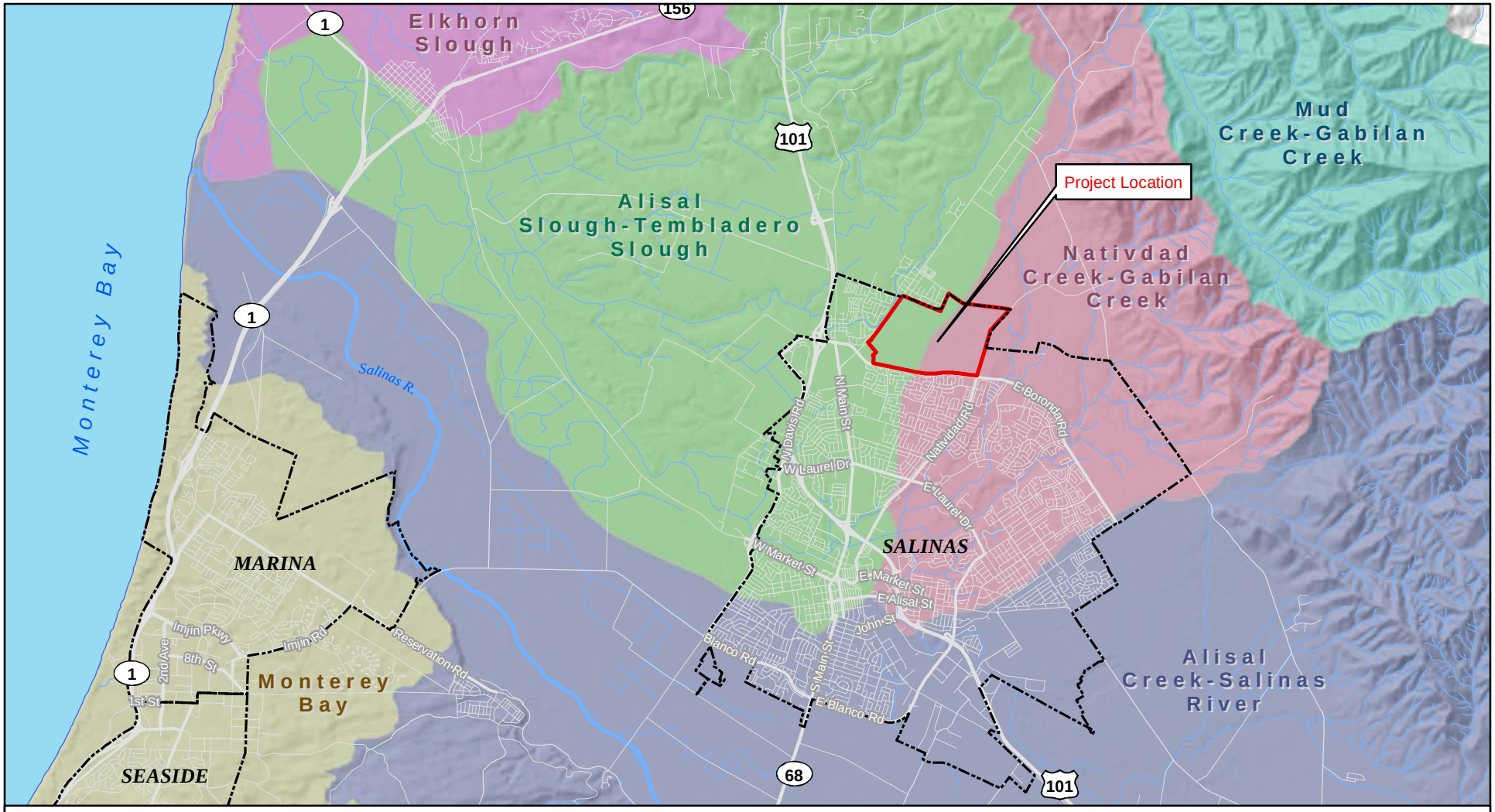
The West Area Specific Plan includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would

originate in the Specific Plan Area. Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the Specific Plan Area. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, and supplemental detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

CONCLUSION

Future development in the area must be sited and designed in accordance with the aforementioned City flood damage regulations (i.e., Article VI, Flood Damage Prevention, of the City's Code). The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures require designs that ensure structures are outside the base flood elevation and that storm water flows are maintained to prevent downstream flooding. The proposed project would not have cumulatively considerable impacts associated with flooding. Overall, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for impacts related to flooding.



HUC-12 (Subwatersheds)

- Alisal Creek-Salinas River
- Alisal Slough-Tembladero Slough
- Elkhorn Slough
- Monterey Bay
- Mud Creek-Gabilan Creek
- Nativdad Creek-Gabilan Creek

N

0 0.5 1

Miles

1:120,000

Sources: USGS National Watershed Boundary Dataset; USGS National Hydrography Dataset; Monterey County GIS. Map date: April 25, 2016. Revised November 21, 2016. Boundary update: February 25, 2019.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.6-1: Watershed Map

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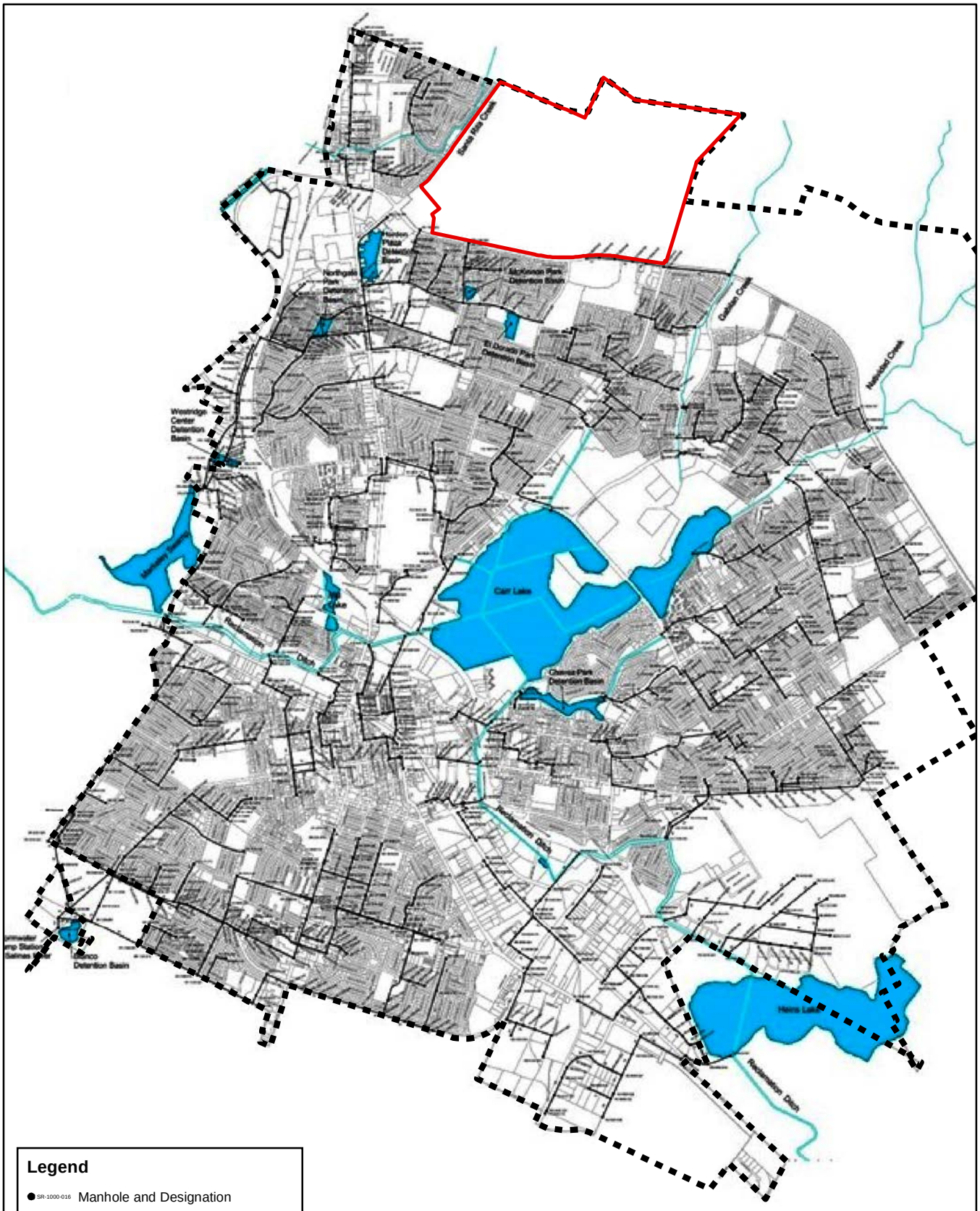

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.6-2: Storm Drainage

Source: City of Salinas Storm Water Master Plan, 2004. Map date: November 29, 2016. Boundary update: February 25, 2019.

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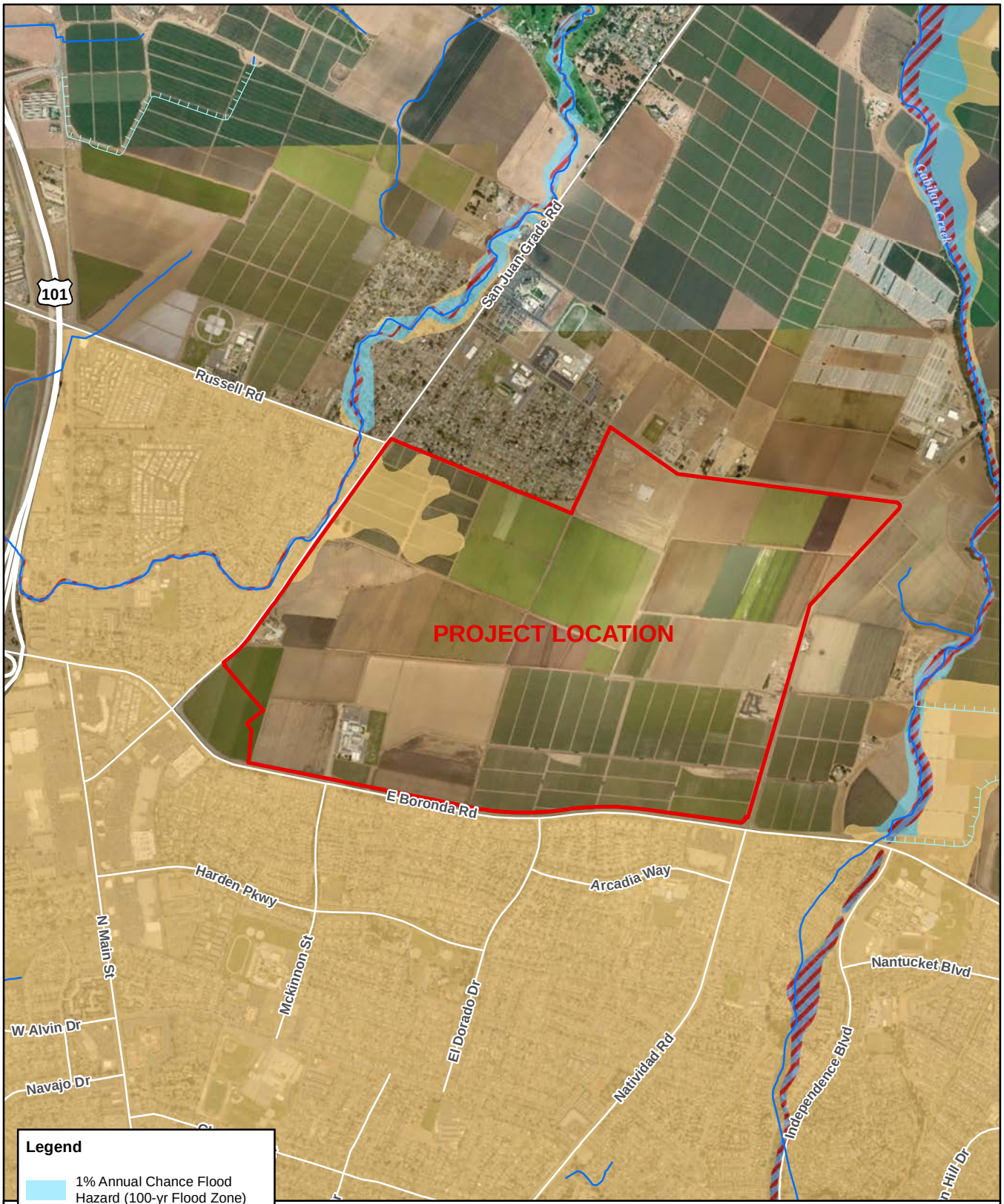

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.6-3: FEMA Flood Map

Sources: FEMA National Flood Hazard Layer, Panels 06053C0207G, 06053C0226G, 06053C0209G; 06053C0228G, eff 4/2/2009; Monterey County; USGS NHD. Map date: April 25, 2016. Revised November 21, 2016. Boundary update: February 25, 2019.

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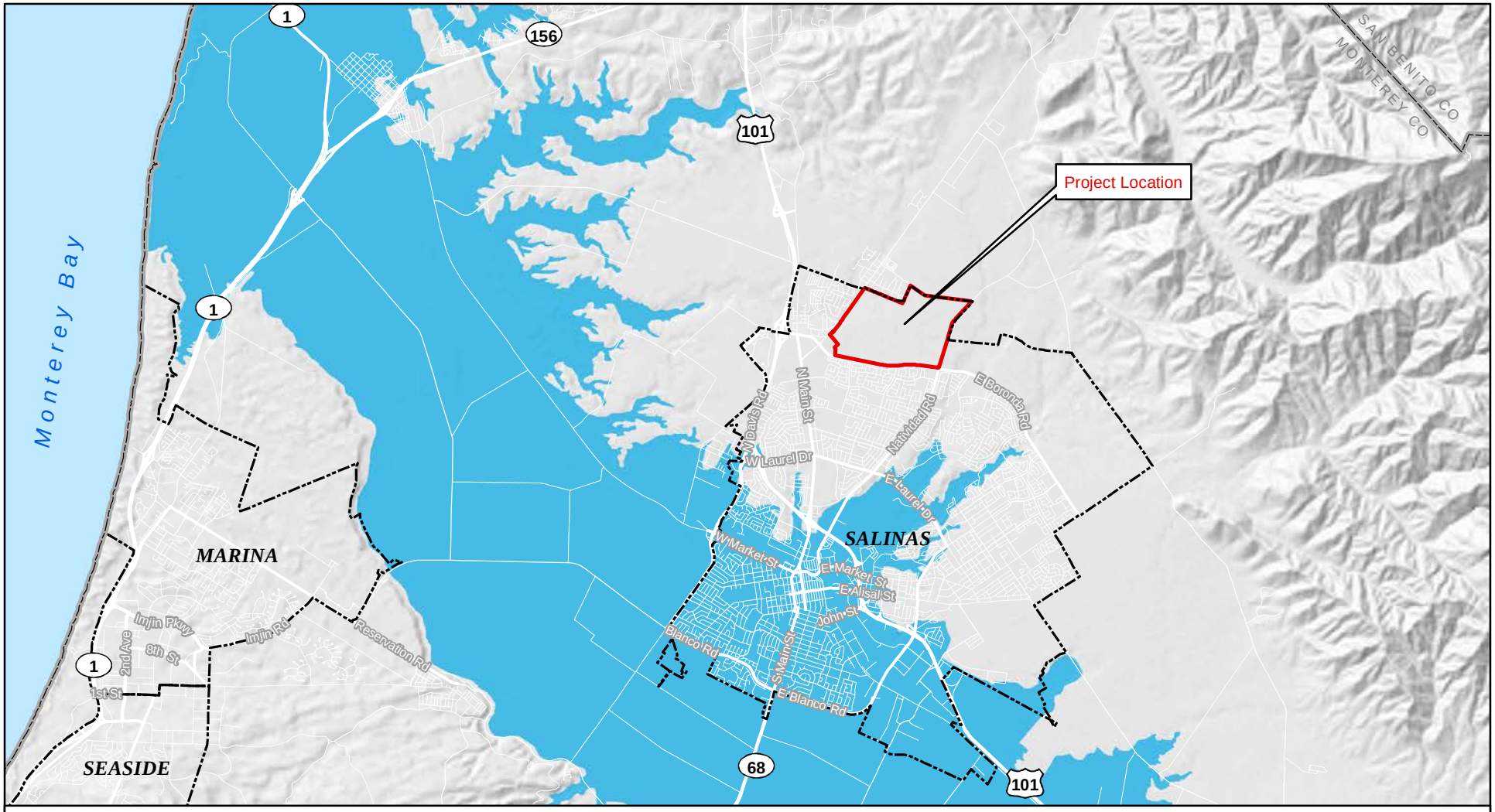

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.6-4: Dam Inundation Areas

Nacimiento Dam and San Antonio Dam Inundation Areas

N

0 0.5 1

Miles

1:120,000

Sources: Cal EMA Dam Inundation Areas; Monterey County GIS.
Map date: August 21, 2018. Boundary update: February 25, 2019.

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This section provides a general description of the existing noise sources in the project vicinity, a discussion of the regulatory setting, and identifies potential noise impacts associated with the proposed project. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment. Mitigation measures have been identified for significant noise-related impacts. The noise analysis was completed by J.C. Brennan & Associates. Inc. (December 2018). The noise data and technical report are included as **Appendix H** of this Draft EIR.

One comment was received during the public review period for the Notice of Preparation from the Santa Rita School District regarding noise that would be generated by the proposed project. No other comments related to noise were received during the public review period for the Notice of Preparation.

3.7.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 to 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
L_{dn}	Day/Night Average Sound Level. Like CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period.
$L_{(n)}$	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50 percent of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.

SEL Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60-dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is like L_{dn}, but includes a +5-dB penalty for evening noise. Table 3.7-1 lists several examples of the noise levels associated with common situations.

TABLE 3.7-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	*NOISE LEVEL (DBA)*	*COMMON INDOOR ACTIVITIES*
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. SEPTEMBER 2013.

EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. The following relationships occur regarding increases in A-weighted noise level:

- Except in carefully controlled laboratory experiments, a 1 dBA change cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE LEVELS

Surrounding Land Uses

North: The Bolsa Knolls residential area is located to the north of the Plan Area on the northeastern corner of the intersection of Russell Road and San Juan Grade Road. Scattered residences and other non-residential uses are also located along Rogge Road to the north. Further to the north is a mix of agricultural land, rural residences, and the Club at Crazy Horse Ranch golf course formerly known as the Salinas Golf and Country Club. Further north is the Butterfly Village planned community, County approved but not yet constructed. These land uses are all located in the unincorporated area of Monterey County.

East: Land to the east of the Plan Area is currently used primarily for agricultural production and is zoned New Urbanism Interim (NI) with a Specific Plan Overlay District. This area is in the North of Boronda Future Growth Area (FGA) and a Specific Plan (referred to as the Central Area Specific Plan) has been submitted to the City and is currently being processed for this area. The Central Area Specific Plan proposes a mix of urban land uses, like those proposed for the West Area Specific Plan. The area northeast of the West Area Specific Plan is located in the County and is currently used for agricultural production.

South: Across East Boronda Road directly to the south is the Harden Ranch Specific Plan Area. The portion of the Harden Ranch Specific Plan abutting the Plan Area is primarily residential. Most of the residences are of the type associated with low density residential uses, mainly single-family detached homes. However, some medium density and high density (multifamily) units are in this area as well. These residential uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-1.8 (Residential High Density). Single-family detached homes (zoned R-L 5.5) are also located to the southeast of the Plan Area (east of Natividad Road). Other land uses in the Harden Ranch Specific Plan Area include a commercial shopping center (Shaker Square) located at the southwest corner of Natividad Road and Boronda Road (zoned Retail Commercial-CR) and the New Republic Elementary School (within the Santa Rita Union

School District) (zoned Public/Semipublic-PS). Extensive commercial development is located generally west and southwest of the Plan Area, along both North Main Street and U.S. 101. This is the location of some of the major retail centers in Salinas, including the Northridge Shopping Center, Santa Rita Shopping Center, and Harden Ranch Plaza. These areas are zoned Commercial Retail (CR).

West: The area directly to the west of the Plan Area contains residential uses consisting of low, medium and high density residential uses. These uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-2.1 (Residential High Density). Also, located farther to the west is Santa Rita Elementary School (within the Santa Rita Union School District) which is zoned PS. The Gateway Center Specific Plan is located at the northeast corner of San Juan Grade Road and E. Boronda Road.

The City and County General Plan land use designations for the above areas are illustrated on Figure 2-3.

Existing Ambient Noise Levels

To quantify the existing ambient noise environment in the project vicinity, short-term and continuous (24-hour) noise level measurements were conducted in the Plan Area on January 19th and 20th, 2016. The noise measurement locations are shown on Figure 3.7-1. The noise level measurement survey results are provided in Table 3.7-2. Appendix A of **Appendix H** of this EIR shows the complete results of the noise monitoring survey.

The sound level meters were programmed to collect hourly noise level intervals at each site during the survey. The maximum value (L_{max}) represents the highest noise level measured during an interval. The average value (L_{eq}) represents the energy average of all the noise measured during an interval. The median value (L_{50}) represents the sound level exceeded 50 percent of the time during an interval.

TABLE 3.7-2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

SITE	LOCATION	DATE/TIME	L_{DN}	AVERAGE MEASURED HOURLY NOISE LEVELS, dB					
				DAYTIME (7AM-10PM)			NIGHTTIME (10PM-7AM)		
				L_{EQ}	L_{50}	L_{MAX}	L_{EQ}	L_{50}	L_{MAX}
Continuous (24-hour) Noise Level Measurements									
A	150 ft. from centerline of San Juan Grade Road	1/19/16-1/20/16 24-hour	58	57	55	71	49	44	64
Short-Term Noise Level Measurements									
1	Southwest corner of site	1/19/16 – 3:40 p.m.	N/A	65	61	71	Traffic on E. Boronda Road is primary noise source		
		1/20/16 – 7:15 a.m.	N/A	65	61	72			
		1/20/16 12:30 p.m.	N/A	62	59	72			
2	North/central portion of site	1/19/16 – 4:25 p.m.	N/A	56	52	70	Distant traffic is primary noise source		
		1/20/16 – 7:40 a.m.	N/A	57	53	71			
		1/20/16 – 1:05 p.m.	N/A	56	52	69			

NOTE: N/A = NOT APPLICABLE.

SOURCE: J.C. BRENNAN & ASSOCIATES, INC., 2018.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

EXISTING ROADWAY NOISE LEVELS

To predict existing noise levels due to traffic, the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calveno reference noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions.

Traffic volumes for existing conditions were obtained from the traffic data prepared for the proposed project by Fehr & Peers, 2018. Truck percentages and vehicle speeds on the local area roadways were estimated from field observations.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each Plan Area roadway segment. Where traffic noise barriers are predominately along a roadway segment, a -5 dB offset was added to the noise prediction model to account for various noise barrier heights. A -5 dB offset was also applied where outdoor activity areas are shielded by intervening buildings. In some locations, sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is believed to be representative of most sensitive receptors located closest to the Plan Area roadway segments analyzed in this section.

Table 3.7-3 shows the existing traffic noise levels in terms of L_{dn} at closest sensitive receptors along each roadway segment. A complete listing of the FHWA Model input data is contained in **Appendix H of this draft EIR**.

TABLE 3.7-3: EXISTING TRAFFIC NOISE LEVELS

ROADWAY	*SEGMENT*	*EXTERIOR TRAFFIC NOISE LEVEL, DB L_{DN}*
Constitution Blvd.	South of E. Boronda	61.9
E. Boronda Rd.	N. Main to San Juan Grade	67.5
E. Boronda Rd.	San Juan Grade to McKinnon	66.4
E. Boronda Rd.	McKinnon to El Dorado	65.9
E. Boronda Rd.	El Dorado to Natividad	65.1
E. Boronda Rd.	Natividad to Independence	67.2
E. Boronda Rd.	Independence to Hemmingway	65.8

ROADWAY	*SEGMENT*	*EXTERIOR TRAFFIC NOISE LEVEL, DB L_{DN}*
E. Boronda Rd.	Hemmingway to Constitution	58.4
E. Boronda Rd.	Constitution to N. Sanborn	60.3
E. Boronda Rd.	N. Sanborn to Williams	58.5
El Dorado Dr.	South of E. Boronda	54.3
Hemmingway Dr.	South of E. Boronda	55.5
Independence Blvd.	South of E. Boronda	60.6
McKinnon St.	South of E. Boronda	64.0
N. Main St.	North of E. Boronda	67.0
N. Main St.	South of E. Boronda	65.3
N. Sanborn Rd.	South of E. Boronda	56.3
Natividad Rd.	South of E. Boronda	65.7
Natividad Rd.	E. Boronda to Future Russell Rd. Ext.	66.9
Natividad Rd.	Future Russell Rd. to Rogge	62.4
Natividad Rd.	North of Rogge	60.6
Old Stage Rd.	North of Future Constitution	57.9
Old Stage Rd.	Future Constitution to Williams	56.7
Old Stage Rd.	South of Williams	54.6
Rogge Rd.	San Juan Grade to Natividad	61.7
Russell Rd.	West of San Juan Grade	65.0
San Juan Grade Rd.	South of E. Boronda	65.2
San Juan Grade Rd.	E. Boronda to Van Buren	69.6
San Juan Grade Rd.	Van Buren to Russell	67.3
San Juan Grade Rd.	Russell to Rogge	66.0
San Juan Grade Rd.	North of Rogge	62.9
Van Buren Ave.	West of San Juan Grade	57.1
Williams Rd.	West of E. Boronda	62.1
Williams Rd.	East of E. Boronda	46.6

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM FEHR & PEERS, AND J.C. BRENNAN & ASSOCIATES, INC. 2018.

3.7.2 REGULATORY SETTING

FEDERAL

There are no federal regulations related to noise that apply to the proposed project.

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise or vibration levels more than local general plans or noise ordinance standards, or cause a substantial permanent or temporary

increase in ambient noise levels. CEQA standards are discussed more below under the Thresholds of Significance section.

California State Building Codes

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room.

Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

Local building codes are updated periodically based upon State updates and each individual building within the Plan Area would be subject to the local Building Code in effect at that time.

City of Salinas General Plan

The City of Salinas General Plan Noise Element includes the following goals, policies, and actions regarding noise that are applicable to the proposed project:

NOISE ELEMENT

Policy N-1-1: Ensure that new development be made compatible with the noise environment by using noise/land use compatibility standards and the Noise Contours Map as a guide for future planning and development decisions.

Policy N-1-2: Require the inclusion of noise-reducing design features in development and reuse/revitalization projects to address the impact of noise on residential development.

Policy N-1-3: Locate only urban development within the Salinas Municipal Airport "area of influence" that is compatible with the airport noise environment and meets the guidelines of the Caltrans Handbook.

Policy N-1-4: Ensure proposed development meets Title 24 Noise Insulation Standards for construction.

Policy N-2-1: Ensure that noise impacts generated by vehicular sources are minimized through the use of noise control measures (i.e. earthen berms, landscaped walls, lowered streets).

Policy N-2-2: Control truck traffic routing to reduce transportation related noise

impacts on sensitive uses.

Policy N-3-1: Enforce the City of Salinas Noise Ordinance to ensure stationary noise sources and noise emanating from construction activities, private developments/residents and special events are minimized.

NOISE COMPATIBILITY STANDARDS

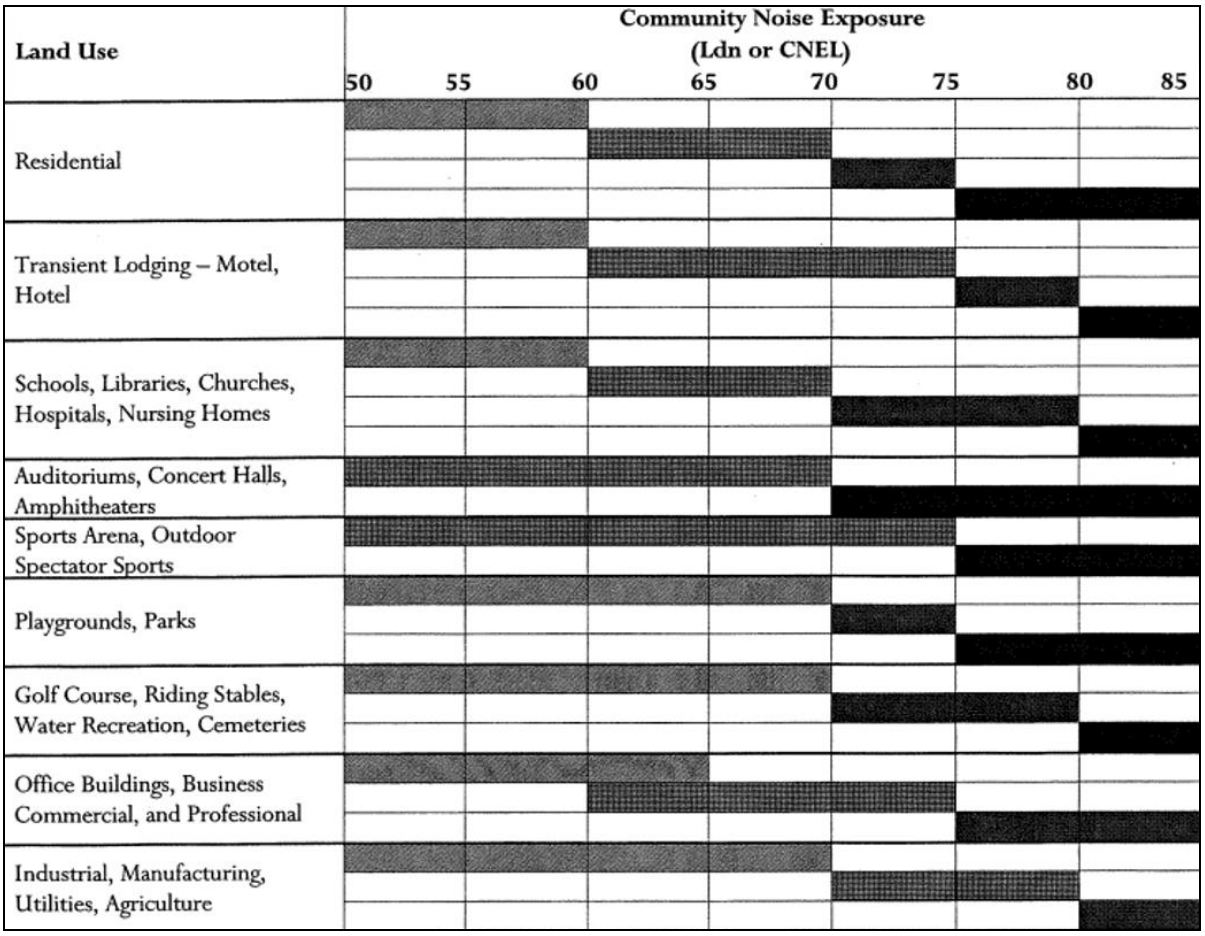
Table N-2 (reprinted as Table 3.7-4 below) of the City of Salinas General Plan shows a simplified view of the maximum noise level of several land use categories. Table N-3 (reprinted as Table 3.7-5 below) gives a detailed overview of the acceptable and unacceptable community noise exposure for all the land use categories that are applied throughout the City. Several of the land use categories are of relevance to the proposed project, namely Residential, Schools, Parks, and Agriculture. However, the Residential land use category is the most sensitive and as such it will be used as the benchmark for Acceptable and Unacceptable noise levels.

TABLE 3.7-4: EXTERIOR NOISE STANDARDS

DESIGNATION/DISTRICT OF PROPERTY RECEIVING NOISE	*MAXIMUM NOISE LEVEL, L_{DN} OR CNEL, DBA*
Agricultural	70
Residential	60
Commercial	65
Industrial	70
Public and Semipublic	60

SOURCE: CITY OF SALINAS GENERAL PLAN, TABLE N-2. SEPTEMBER 2002.

TABLE 3.7-5: NOISE/LAND USE COMPATIBILITY MATRIX



	ZONE A - NORMALLY ACCEPTABLE: *Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.*
	ZONE B - CONDITIONALLY ACCEPTABLE: *New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measure are identified and included in the project design.*
	ZONE C - NORMALLY UNACCEPTABLE: *New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.*
	ZONE D - CLEARLY UNACCEPTABLE: *New construction or development clearly should not be undertaken.*

SOURCE: CITY OF SALINAS GENERAL PLAN, TABLE N-3. SEPTEMBER 2002.

Noise levels of up to 70 dBA are considered conditionally acceptable; new development exposed to such noise levels may only be undertaken after a detailed noise analysis is conducted and noise reduction measures are included in the project design. Noise exposure levels above 70 dBA are considered unacceptable. New development in such areas will likely need substantial mitigation to meet City standards.

City of Salinas Zoning Code and Noise Ordinance

Section 37-50.180 of the Zoning Code identifies performance standards for noise. The maximum noise level for Residential Districts, the most sensitive zone in the Plan Area, is set at 60 dBA. This standard is 5.0 dBA lower between 9:00 p.m. and 7:00 a.m. It is noted that there is a slight reprieve in that noise that is produced for no more than a cumulative period of five minutes in any hour may exceed the standard by 5.0 dBA.

Interior noise level in any residential dwelling unit located in a mixed-use building or development shall not exceed a maximum of 45 dBA from exterior ambient noise. Again, there is a slight reprieve in that noise that is produced for no more than a cumulative period of one minute in any hour may exceed the standards above by 10.0 dBA.

The City's Noise Ordinance, Chapter 21A of the Municipal Code, defines the following classes of noise (A through D) and defines noise regulations that pertain to each class:

- Class A Noise is defined as noise created by equipment operated in the public interest or for emergency or safety purposes. Such equipment includes sirens, street sweepers, garbage trucks, chipper machines, etc. Class A noise is allowed at any time.
- Class B Noise is defined as noise created or generated within or adjacent to residential property which is normally associated with residential living. Class B noise includes lawn mowers, trimmers, home appliances, vehicle repairs, home construction projects, etc. Class B noise is not allowed between 9:00 p.m. and 7:00 a.m.
- Class C Noise is defined as noise made by motorized or mechanical equipment or devices used in sporting, recreational and hobby activities. Class C noise includes go-carts, mini-bikes, model planes and cars, etc. Class C noise is not allowed between 9:00 p.m. and 7:00 a.m. Class C noise must be made at such a distance away from a residential area so that residents will not be unreasonably disturbed by the noise of the equipment or devices.
- Class D Noise is defined as noise that is unnecessary, unnatural or unusual noises created by a human voice or animal outcry, or by any other means which is so annoying, or which is so harsh or prolonged, as to be injurious to the health, peace or comfort of any reasonable person residing in the area. Class D noise is not permitted at any time.

VIBRATION STANDARDS

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface.

As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The City of Salinas does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities and railroad operations are addressed as potential noise impacts associated with project implementation.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events.

Table 3.7-6 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

TABLE 3.7-6: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

PEAK PARTICLE VELOCITY		*HUMAN REACTION*	*EFFECT ON BUILDINGS*
MM/SEC.	*IN./SEC.*		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

3.7.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the Noise Element of the City's General Plan, the City's Noise Ordinance, and the professional judgment of City staff and consultants, the project will have a significant impact related to noise if it will result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels allowed under the City's General Plan Noise Element and the Noise Ordinance in the City's Municipal Code;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels within two miles of a public airport or public use airport; or
- For a project within the vicinity of a private airstrip, expose people residing or working in the Project area to excessive noise levels.

Note: The Plan Area is not located within two miles of a public or private airport or airstrip. Therefore, airplane and airport noise are not discussed further in this analysis.

Determination of a Significant Increase in Noise Levels

The noise standards applicable to the proposed project include the relevant portions of the City of Salinas General Plan, the City of Salinas Zoning Ordinance and Noise Ordinance described in the Regulatory Framework section previously, and the following standards. Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the proposed project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible;
- A 5-dB change is clearly perceptible; and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project noise conditions. Table 3.7-7 is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn}.

TABLE 3.7-7: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

AMBIENT NOISE LEVEL WITHOUT PROJECT, LDN	*INCREASE REQUIRED FOR SIGNIFICANT IMPACT*
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

SOURCE: FEDERAL INTERAGENCY COMMITTEE ON NOISE (FICON)

Based on the Table 3.7-7, an increase in the traffic noise level of 5 dB or more would be significant where the pre-project noise levels are less than 60 dB L_{dn}, or 3 dB or more where existing noise levels are between 60 to 65 dB Ldn. Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 65 dB L_{dn}. The rationale for the Table 3.7-7 criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

It should be noted that the predicted traffic noise levels contained in the following analysis represent a conservative estimate, since they do not take into account the reduction in traffic noise levels associated with the introduction of electric vehicles into the vehicle fleet. Electric vehicles produce far less noise than traditional gasoline or diesel-powered vehicles, and over time it is expected that electric vehicles will increase as a proportion of the vehicle fleet, which will reduce traffic noise compared to the predicted traffic noise levels. Therefore, the predicted future traffic noise levels contained in this analysis represent a worse-case scenario.

IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: The proposed project has the potential to increase traffic noise levels at existing receptors (Significant and Unavoidable)

PROPOSED PROJECT ANALYSIS

Tables 3.7-8 through 3.7-11 show the predicted traffic noise level increases on the local roadway network for Existing No Project, Existing + Project, Existing + Project + Central Area Specific Plan (CASP), Cumulative, Cumulative + Project, and Cumulative + Project + CASP conditions. **Appendix H** of this DEIR provides the complete inputs and results of the FHWA traffic noise modeling.

TABLE 3.7-8: EXISTING AND EXISTING PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	*SEGMENT*	*NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS*				
		EXISTING	*EXISTING + PROJECT*	*CHANGE*	*CRITERIA[1]*	*SIGNIFICANT?*
Constitution Blvd.	South of E. Boronda	61.9	63.4	1.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	67.5	68.0	0.4	+1.5 dB	No
E. Boronda Rd.	San Juan Grade to McKinnon	66.4	66.9	0.5	+1.5 dB	No
E. Boronda Rd.	McKinnon to El Dorado	65.9	66.5	0.6	+1.5 dB	No
E. Boronda Rd.	El Dorado to Natividad	65.1	66.0	0.9	+1.5 dB	No
E. Boronda Rd.	Natividad to Independence	67.2	68.2	1.0	+1.5 dB	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		EXISTING	EXISTING + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT?
E. Boronda Rd.	Independence to Hemmingway	65.8	66.7	0.9	+1.5 dB	No
E. Boronda Rd.	Hemmingway to Constitution	58.4	59.7	1.2	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.3	62.1	1.8	+3 dB	No
E. Boronda Rd.	N. Sanborn to Williams	58.5	59.7	1.2	+5 dB or > 60 dB	No
El Dorado Dr.	South of E. Boronda	54.3	54.7	0.5	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	55.5	56.6	1.1	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.6	62.6	2.0	+3 dB	No
McKinnon St.	South of E. Boronda	64.0	64.2	0.2	+3 dB	No
N. Main	North of E. Boronda	67.0	67.1	0.2	+1.5 dB	No
N. Main	South of E. Boronda	65.3	65.3	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.3	2.0	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**65.7**	**67.3**	**1.6**	**+1.5 dB**	**Yes**
Natividad Rd.	E. Boronda to Future Russell Rd.	66.9	68.1	1.2	+1.5 dB	No
Natividad Rd.	Future Russell Rd. to Rogge	62.4	63.7	1.4	+3 dB	No
Natividad Rd.	North of Rogge	60.6	61.0	0.5	+3 dB	No
Old Stage Rd.	North of Future Constitution	57.9	59.4	1.5	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	56.7	58.3	1.5	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	54.6	55.2	0.6	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	63.4	1.6	+3 dB	No
Russell Rd.	West of San Juan Grade	65.0	65.8	0.8	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.2	65.2	0.0	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.6	69.8	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	67.3	67.3	0.0	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.9	0.9	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	62.9	62.9	0.0	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.1	57.8	0.7	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	62.1	63.6	1.5	+3 dB	No
Williams Rd.	East of E. Boronda	46.6	48.0	1.4	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE. SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2018.*

TABLE 3.7-9: EXISTING AND EXISTING PLUS PROJECT + CASP TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		EXISTING	EXISTING + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
Constitution Blvd.	South of E. Boronda	61.9	63.4	1.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	67.5	68.0	0.4	+1.5 dB	No
E. Boronda Rd.	San Juan Grade to McKinnon	66.4	66.9	0.5	+1.5 dB	No
E. Boronda Rd.	McKinnon to El Dorado	65.9	66.5	0.6	+1.5 dB	No
E. Boronda Rd.	El Dorado to Natividad	65.1	66.0	0.9	+1.5 dB	No
E. Boronda Rd.	Natividad to Independence	67.2	68.2	1.0	+1.5 dB	No
E. Boronda Rd.	Independence to Hemmingway	65.8	66.7	0.9	+1.5 dB	No
E. Boronda Rd.	Hemmingway to Constitution	58.4	59.7	1.2	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.3	62.1	1.8	+3 dB	No
E. Boronda Rd.	N. Sanborn to Williams	58.5	59.7	1.2	+5 dB or > 60 dB	No
El Dorado Dr.	South of E. Boronda	54.3	54.7	0.5	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	55.5	56.6	1.1	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.6	62.6	2.0	+3 dB	No
McKinnon St.	South of E. Boronda	64.0	64.2	0.2	+3 dB	No
N. Main	North of E. Boronda	67.0	67.1	0.2	+1.5 dB	No
N. Main	South of E. Boronda	65.3	65.3	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.3	2.0	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**65.7**	**67.3**	**1.6**	**+1.5 dB**	**Yes**
Natividad Rd.	E. Boronda to Future Russell Rd.	66.9	68.1	1.2	+1.5 dB	No
Natividad Rd.	Future Russell Rd. to Rogge	62.4	63.7	1.4	+3 dB	No
Natividad Rd.	North of Rogge	60.6	61.0	0.5	+3 dB	No
Old Stage Rd.	North of Future Constitution	57.9	59.4	1.5	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	56.7	58.3	1.5	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	54.6	55.2	0.6	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	63.4	1.6	+3 dB	No
Russell Rd.	West of San Juan Grade	65.0	65.8	0.8	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.2	65.2	0.0	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.6	69.8	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	67.3	67.3	0.0	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.9	0.9	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	62.9	62.9	0.0	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.1	57.8	0.7	+5 dB or > 60 dB	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		EXISTING	EXISTING + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
Williams Rd.	West of E. Boronda	62.1	63.6	1.5	+3 dB	No
Williams Rd.	East of E. Boronda	46.6	48.0	1.4	+5 dB or > 60 dB	No

NOTE: [1] EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*
SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2018.

TABLE 3.7-10: CUMULATIVE AND CUMULATIVE PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT?
Constitution Blvd.	South of E. Boronda	62.2	64.7	2.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	66.5	67.9	1.3	+1.5 dB	No
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.7**	**2.4**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	65.9	1.4	+3 dB	No
E. Boronda Rd.	El Dorado to Natividad	64.1	67.0	2.9	+3 dB	No
E. Boronda Rd.	Natividad to Independence	66.6	68.0	1.4	+1.5 dB	No
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**66.9**	**1.8**	**+1.5 dB**	**Yes**
E. Boronda Rd.	Hemmingway to Constitution	58.2	59.9	1.7	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.0	2.4	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.0**	**2.4**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	54.8	0.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	60.8	0.3	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.2	1.6	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	66.9	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.4	2.1	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**66.8**	**3.7**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.1**	**3.0**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.3	0.2	+3 dB	No
Natividad Rd.	North of Rogge	62.0	62.3	0.3	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.1	0.0	+5 dB or > 60 dB	No

Roadway	Segment	Noise Levels (L_{DN}, dB) at Nearest Sensitive Receptors				
		Cumulative	Cumulative + Project	Change	Criteria[1]	Significant ?
Old Stage Rd.	Future Constitution to Williams	58.0	58.0	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	56.2	0.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	West of San Juan Grade	67.5	68.7	1.2	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.8	66.7	0.8	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.2	1.6	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.7	0.0	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2018.

TABLE 3.7-11: CUMULATIVE AND CUMULATIVE PLUS PROJECT + CASP TRAFFIC NOISE LEVELS

Roadway	Segment	Noise Levels (L_{DN}, dB) at Nearest Sensitive Receptors				
		Cumulative	Cumulative + Project + CASP	Change	Criteria[1]	Significant?
Constitution Blvd.	**South of E. Boronda**	**62.2**	**65.7**	**3.5**	**+3 dB**	**Yes**
E. Boronda Rd.	**N. Main to San Juan Grade**	**66.5**	**68.1**	**1.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.9**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	66.1	1.7	+3 dB	No
E. Boronda Rd.	**El Dorado to Natividad**	**64.1**	**67.4**	**3.3**	**+3 dB**	**Yes**
E. Boronda Rd.	**Natividad to Independence**	**66.6**	**69.3**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**68.6**	**3.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Hemmingway to Constitution**	**58.2**	**61.3**	**3.0**	**+5 dB or > 60 dB**	**Yes**
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.8	3.2	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.7**	**3.1**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
Hemmingway Dr.	South of E. Boronda	54.8	58.8	4.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	62.1	1.6	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.3	1.7	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	67.0	0.2	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.9	2.6	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**67.5**	**4.5**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.9**	**3.8**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.9	0.8	+3 dB	No
Natividad Rd.	North of Rogge	62.0	63.0	1.1	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.8	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.7	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	57.2	1.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	**West of San Juan Grade**	**67.5**	**69.4**	**1.9**	**+1.5 dB**	**Yes**
San Juan Grade Rd.	South of E. Boronda	65.8	66.9	1.1	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.8	2.2	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.8	0.1	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2018.

As shown in Tables 3.7-8 through 3.7-11, some noise-sensitive receptors located along the Plan Area roadways are currently exposed to exterior traffic noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard for residential uses. These receptors would continue to experience elevated exterior noise levels with implementation of the proposed project. For example, under Existing conditions sensitive receptors located adjacent to E. Boronda Road

between N. Main and San Juan Grade currently experience an exterior noise level of approximately 67.5 dB L_{dn}. This exceeds the City's Normally Acceptable exterior noise level standard of 60 dB L_{dn}. Under Existing Plus Project conditions, exterior traffic noise levels are predicted to be approximately 68.0 dB L_{dn}. This would also exceed the City's Normally Acceptable exterior noise level standard of 60 dB L_{dn}. However, the proposed project's contribution of 0.4 dB would not exceed the FICON criteria of 1.5 dB where existing noise levels exceed 65 dB. Therefore, the project's contribution to noise in this location would be a less than significant impact at this location.

Overall, in some locations, the proposed project is predicted to cause increases in traffic noise levels which would trigger a new exceedance of the City of Salinas 60 dB L_{dn} exterior noise level standard at sensitive receptor locations, or exceed the FICON allowable increase criteria outlined in Table 3.7-7. The greatest number of significant traffic noise increases would occur under the Cumulative + Project + CASP traffic condition. However, all analyzed plus project traffic scenarios would result in significant increases in traffic noise.

As shown in Table 3.7-8, the segment of Natividad Road south of E. Boronda Road would experience unacceptable noise levels under Existing Plus Project conditions. The project would cause noise levels along this segment to increase by 1.6 dB.

As shown in Table 3.7-9, the segment of Natividad Road south of E. Boronda Road would experience unacceptable noise levels under Existing Plus Project Plus CASP conditions.

As shown in Table 3.7-10, the following roadway segments would experience unacceptable noise levels under Cumulative Plus Project conditions:

- E. Boronda Road from San Juan Grade to McKinnon (2.4 dB increase);
- E. Boronda Road from Independence to Hemmingway (1.8 dB increase);
- E. Boronda Road from N. Sanborn to Williams (2.4 dB increase);
- Natividad Road south of E. Boronda (3.7 dB increase); and
- Natividad Road from E. Boronda to Future Russell Road (3.0 dB increase).

As shown in Table 3.7-11, significant traffic noise increases are anticipated under the Cumulative Plus Project Plus CASP traffic condition include the following segments:

- Constitution Blvd., South of E. Boronda – noise levels are predicted to increase by 3.5 dB from 62.2 dB to 65.7 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Main to San Juan Grade – noise levels are predicted to increase by 1.5 dB from 66.5 dB to 68.1 dB L_{dn}. This would equal the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, San Juan Grade to McKinnon – noise levels are predicted to increase by 2.6 dB from 65.3 dB to 67.9 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.

- E. Boronda Road, El Dorado to Natividad – noise levels are predicted to increase by 3.3 dB from 64.1 dB to 66.1 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Natividad to Independence – noise levels are predicted to increase by 2.6 dB from 66.6 dB to 69.3 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Independence to Hemmingway – noise levels are predicted to increase by 3.5 dB from 65.1 dB to 68.6 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Hemmingway to Constitution – noise levels are predicted to increase by 3.0 dB from 58.2 dB to 61.3 dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- E. Boronda Road, N. Sanborn to Williams – noise levels are predicted to increase by 3.1 dB from 59.6 dB to 62.7dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- Natividad Road., South of E. Boronda – noise levels are predicted to increase by 4.5 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- Natividad Road., E. Boronda to Future Russell Road – noise levels are predicted to increase by 3.8 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7. However, it should be noted that this roadway segment is located between the West Area Specific Plan and Central Area Specific Plan projects and future sensitive receptors along this roadway would be constructed with noise control measures designed to achieve compliance with the City of Salinas exterior and interior noise level standards.
- Russell Road, West of San Juan Grade – noise levels are predicted to increase by 1.9 dB from 67.5 dB to 69.4 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.

CONCLUSION

The proposed project would cause increased noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard at existing residential receptors. Therefore, this would be a **potentially significant** impact. Additionally, traffic noise level increases would exceed the FICON CEQA substantial increase criteria of 1.5 to 5 dB, as outlined in Table 3.7-7. Therefore, this would be a **potentially significant** impact.

The Specific Plan Area was assumed for urban development under the City's General Plan and General Plan FEIR. As such, development of the Specific Plan Area for urban uses was analyzed in the General Plan FEIR. Build-out of the City's General Plan land use map, including the Specific

Plan Area, will inherently result in an increase in traffic-related noise levels. The City of Salinas certified the *Final Environmental Impact Report, Salinas General Plan* (City of Salinas, 2002), adopted a statement of overriding considerations relative to this significant and unavoidable impact, and approved the Salinas General Plan. Subsequently, the *Final Supplemental for the Salinas General Plan Final Program EIR* (City of Salinas, 2007) indicated that noise impacts associated with the North of Boronda Future Growth Area (FGA), which includes the Specific Plan Area, would not be different than those discussed in the *Final Environmental Impact Report, Salinas General Plan* (City of Salinas, 2002).

Any future development under the approved General Plan, which includes all development under the proposed project, would be required to comply with the City of Salinas General Plan, including all regulations, policies, and standards. In addition, all mitigation measure adopted as part of the *Final Environmental Impact Report, Salinas General Plan* (City of Salinas, 2002) and the *Final Supplemental for the Salinas General Plan Final Program EIR* (City of Salinas, 2007) are applicable to the proposed project.

Increasing the height of existing sound walls could be a potential mitigation measure in some locations; however, in some locations it may prove impractical or infeasible for a variety of reasons. The footings for the walls would need to be reengineered and resized, which may result in encroachment into private property. Such encroachment would require private property owners to allow permission to enter their property. There is a possibility that private property owners have pools or other structures proximate to the existing walls that could inhibit the reconstruction of the sound wall. Also, the height of a sounds wall could result in aesthetic impacts that are unwanted in the community.

The use of quieter pavement technologies could be a potential mitigation measure. Research shows that a minimum of 3 dBA can be achieved by using alternative pavements, such as rubberized asphalt or open gap materials. Costs for these pavement technologies vary, but they have been proven to be comparable to traditional pavements. However, alternative pavement tends to wear down as trucks and automobiles travel over these roadway segments, decreasing its noise reduction effectiveness and increasing replacement costs. As such, rubberized asphalt is not highly desirable in most communities in California and would not be feasible or practicable in the City of Salinas in the long term.

The proposed project would implement several mitigation measures that are specifically intended to ensure compliance with the City of Salinas noise standards. This includes Mitigation Measure 3.7-1 and -2, which impose construction related measures to mitigate noise to the extent feasible. Mitigation Measures 3.7-3, -4, and -5 provide requirements for the installation of noise barriers (i.e. sounds walls/berms), and the use of building materials that will reduce traffic noise levels on adjacent noise sensitive uses. Mitigation Measure 3.7-6 provides requirements for designing parks/play areas to ensure appropriate separation/buffer between noise and the noise sensitive areas. Mitigation Measure 3.7-7 provides requirements for design of commercial, business professional, office, or similar uses that abut residential uses to ensure that operations do not cause noise impacts. Lastly, Mitigation Measure 3.7-8 includes requirements for well sites to

ensure that they are designed and built to not exceed acceptable noise levels. Nevertheless, even with implementation of these mitigation measures, there is the potential for noise levels to exceed the acceptable levels in some cases if encroachment into private property proves for the construction of sounds walls proves to be infeasible. As discussed previously, such encroachment would require private property owners to allow permission to enter their property and there is a possibility that private property owners have pools or other structures proximate to the existing walls that could inhibit the reconstruction of the sound wall. Also, the height of a sounds wall could result in aesthetic impacts that are unwanted in the community. Given that there is a possibility of not being able to feasibility install sounds walls in some locations, there will remain a possibility that the noise impact exceeds the acceptable levels. This would be a ***significant and unavoidable*** impact.

MITIGATION MEASURES

Implement Mitigation Measures 3.7-1 and 3.7-8.

Impact 3.7-2: The proposed project has the potential to increase noise levels associated with construction activities (Less than Significant with Mitigation)

During the construction of the project, including roads, water, and sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the project vicinity. Existing sensitive receptors are located in the nearby residences, some of which are as close as 50 feet from the proposed construction activities. As indicated in Table 3.7-12, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours, which are the least sensitive hours. Additionally, the majority of construction activities would occur at distances of 300 to 500 feet from the nearest residences. At these further distances, the maximum noise levels due to construction at the interior of the site would range from 60 to 70 dBA.

TABLE 3.7-12: CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	*MAXIMUM LEVEL, DB AT 50 FEET*
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration and would likely occur primarily during daytime hours.

The proposed project has the potential to increase noise levels associated with construction activities. Construction activities would be temporary in nature and are exempt from noise regulation during the hours of 7:00 a.m. to 9:00 p.m., as outlined in the City's Municipal Code for Type B noise. Additionally, the project site was assumed for urban development as part of the City's General Plan and General Plan EIR. Build-out of the City's General Plan land use map, including the proposed project site, will inherently result in construction and construction-related noise levels. Implementation of the following mitigation measures will ensure that these potential impacts are reduced to a ***less than significant*** level.

MITIGATION MEASURES

Mitigation Measure 3.7-1: *Prior to the approval of site improvement plans and respective permits, plans shall note that construction activities shall adhere to the requirements of the City of Salinas Municipal Code with respect to hours of operation.*

Mitigation Measure 3.7-2: *Prior to the approval of site improvement plans and respective permits, plans shall note that all equipment shall be fitted with factory equipped mufflers and in good working order. All stationary noise generating equipment (i.e. generators) shall be located at least 300 feet from a sensitive receptor. All construction staging areas shall be located at least 300 feet from a sensitive receptor.*

Impact 3.7-3: The proposed project has the potential to increase noise vibration association with construction activities (Less than Significant)

The primary vibration-generating activities associated with the proposed project would happen during construction when activities such as grading, utilities placement, and road construction occur. Sensitive receptors which could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located approximately 100 feet or further from the Plan Area. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 3.7-13 shows the typical vibration levels produced by construction equipment.

TABLE 3.7-13: VIBRATION LEVELS FOR VARYING CONSTRUCTION EQUIPMENT

TYPE OF EQUIPMENT	*PEAK PARTICLE VELOCITY @ 25 FEET (INCHES/SECOND)*	*PEAK PARTICLE VELOCITY @ 100 FEET (INCHES/SECOND)*
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006

Table 3.7-13 data indicate that construction vibration levels anticipated for the proposed project are less than the 0.1 in/sec criteria at distances of 50 feet. The proposed project would not increase noise vibration associated with construction activities. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. Implementation of the proposed project would have a ***less than significant*** impact relative to this environmental topic.

Impact 3.7-4: The proposed project has the potential to expose new sensitive receptors to excessive transportation noise (Less than Significant with Mitigation)

EXTERIOR NOISE IMPACTS

The FHWA traffic noise prediction model was used to predict Cumulative + Project + CASP traffic noise levels at the proposed residential land uses associated with the proposed project. Table 3.7-14 shows the predicted traffic noise levels at the proposed residential uses adjacent to the major Plan Area arterial roadways. Table 3.7-14 also indicates the property line noise barrier heights required to achieve compliance with an exterior noise level standard of 60 dB L_{dn}.

The complete inputs and results to the FHWA traffic noise prediction model and barrier calculations are contained in Appendix C of the Noise Study (see **Appendix H** of this EIR). The modeled noise barriers assume flat site conditions where roadway elevations, base of wall elevations, and building pad elevations are approximately equivalent.

To describe future noise levels due to traffic, FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. Direct inputs to the model included traffic volumes provided by Fehr & Peers (2018). The FHWA model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict L_{dn}/CNEL values, it is necessary to determine the day/night distribution of traffic and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

TABLE 3.7-14: CUMULATIVE + PROJECT TRANSPORTATION NOISE LEVELS AT PROPOSED RESIDENTIAL USES

ROADWAY	APPROXIMATE RESIDENTIAL SETBACK, FEET[1]	ADT	PREDICTED TRAFFIC NOISE LEVELS, DB L_{DN}[2]					
			NO WALL	6' WALL	7' WALL	8' WALL	9' WALL	10' WALL
E. Boronda - Nearest Residential	85	46,700	71	65	64	62	61	60
San Juan Grade Road - Nearest Residential	85	19,500	67	61	60	59	57	56
Russell Road - Nearest Residential	85	13,000	65	59	57	56	55	54
Rogge Road - Nearest Residential	45	5,200	62	55	54	53	52	50
Natividad Road - Nearest Residential	65	30,400	71	64	63	62	61	60

NOTES: ADT = AVERAGE DAILY TRIPS

[1] SETBACK DISTANCES ARE MEASURED IN FEET FROM THE CENTERLINES OF THE ROADWAYS TO THE CENTER OF RESIDENTIAL BACKYARDS.

[2] THE MODELED NOISE BARRIERS ASSUME FLAT SITE CONDITIONS WHERE ROADWAY ELEVATIONS, BASE OF WALL ELEVATIONS, AND BUILDING PAD ELEVATIONS ARE APPROXIMATELY EQUIVALENT. SOUND WALL HEIGHT MAY BE ACHIEVE D THROUGH THE USE A WALL AND EARTHEN BERM TO ACHIEVE THE TOTAL HEIGHT (I.E. 6-FOOT WALL ON 2-FOOT BERM IS EQUIVALENT TO AN 8-FOOT TALL WALL).

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM FEHR & PEERS, AND J.C. BRENNAN & ASSOCIATES, INC. 2018.

CONCLUSION

Table 3.7-14 data indicate that noise barriers 6- to 8-feet in height would generally be sufficient to achieve compliance with the City of Salinas 60 dB L_{dn} exterior noise level standard for the proposed residential uses. However, for the residential uses located along E. Boronda Road and Natividad Road, sound walls of 6- to 8-feet in height would only reduce exterior noise levels to 62 to 65 dB L_{dn}. While these noise level do not meet the City's preferred 60 dB L_{dn} noise standards, they would comply with the City's conditionally acceptable standard of 60 to 70 dB L_{dn}. Final wall heights should be determined at the discretion of the City. With implementation of the following exterior noise mitigation measures, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-3: *Prior to the approval of site improvement plans and respective permits, the plans shall note the location, design and constructions details of the eight-foot to nine-foot tall sound attenuation walls and/or landscaped berm/wall combinations, as applicable, that will be constructed along the primary Plan Area roadways, adjacent to proposed residential dwellings, in order to achieve the City's exterior noise standards. At the City's discretion, wall heights which achieve the City's conditionally acceptable 60-70 dB L_{dn} noise standard may be allowed. See the Draft EIR Table 3.7-14 for specific noise barrier/wall heights along each roadway. Noise barrier walls shall be constructed of concrete panels, concrete masonry units, stucco or manufactured materials (with a density of four pounds per square foot or greater), earthen landscaped berms, or any combination of these materials as determined appropriate by the City of Salinas. The*

design/appearance of the wall is subject to the design approval by the City of Salinas based upon the standards contained in the West Area Specific Plan and the Salinas Zoning Code, as applicable to ensure that it is visually pleasing. Wood is not permitted due to eventual warping and degradation of acoustical performance. The walls shall not have gaps or penetrations which allow sound to flank through or around the walls. Small gaps which may occur using materials such as "keystone" blocks shall be avoided. Additionally, in accordance with Section 5-03.19 of the City's Municipal Code, best management practices shall be incorporated into the sound wall design in order to control graffiti and/or mitigate the potential impacts of graffiti. These graffiti prevention best management practices may include, without limitation:

(1) The use or the installation and maintenance of ant-graffiti materials and surface treatments approved by the City on likely graffiti-attracting surfaces.

(2) Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces.

(3) Installation and maintenance of lighting to protect likely graffiti-attracting surfaces.

(4) Immediate removal of graffiti by appropriate means within seventy-two hours.

(5) Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).

(6) Authorizing right of access by city employees or contract agents to remove graffiti if not removed within specified time periods.

(7) Supplying the city at its request with paint (of the appropriate color and type), cleaning agents, and/or other materials acceptable to the city to abate or to deter graffiti.

(8) Other requirements, as deemed reasonably feasible by the city planner, to deter, to protect or to reduce the potential for graffiti defacement.

INTERIOR NOISE IMPACTS

Modern construction typically provides a 25-dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dB L_{dn}, or less, will typically comply with the City of Salinas 45 dB L_{dn} interior noise level standard. Additional noise reduction measures, such as acoustically-rated windows, are generally required for exterior noise levels exceeding 70 dB L_{dn}.

It should be noted that exterior noise levels are typically 2 to 3 dB higher at second floor locations. Additionally, noise barriers do not reduce exterior noise levels at second floor locations. The proposed residential uses are predicted to be exposed to unmitigated first floor exterior

transportation noise levels ranging between 62 to 71 dB L_{dn}. Therefore, second floor facades are predicted to be exposed to exterior noise levels of up to 65 to 74 dB L_{dn}.

Based upon a 25-dB exterior-to-interior noise level reduction, interior noise levels are predicted to range between 40 to 49 dB L_{dn}. Predicted interior noise levels would exceed the City's 45 dB L_{dn} interior noise level standard at the first row of residential uses located closest to E. Boronda Road and Natividad Road. Therefore, additional interior noise control measures would be required for these residential uses along E. Boronda Road and Natividad Road. To reduce interior noise levels to 45 dB L_{dn}, or less, it is likely that second floor facades would require windows having a Sound Transmission Class (STC) 35 rating, or higher. Exterior walls would also likely require 3-coat stucco and RC-channels. This would specifically apply to the first row of homes along E. Boronda Road and Natividad Road and would not apply to facades facing away from the roadway.

CONCLUSION

This analysis assumes that mechanical ventilation will be provided to allow residents to keep doors and windows closed, as desired for acoustical isolation. With implementation of the following interior noise mitigation measures, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-4: *Prior to the approval of building permits, the first row of residential dwellings located along E. Boronda Road and Natividad Road shall include windows having a Sound Transmission Class (STC) 35, or higher, rating installed in second floor facades and rooms that have windows or doors that face E. Boronda Road and/or Natividad Road. Exterior walls shall also require 3-coat stucco and RC-channels. The exterior wall specifications would specifically apply to the first row of homes and does not apply to facades facing away from the roadway. These requirements shall be included in the building plans for the specific dwelling units and noted on the building permits. A detailed analysis of any additional interior mitigation measures shall be conducted when building plans are available and prior to building permit issuance to verify these requirements. These requirements shall also be noted in the site improvement plans prior to approval by the City.*

Mitigation Measure 3.7-5: *Prior to the approval of building permits, mechanical ventilation shall be required in the first row of all residential dwellings that face E. Boronda Road and/or Natividad Road, sufficient to allow residents, as desired for acoustical isolation, to keep their doors and windows closed and still maintain acceptable interior temperature and noise levels. This requirement shall be included in the building plans for the specific dwelling units and noted on the building permits. This requirement shall also be noted in the site improvement plans prior to approval by the City.*

Impact 3.7-5: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed park and school uses (Less than Significant with Mitigation)

Children playing at neighborhood parks or outdoor recreational fields (softball, soccer, basketball, tennis) are often considered potentially significant noise sources which could adversely affect adjacent noise-sensitive land uses. Typical noise levels associated with groups of approximately 50 children playing at 50 feet generally range from 55 to 60 dB L_{eq} and 70 to 75 dB L_{max}. It is expected that park activities would occur primarily during daytime hours. Therefore, noise levels from the playgrounds would need to comply with the City of Salinas exterior noise level standards of 60 dB L_{eq} and 70 dB L_{max} at the nearest residential uses.

Based upon the referenced noise level data discussed above, the 60 dB L_{eq} noise contour would be located approximately 50 feet from the center of playgrounds or recreational fields. The 70 dB L_{max} noise contour would extend approximately 90 feet from the center of playground or recreational fields. For residential backyards located less than 90 feet from the center of a playground or recreational field, noise levels may exceed the City of Salinas 70 dB L_{max} exterior noise level standard. In this case, construction of a 6-foot tall masonry sound wall would provide an approximate noise level reduction of 5 dB and would typically reduce noise levels to 60 dB L_{eq} and 70 dB L_{max}, or less.

With implementation of the following exterior mitigation measure, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-6:

Prior to the approval of site improvement plans, as applicable, when parks or play areas are located near residential uses, the center of active play areas, such as football fields, soccer fields or other athletic fields, shall be located at a minimum distance of 90-feet from the nearest residential property lines. Large active play areas shall comply with the 60 dB L_{eq} and 70 dB L_{max} standards, and shall include these further noise level evaluations during the design phases of future park areas.

Parks shall be designed such that residences front, or side in limited locations where approved by the City Planner, to the park. Minimum 6-foot tall sound walls and/or landscaped berms shall be constructed where school site directly abuts a residential property line in instances where site design (i.e., minimum distances, siting of activity areas, etc.) cannot achieve the 60 dB L_{eq} and 70 dB L_{max} noise standards. No wall shall be required where residential uses are fronted towards a park or school site and separated by a roadway or a walkway.

Noise barrier walls shall be constructed of concrete panels, concrete masonry units, stucco or manufactured materials (with a density of four pounds per square foot or greater), earthen

landscaped berms, or any combination of these materials as determined appropriate by the City of Salinas. The design/appearance of walls is subject to the design approval by the City of Salinas based upon the standards contained in the West Area Specific Plan and the Salinas Zoning Code, as applicable to ensure that it is visually pleasing. Wood is not permitted due to eventual warping and degradation of acoustical performance. The walls shall not have gaps or penetrations which allow sound to flank through or around the walls. Small gaps which may occur using materials such as "keystone" blocks shall be avoided. Additionally, in accordance with Section 5-03.19 of the City's Municipal Code, best management practices shall be incorporated into the sound wall design in order to control graffiti and/or mitigate the potential impacts of graffiti (see mitigation 3.7.3 for further discussion of best management practices.)

Impact 3.7-6: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed commercial mixed-uses (Less than Significant with Mitigation)

COMMERCIAL AND OFFICE LAND USES

Mixed-use commercial land use activities can produce noise levels which affect adjacent sensitive land uses. These noise sources can be continuous and may contain tonal components which may be annoying to individuals who live in the vicinity. In addition, noise generation from fixed noise sources may vary based upon climatic conditions, time of day, and existing ambient noise levels. The primary noise sources generally include truck deliveries, trash pickup, parking lot use, and heating, ventilation, and air conditioning (HVAC) equipment operation. These sources may result in noise levels exceeding the City's standards at nearby receptors.

MECHANICAL EQUIPMENT

HVAC equipment can be a primary noise source associated with commercial mixed uses. These types of equipment are often mounted on roof tops, located on the ground, or located within mechanical rooms. The noise sources can take the form of fans, pumps, air compressors, chillers, or cooling towers. Noise levels from these types of equipment can vary significantly. Noise levels from these types of sources generally range between 45 dB to 70 dB at 50 feet and could exceed City standards at nearby receptors.

MEASURES TO REDUCE NOISE EXPOSURE FROM COMMERCIAL MIXED USES

Use of Setbacks: Noise exposure may be reduced by increasing the distance between the noise source and the noise-receiving use. Setbacks can take the form of open space, frontage roads, recreational areas, etc. The available noise attenuation from this technique is limited by the characteristics of the noise source, but is generally 3 to 6 dB per doubling of distance from the source. The rule-of-thumb is that most traffic and railroad noise levels will decrease or increase by approximately 4.5 dB per doubling, or halving of distance, respectively. Noise from point sources, such as HVAC equipment, will generally attenuate at 6 dB per doubling of distance.

Use of Barriers: Noise reduction can be accomplished by placing walls, berms or other structures, such as buildings, between the noise source and the receiver. In addition, intervening topography can be an effective barrier for noise control. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increases in distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction. Walls within the interior of the Specific Plan are generally not encouraged.

In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path length difference for a given increase in barrier height than does a location closer to either source or receiver.

Site Design, Building Locations, and Building Orientations: Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise levels caused by reflections. As an example, carports or garages can be used to form or complement a barrier, or shield an outdoor activity area. Placement of outdoor activity areas on the opposite side of the building facades from the noise source, or within the shielded portion of a building complex, such as a central courtyard, can also be an effective method of providing a quiet retreat in an otherwise noisy environment.

CONCLUSION

With implementation of the following exterior mitigation measure, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-7: *Prior to the approval of development review permits, the plans shall demonstrate: where commercial, business professional, office, or similar uses abut residential uses or where loading docks or truck circulation routes face residential areas, the following measures shall be included in the project design:*

- *All HVAC equipment shall be located within mechanical rooms where possible or shielded from view with solid or grated barriers;*
- *Emergency generators shall comply with the City's noise criteria at the nearest noise-sensitive receivers;*
- *Delivery/loading activities shall comply with the Salinas Zoning Code standards and regulations; and*

The applicant shall submit a noise study to verify that the appropriate noise control measures have been incorporated into the project design and will achieve compliance with the City's noise level standards..

Impact 3.7-7: The proposed project has the potential to expose sensitive receptors to substantial noise from proposed well sites (Less than Significant with Mitigation)

Typical noise levels for well sites at 50 feet are expected to be 60 dB L_{eq}. If a backup generator is present and running, a noise level of 70 dB L_{eq} at 50 feet would be expected. It is expected that wells could operate during daytime or nighttime hours. Long-term operation of the backup generator would only occur under emergency conditions and would therefore not be subject to the City of Salinas exterior noise level standards for Class A noise. However, weekly exercising of the generator may be subject to the City's 60 dB L_{eq} daytime exterior noise level standard at the nearest noise-sensitive residential receptors.

The specific design features of the well sites are not currently known and the associated noise levels cannot be precisely determined at the nearest proposed residential units. Therefore, the well sites should be limited to generating a noise level not exceeding the City's nighttime noise standard of 55 dB L_{eq} at the nearest on-site residential property lines under normal operations. Generators should not exceed the City's daytime noise standard of 60 dB L_{eq}. This will ensure compliance with the City's noise ordinance standards at both on-site and off-site receptors. With implementation of the following exterior mitigation measure, the proposed project would have a ***less than significant*** impact relative to this environmental topic.

MITIGATION MEASURES

Mitigation Measure 3.7-8: *The potential well and treatment plant sites are shown in the Specific Plan. The actual well and treatment plant facilities are subject to the approval of a Conditional Use Permit (CUP) by the City pursuant to the requirements of the Salinas Zoning Code and the West Area Specific Plan. The potential well and treatment plant sites and the CUP requirement for said facilities shall be clearly noted on the site improvement plans.*

Prior to approval of the CUP and subsequent issuance of the building permits for the well and treatment plant facilities, the plans shall demonstrate that the following measures shall be included in the project design:

- *The well and treatment facilities have been designed and will be built to not exceed a noise level of 55 dB L_{eq} at the nearest residential or school property line during normal operation of the facilities;*
- *The generators shall not be permitted to exceed the City's daytime noise standard of 60 dB L_{eq};*
- *The generators shall be tested only during daytime hours; and*

Additionally, that the well and treatment facilities/sites have been designed (in accordance with the West Area Specific Plan) to incorporate decorative screen walls, landscaping and other features to ensure compatibility with surrounding land uses.

Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development (Cumulatively Considerable and Significant and Unavoidable)

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography. The cumulative setting for noise includes the study roadway segments as identified in the traffic analysis in this EIR. This area was chosen because it represents the area that is reasonably expected to be affected by changes to the ambient noise levels as the project buildouts out. The following tables show the predicted traffic noise level increases on the local roadway network for Cumulative, Cumulative + Project, and Cumulative + Project + CASP conditions. **Appendix H** of this EIR provides the complete inputs and results of the FHWA traffic noise modeling.

TABLE 3.7-15: CUMULATIVE AND CUMULATIVE PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT ?
Constitution Blvd.	South of E. Boronda	62.2	64.7	2.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	66.5	67.9	1.3	+1.5 dB	No
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.7**	**2.4**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	65.9	1.4	+3 dB	No
E. Boronda Rd.	El Dorado to Natividad	64.1	67.0	2.9	+3 dB	No
E. Boronda Rd.	Natividad to Independence	66.6	68.0	1.4	+1.5 dB	No
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**66.9**	**1.8**	**+1.5 dB**	**Yes**
E. Boronda Rd.	Hemmingway to Constitution	58.2	59.9	1.7	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.0	2.4	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.0**	**2.4**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	54.8	0.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	60.8	0.3	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.2	1.6	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	66.9	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.4	2.1	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**66.8**	**3.7**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.1**	**3.0**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.3	0.2	+3 dB	No
Natividad Rd.	North of Rogge	62.0	62.3	0.3	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.1	0.0	+5 dB or	No

Roadway	Segment	Noise Levels (L_{DN}, dB) at Nearest Sensitive Receptors				
		Cumulative	Cumulative + Project	Change	Criteria[1]	Significant ?
					> 60 dB	
Old Stage Rd.	Future Constitution to Williams	58.0	58.0	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	56.2	0.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	West of San Juan Grade	67.5	68.7	1.2	+1.5 dB	No
San Juan Grade Rd.	South of E. Boronda	65.8	66.7	0.8	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.2	1.6	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.7	0.0	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2018.

TABLE 3.7-16: CUMULATIVE AND CUMULATIVE PLUS PROJECT + CASP TRAFFIC NOISE LEVELS

Roadway	Segment	Noise Levels (L_{DN}, dB) at Nearest Sensitive Receptors				
		Cumulative	Cumulative + Project + CASP	Change	Criteria[1]	Significant?
Constitution Blvd.	**South of E. Boronda**	**62.2**	**65.7**	**3.5**	**+3 dB**	**Yes**
E. Boronda Rd.	**N. Main to San Juan Grade**	**66.5**	**68.1**	**1.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.9**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	66.1	1.7	+3 dB	No
E. Boronda Rd.	**El Dorado to Natividad**	**64.1**	**67.4**	**3.3**	**+3 dB**	**Yes**
E. Boronda Rd.	**Natividad to Independence**	**66.6**	**69.3**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**68.6**	**3.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Hemmingway to Constitution**	**58.2**	**61.3**	**3.0**	**+5 dB or > 60 dB**	**Yes**
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.8	3.2	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.7**	**3.1**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
					> 60 dB	
Hemmingway Dr.	South of E. Boronda	54.8	58.8	4.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	62.1	1.6	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.3	1.7	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	67.0	0.2	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.9	2.6	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**67.5**	**4.5**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.9**	**3.8**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.9	0.8	+3 dB	No
Natividad Rd.	North of Rogge	62.0	63.0	1.1	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.8	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.7	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	57.2	1.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	**West of San Juan Grade**	**67.5**	**69.4**	**1.9**	**+1.5 dB**	**Yes**
San Juan Grade Rd.	South of E. Boronda	65.8	66.9	1.1	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.8	2.2	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.8	0.1	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2018.

As shown in the above tables, some noise-sensitive receptors located along the Plan Area roadways are currently exposed to exterior traffic noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard for residential uses. These receptors would continue to experience elevated exterior noise levels with implementation of the proposed project.

In some locations, the proposed project is predicted to cause increases in traffic noise levels which would trigger a new exceedance of the City of Salinas' 60 dB L_{dn} exterior noise level standard at sensitive receptor locations, or exceed the FICON allowable increase criteria outlined in Table 3.7-7. The greatest number of significant traffic noise increases would occur under the Cumulative Plus Project Plus CASP traffic condition.

Significant traffic noise increases under the Cumulative Plus Project Plus CASP traffic condition include the following segments:

- Constitution Blvd., South of E. Boronda – noise levels are predicted to increase by 3.5 dB from 62.2 dB to 65.7 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Main to San Juan Grade – noise levels are predicted to increase by 1.5 dB from 66.5 dB to 68.1 dB L_{dn}. This would equal the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, San Juan Grade to McKinnon – noise levels are predicted to increase by 2.6 dB from 65.3 dB to 67.9 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, El Dorado to Natividad – noise levels are predicted to increase by 3.3 dB from 64.1 dB to 66.1 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Natividad to Independence – noise levels are predicted to increase by 2.6 dB from 66.6 dB to 69.3 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Independence to Hemmingway – noise levels are predicted to increase by 3.5 dB from 65.1 dB to 68.6 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Hemmingway to Constitution – noise levels are predicted to increase by 3.0 dB from 58.2 dB to 61.3 dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- E. Boronda Road, N. Sanborn to Williams – noise levels are predicted to increase by 3.1 dB from 59.6 dB to 62.7dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- Natividad Road., South of E. Boronda – noise levels are predicted to increase by 4.5 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- Natividad Road., E. Boronda to Future Russell Road – noise levels are predicted to increase by 3.8 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7. However, it

should be noted that this roadway segment is located between the West Area Specific Plan and Central Area Specific Plan projects and future sensitive receptors along this roadway would be constructed with noise control measures designed to achieve compliance with the City of Salinas exterior and interior noise level standards.

- Russell Road, West of San Juan Grade – noise levels are predicted to increase by 1.9 dB from 67.5 dB to 69.4 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.

The proposed project would cause increased noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard at existing residential receptors. Therefore, there would be a cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the General Plan), would result in a significant cumulative impact related to traffic noise. The proposed project's incremental contribution toward this significant cumulative impact would be cumulatively considerable due to the large number of vehicle trips that would be generated at buildout of the Plan Area.

It is noted that the City's General Plan and General Plan EIR assumes development of the Plan Area for urban uses as part of the FGA buildout. As buildout occurs it will inherently result in an increase in traffic-related noise levels. The City of Salinas certified the Final Environmental Impact Report, Salinas General Plan (City of Salinas, 2002), adopted a statement of overriding considerations relative to this significant and unavoidable impact, and approved the Salinas General Plan.

Implementation of the West Area Specific Plan would have a ***significant cumulative impact*** and a ***cumulatively considerable contribution*** to noise.

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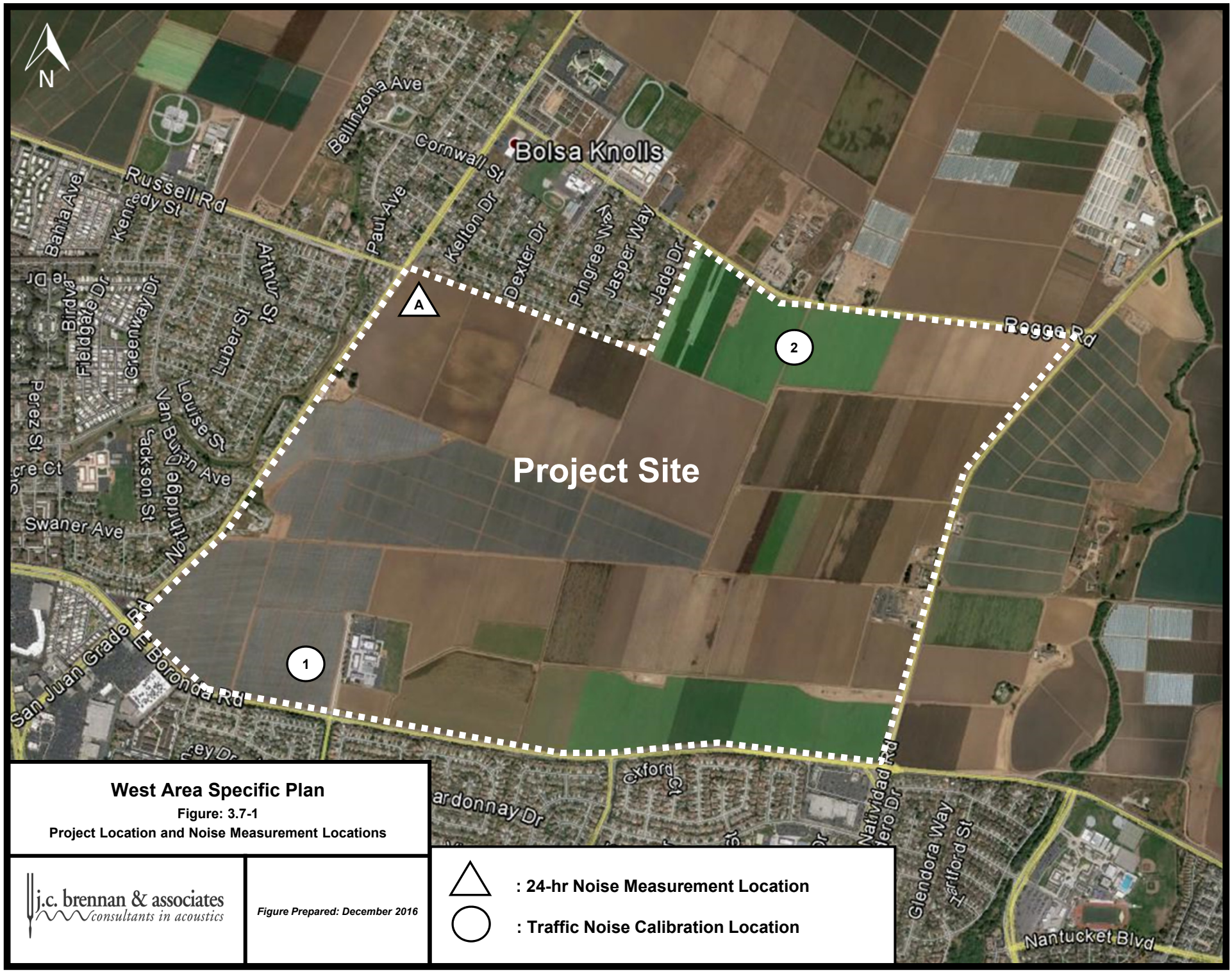

West Area Specific Plan

Figure: 3.7-1

Project Location and Noise Measurement Locations

j.c. brennan & associates
consultants in acoustics

Figure Prepared: December 2016

: 24-hr Noise Measurement Location

: Traffic Noise Calibration Location

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This section identifies existing population and housing conditions within the City and proposed by the project, then analyzes project consistency with relevant planning documents and policies, and recommends mitigation measures to avoid or minimize any potential impacts. Information in this section is based on information provided by the project applicant and contained within the West Area Specific Plan submitted to the City of Salinas, and the following reference materials:

- *City of Salinas General Plan (adopted September 17, 2002, as Amended through 2017),*
- *City of Salinas Housing Element (adopted December 15, 2015)*
- *City of Salinas Economic Development Element (adopted December 5, 2017)*
- *City of Salinas Municipal Code (Chapter 37 Zoning),*
- *United States Census Bureau data,*
- *California Department of Finance Population and Housing estimates (E-5 reports)*
- *AMBAG 2018 Regional Growth Forecast, and*
- *2040 Metropolitan Transportation Plan/Sustainable Communities Strategy.*

The documents listed above are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at the offices of the City of Salinas Community Development Department at 65 West Alisal Street, Salinas, California 93901.

No comments were received during the public review period for the Notice of Preparation regarding environmental impacts associated with population or housing.

3.8.1 ENVIRONMENTAL SETTING

EXISTING PHYSICAL ENVIRONMENT

Salinas is located in northern Monterey County, within the Salinas Valley between the Gabilan and Santa Lucia mountain ranges. Salinas is situated approximately 20 miles northeast of the City of Monterey, 60 miles south of San Jose, 100 miles south of San Francisco and 325 miles north of Los Angeles. Salinas is located close to regional transportation routes, including U.S. Highway 101 (U.S. 101), State Routes 68 and 183, and the Union Pacific Railroad line.

Project Site

In 2006, the City of Salinas began the process of amending its Sphere of Influence to include areas designated as Future Growth Areas (FGAs). The Specific Plan Area is located within the area designated as the North of Boronda FGA. The process included a Sphere of Influence (SOI) amendment, a Final Supplement for the Salinas General Plan Final Program EIR, and an application for annexation. The application for annexation was submitted to the Monterey County Local Agency Formation Commission (LAFCO) in December 2007. LAFCO approved the application on

May 19, 2008, and the North of Boronda FGA (including the Specific Plan Area) was subsequently made part of the incorporated City of Salinas on September 8, 2008.

The Specific Plan Area includes roughly 797 acres within the incorporated Salinas city limits and is bounded by San Juan Grade Road on the west, Boronda Road on the south, Natividad Road on the east, and Rogge Road and the future extension of Russell Road on the north. Gabilan Creek is located east of the Specific Plan Area, while U.S. 101 and Main Street are located to the west.

The majority of the Specific Plan Area is currently under agricultural production. Agricultural activity on-site and in the immediate vicinity consisted primarily of various types of vegetable row crops.

The Specific Plan Area currently contains limited development. McKinnon Elementary School is an existing school located in the southern portion of the Specific Plan Area, near the intersection of Boronda Road and McKinnon Street. This school, which is part of the Santa Rita Elementary School District, provides a K through 5th grade education to students in the north Salinas area. A new high school, which is part of the Salinas Union High School District is currently under construction in the northern portion of the Specific Plan on Rogge Road. A few residences and farm structures are clustered within the eastern portion of the Specific Plan Area, adjacent to Natividad Road. Other residences with accessory farm structures are in the northern portion, adjacent to Rogge Road, and in the western portion near the intersection of San Juan Grade Road and Boronda Road.

Existing Surrounding Land Uses

North of the Specific Plan Area is the Bolsa Knolls residential area is located on the northeastern corner of the intersection of Russell Road and San Juan Grade Road. Bolsa Knolls is an unincorporated area within Monterey County that is immediately adjacent to the City's northern boundaries and has a mixture of residential subdivisions along San Juan Grade Road. Scattered residences and other uses are also located along Rogge Road to the north in the unincorporated area of Monterey County. Beyond this residential area is a mix of agricultural land, rural residences, and the Club at Crazy Horse Ranch Golf Course, formerly known as the Salinas Golf and Country Club. Further north is the Butterfly Village planned community, County approved but not yet constructed. These land uses are all located in the unincorporated area of Monterey County.

Land east of the Specific Plan Area is also designated as part of the North of Boronda FGA in the Salinas General Plan. This area immediately east is known as the Central Area Specific Plan Area. Although it is currently used primarily for agricultural production, a specific plan for this area is being prepared that proposes a mix of urban land uses, similar to that proposed for the West Area Specific Plan. The area northeast of the West Area Specific Plan is located in the County and is currently used for agricultural production.

South of the Specific Plan Area, across Boronda Road, is the Harden Ranch Specific Plan area. This portion of the city is primarily a residential area. Most of the residences are of the type associated with low density residential uses, mainly single-family detached homes. However, some medium density and high density (multifamily) units are in this area as well. These residential uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-1.8

(Residential High Density). Single-family detached homes (zoned R-L 5.5) are also located to the southeast of the Plan Area (east of Natividad Road). Other land uses in the Harden Ranch Specific Plan Area include a commercial shopping center (Shaker Square) located at the southwest corner of Natividad Road and Boronda Road (zoned Retail Commercial-CR) and the New Republic Elementary School (within the Santa Rita Union School District) (zoned Public/Semipublic-PS). Extensive commercial development is located generally west and southwest of the Plan Area, along both North Main Street and U.S. 101. This is the location of some of the major retail centers in Salinas, including the Northridge Shopping Center, Santa Rita Shopping Center, and Harden Ranch Plaza. These areas are zoned Commercial Retail (CR).

West of the Specific Plan Area are residential areas with a mix of low density, medium and high density units. Also located to the west is Santa Rita Elementary School. These uses are zoned R-L-5.5 (Residential Low Density), R-M-2.9 (Residential Medium Density) and R-H-2.1 (Residential High Density). Also, located farther to the west is Santa Rita Elementary School (within the Santa Rita Union School District) which is zoned PS. The Gateway Center Specific Plan is located at the northeast corner of San Juan Grade Road and E. Boronda Road.

Surrounding land uses are shown in Section 2.0: Figure 2-3.

Existing General Plan Land Uses

The West Area Specific Plan is currently designated in the Salinas General Plan and on the General Plan Land Use Map as a Future Growth Area (FGA). General Plan Land Use Implementation Program LU-4 requires the preparation of Specific Plans prior to development of any portion of the FGA. The General Plan also requires that development in Future Growth Areas reflect the principles of New Urbanism. The General Plan Land Use Designations for the proposed West Area Specific Plan includes Mixed Use, Residential Low Density, Residential Medium Density, Residential High Density, Public/Semipublic, Open Space and Park.

Housing Policy H-1.11 ensures that each Specific Plan within the FGA includes a range of housing types by requiring new residential developments of over 1,000 units to include a mix of low-density, medium density, and high-density units. From 15%-25% of the housing units in such developments shall fall within the density range of 16-24 units per net residential development acre, and 35%-45% of the housing units shall fall within the density range of 7-14 units per net residential developable acre.

Existing Zoning

The West Area Specific Plan is located in the North of Boronda FGA. The North of Boronda FGA was formally annexed to the City of Salinas on September 8, 2008 and zoned New Urbanism Interim (NI) with a Specific Plan Overlay.

HOUSING AND DEMOGRAPHICS

Population Trends

According to the 2018 Department of Finance (DOF) population estimates, the City of Salinas had a population of 161,784. The City experienced a population increase of 33,908 persons (a total increase of 31.2%) from 1990 to 2000. During the period from 2000 to 2010, population continued to increase, but at a slower rate (a total increase of 5.4%) as compared to the previous decade.

The Association of Monterey Bay Area Governments (AMBAG) 2018 Regional Growth Forecast, estimates a similar growth rate within Salinas over the next several decades (a total increase of 5.5% from 2020 to 2030, and an additional increase of 5.2% from 2030 to 2040). Population trends and a growth forecast are shown below in Table 3.8-1.

TABLE 3.8-1: POPULATION GROWTH AND GROWTH FORECAST

YEAR	POPULATION	CHANGE	PERCENT CHANGE FROM PRIOR PERIOD
1990	108,777	--	--
2000	142,685	33,908	31.2%
2010	150,441	7,756	5.4%
2015	154,720	4,279	2.8%
GROWTH FORECAST			
2020	166,303	11,583	7.5%
2030	175,442	9,139	5.5%
2040	184,599	91,57	5.2%

SOURCES: CALIFORNIA DEPARTMENT OF FINANCE, 1850-2010 HISTORICAL U.S. CENSUS POPULATIONS OF COUNTIES AND INCORPORATED CITIES/TOWNS IN CALIFORNIA, AND AMBAG 2018 REGIONAL GROWTH FORECAST

Housing Stock

Table 3.8-2 summarizes the growth of the City's housing stock between 2000 and 2018. As shown in Table 3.8-2, the number of housing units increased from 39,659 in 2000 to 42,651 in 2010, representing 7.5 percent growth in total units. From 2010 to 2015, housing stock increases were smaller than the previous 10 years. The City's housing stock totaled 43,001 housing units in 2015, representing 0.8 percent growth from 2010 to 2015. From 2015 to 2018, housing units increased by approximately 166 units, or by 0.4% from 2015.

TABLE 3.8-2: HOUSING UNIT GROWTH

YEAR	HOUSING UNITS	CHANGE	PERCENT CHANGE
2000	39,659	--	--
2010	42,651	2,992	7.5%
2015	43,001	350	0.8%
2018	43,167	166	0.4%

SOURCES: CENSUS BUREAU 2000 AND 2010 CENSUS BUREAU; STATE DEPARTMENT OF FINANCE, HOUSING ESTIMATES, 2013-2017.

Persons Per Dwelling Unit

According the 2010 U.S. Census Bureau , the average number of persons residing in a dwelling unit in the City of Salinas was 3.66. More recent data shows that the average number of persons residing in a dwelling unit in the City of Salinas was 3.71 (U.S. Census Bureau, 2017).

3.8.2 REGULATORY SETTING

STATE

Government Code

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The general plan is a comprehensive, long-term, and general document that describes plans for the physical development of a jurisdiction and of any land outside its boundaries that, in the jurisdiction's judgment, bears relation to its planning. The general plan addresses a broad range of topics, including, at a minimum, land use, circulation, housing, conservation, open space, noise, safety, and (commencing with the adoption or revision of two or more elements concurrently after January 1, 2018) environmental justice. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the jurisdiction's vision for the area. The general plan is a long-range document that typically addresses the physical character of an area over a 20-year (or longer) period. Although the general plan serves as a blueprint for future development and identifies the overall vision for the planning area, it remains general enough to allow for flexibility in the approach taken to achieve the plan's goals.

The State Zoning Law (California Government Code Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific district, are required to be consistent with the general plan and any applicable specific plans. When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure the land uses designated in the general plan would also be allowable by the zoning ordinance (Government Code, Section 65860, subd. [c]).

Regional Housing Needs Plan

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The share is known as the Regional Housing Needs Allocation (RHNA) and is based on a Regional Housing Needs Plan (RHNP) developed by councils of government. The Association of Monterey Bay Area Governments (AMBAG) is the lead agency for developing the RHNP for a three-county area that includes Monterey, Santa Cruz and San Benito counties. AMBAG is responsible for allocating housing needs to each jurisdiction in its region. A local jurisdiction's share of regional housing need is the number of additional housing units needed to accommodate the forecasted growth in the number of households, to replace expected demolitions and conversion of housing units to non-housing uses, and to achieve a future vacancy rate that allows for healthy functioning of the housing market. The allocation is divided into the four income categories: Very Low, Low, Moderate, and Above Moderate. The allocation is further adjusted to avoid an over-concentration of lower income households in any one jurisdiction.

The latest housing allocation for the City of Salinas covers the period from 2014 to 2023 and consists of 2,229 units (269 extremely low, 269 very low, 350 low, 406 moderate, and 935 above moderate income). The City is not required to make development occur; however, the City must facilitate housing production by ensuring that land is available and that unnecessary development constraints have been removed. The City has prepared and adopted an updated Housing Element (2015-2023) to cover the 2014-2023 regional housing needs cycle in accordance with State law.

2017 Housing Legislation

In recent years, the high cost of housing in California, particularly in the greater Bay Area, created what is perceived in many quarters as a Statewide housing crisis, with lower-income individuals being the most adversely affected population. In 2017, the Legislature passed a series of bills intended to help facilitate the creation of more housing units in order to meet what the Legislature considered a vast unmet demand. Factual findings added to Government Code section 65589.5 discuss the depth of the problem:

(a)(1) The Legislature finds and declares all of the following:

(A) The lack of housing … is a critical problem that threatens the economic, environmental, and social quality of life in California.

(B) California housing has become the most expensive in the nation. …

(C) Among the consequences of those actions are discrimination against low-income and minority households, lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration.

(D) Many local governments do not give adequate attention to the economic, environmental, and social costs of decisions that result in disapproval of housing development projects, reduction in density of housing projects, and excessive standards for housing development projects.

(2) In enacting the amendments … the Legislature further finds and declares the following:

***

(C) The crisis has grown so acute in California that supply, demand, and affordability fundamentals are characterized in the negative: underserved demands, constrained supply, and protracted unaffordability.

(D) According to reports and data, California has accumulated an unmet housing backlog of nearly 2,000,000 units and must provide for at least 180,000 new units annually to keep pace with growth through 2025.

LOCAL

City of Salinas General Plan (Salinas GP)

As noted above, General Plans are prepared under a mandate from the State of California, which requires each city and county to prepare and adopt a comprehensive, long-term general plan for its jurisdiction and any adjacent related lands. As noted earlier, State law requires General Plans to address seven mandated components: circulation, conservation, housing, land use, noise, open space, safety, and (commencing with the adoption or revision of two or more elements concurrently after January 1, 2018) environmental justice. In addition to those components required by State law, the Salinas General Plan also contains optional elements, including Community Design and Economic Development.

The General Plan functions as a "constitution" for the City of Salinas and reflects the long-range aspirations of physical form and amenity and provides guidance to the substance of developmental regulations and other programs of the City Council.

City of Salinas General Plan Policies: General Plan policies associated with specific environmental topics (aesthetics, air quality, agriculture, biological resources, cultural resources, geology/soils/mineral resources, hazards, hydrology/water quality, noise, public services/recreation, transportation, utilities, etc.) are discussed in the relevant sections of this EIR. General Plan policies applicable to population and housing that are directly relevant to the proposed project are summarized below.

LAND USE ELEMENT

Policy LU-2.1: Minimize disruption of agriculture by maintaining a compact city form and directing urban expansion to the North and East, away from the most productive agricultural land.

Policy LU-2.3: Encourage clustering of development on sites within the Future Growth Area to minimize impacts on agricultural and open space resources.

COMMUNITY DESIGN ELEMENT

Policy CD-1.1: Create entrances to the city that announce arrival and establish a positive impression.

Policy CD-1.2: Maintain Salinas as a city with sharply defined edges between urban use and surrounding agricultural activities.

Policy CD-1.3: Maintain the distinction of the City's urban/rural interface by using roadway segments and/or natural features and tree plantings to form the boundary between urban development and open space or agriculture.

Policy CD-1.4: Use landscaping, design schemes and signing to improve the image and distinct identify of the city, its neighborhoods and its major gateways.

Policy CD-1.5: Create a "park-like" atmosphere for the city with greenways, landscaped streets and medians and parks distributed through the community at convenient locations.

Policy CD-1.6: Locate and design water retention areas and preserve important urban wildlife habitat areas to contribute to the visual quality of the city's open space system.

Policy CD-1.8: Apply high-quality design standards to projects visible from Highway 101.

Policy CD-1.9: Improve the appearance of land designated as Arterial Frontage.

Policy CD-1.10: Require a balancing of housing types and designs to avoid both monotony and visual chaos.

Policy CD-2.1: Maximize a strong sense of neighborhood identity and harmony by implementing architectural design and community layout techniques, such as building location and spacing, landscaping features, and lighting that create distinct neighborhoods, encourage interactions among residents, and facilitate safe street life.

Policy CD-2.2: Minimize potential light and sound impacts of new development on surrounding areas.

Policy CD-2.5: Encourage the use of design features to create an environment that maximizes the number of "eyes on the street" and reduces potential criminal activities.

Policy CD-2.7: Minimize the use and visual effect of sound attenuation walls.

Policy CD-2.8: Avoid large un-landscaped parking areas and blank building walls facing streets or adjoining properties.

Policy CD-3.1: Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, each neighborhood should have the following characteristics:

- An approximately 5-minute walk from perimeter to center;
- Housing densities should increase from perimeter to center (i.e., neighborhoods should be more densely populated at the center);

- The neighborhood center should be the location of retail space, office space, and upper story residential above commercial and office space;
- A civic or public space such as a plaza or park should be at the neighborhood center;
- Small parks should be distributed throughout the neighborhood;
- Schools should lie within the neighborhood and be easily accessible and within walking distance;
- When not adjacent to agricultural operations, which may require a variety of buffering techniques, the neighborhood edge should be bordered by either a natural corridor or the edge of an adjacent neighborhood across a pedestrian-friendly boulevard; and
- Front yard setbacks should decrease from neighborhood edge to neighborhood center.

Policy CD-3.4: Actively encourage mixed-use development in order to provide a greater spectrum of housing near businesses, alternative modes of transportation and other activity areas

Policy CD-3.6: Provide and maintain a pedestrian-friendly atmosphere by encouraging "pedestrian zones" with increased land-scaping, use of traffic-calming techniques on local streets, adequate separation from automobile traffic and the inclusion of amenities such as lighted crosswalks and increased lighting along sidewalks.

Policy CD-3.8: Promote the use of alternative modes of transportation, including bus, rail, bicycling and walking.

Policy CD-3.9: Group neighborhood shopping centers, schools, civic and recreational uses, parks, and public transit opportunities together in new neighborhoods to create an activity center focal point for the neighborhoods they serve.

HOUSING ELEMENT

Policy H-1.1: Encourage a variety of housing types, designs, and prices throughout the city to maintain housing choice and enable households of all types and income levels the opportunity to find suitable ownership or rental housing that supports healthy living. Support the development of cost effective innovations such as micro units, smaller houses on smaller sites, coliving/cohousing, construction from repurposed shipping containers,

and Single Room Occupancy (SRO) units.

Policy H-1.2: Consistent with State law, continue to regulate transitional and supportive housing as a residential use to be subject only to the same development regulations and standards of similar uses in the same zone.

Policy H-1.3: New residential developments shall be adequately served by services and facilities, including park and recreation areas, libraries, sanitary and storm sewers, transportation, public safety and other services. Continue to ensure impact fees are adequate to provide these services and facilities to residential development through periodic review and updating.

Policy H-1.4: Identify adequate sites to facilitate and encourage housing production for the existing and projected housing needs of the City.

Policy H-1.5: Support the concept of "aging in place" by providing a range of housing types and tenure that allows people to remain in the community as their housing needs change.

Policy H-1.6: Encourage diverse, mixed-income neighborhoods throughout the City through the geographic dispersal of units affordable to lower and moderate income households, increased location choice for voucher recipients, and continue to follow state and federal fair housing requirements (including City contracts with housing and public services recipients).

Policy H-1.7: Ensure that new residential development and reuse/revitalization projects are compatible with surrounding neighborhoods by requiring new developments to comply with the City's Zoning Code development regulations and design standards.

Policy H-1.8: Reduce municipal constraints to the production, maintenance, and development of decent, safe housing.

Policy H-1.9: Encourage the development of higher density apartments, townhouses and condominiums in locations that are served by major transit corridors and have good pedestrian and cyclist facilities, continue to use Crime Prevention Through Environmental Design principles as part of housing design and construction, and/or are within walking distance to neighborhood-serving retail and key destinations (parks, schools, childcare, stores with healthy food options, employment, social services, and health care, etc.).

Policy H-1.10: Promote the development of mixed-use neighborhoods designed to encourage travel by walking, bicycling, and mass transit.

Policy H-1.11: In Future Growth Areas, ensure that each Specific Plan includes a range of housing types by requiring new residential developments of over 1,000 units to include a mix of densities.

Policy H-1.12: In Future Growth Areas, promote mixed use development to increase housing opportunities by requiring commercial and professional office development to incorporate housing opportunities on site or in close proximity, unless the City Council makes a finding that it would be inappropriate to require on-site housing in a proposed new commercial or professional office development and in that case shall require equivalent housing to be constructed at an off-site location.

Policy H-1.12: Continue to create affordable housing through innovative solutions for financing with multiple funding sources and affordable housing partners including local, private, state and federal sources. Support the advocacy efforts of collaborative partners for maintaining and expanding financial support for development of a range of options for affordable housing.

Policy H-1.13: Work with community stakeholders to research and implement a range of strategies to help residents relocate as sites redevelop.

Policy H-2.1: Ensure the quality of owner-occupied and rental housing through enforcement of adopted housing and property maintenance codes.

Policy H-2.2: Promote the repair, improvement and rehabilitation of housing to enhance the quality of life in neighborhoods and promote community identity and pride.

Policy H-2.3: Continue to encourage the preservation and restoration of residential resources that possess historic or architectural value.

Policy H-2.4: Through public-private partnerships and collaborative efforts, rehabilitate substandard housing where feasible. Continue to support education of tenants and landlords to address and/or prevent substandard housing issues.

Policy H-2.5: Encourage the retention, rehabilitation and new construction of high-density, well-designed housing in the Central City and other targeted areas, consistent with the Land Use and Community Design Elements.

Policy H-2.6: Ensure new residential developments are compatible (e.g., scale, size, design and appearance) with surrounding uses through implementation of the City's Zoning Code development regulations and design standards.

Policy H-2.7: Support public education programs that promote property

maintenance and energy and water conservation. Continue to leverage services and programs that provide homeowners with low-cost or free energy and water efficiency improvements for existing housing units. Continue to assist rental property owners and tenants with HUD funding for energy conservation improvements.

Policy H-2.8: Encourage developers to maximize energy conservation and exceed the provisions of Title 24 of the California Building Code through green building techniques and materials.

Policy H-2.9: Encourage and support the reuse of existing developed portions of the City that are presently underutilized, without sacrificing history or quality of life.

Policy H-3.1: Assist in the production and conservation of housing affordable to extremely low, very low, low, and moderate income households, with a focus on the need for housing for the local workforce and workers essential to our community.

Policy H-3.2: Continue to encourage the development of affordable housing units with three or more bedrooms, adequate to accommodate large households.

Policy H-3.3: Encourage and support the development of senior housing and assisted living facilities on sites within proximity to public transportation and services.

Policy H-3.4: Encourage and support the provision of safe and decent housing for lower income households and those with special needs within proximity of public transportation and services.

Policy H-3.5: Encourage and support the provision of housing and services for homeless individuals and families in addition to individuals experiencing mental illness through the use of state and federal programs and through public-private partnerships, and through local collaborative efforts.

Policy H-3.6: Work to ensure property owners and managers are not discriminating against current tenants and individuals and families seeking housing in Salinas are not discriminated against on the basis of special characteristics as protected by state and federal fair housing laws.

Policy H-3.7: Facilitate the development of affordable housing through regulatory incentives, density bonuses, inclusionary housing, and financial assistance.

Policy H-3.8: Support collaborative partnerships of nonprofit organizations, affordable housing developers, major employers and market-rate housing developers to expand affordable housing opportunities for those working in the City of Salinas and surrounding areas.

Policy H-3.9: Support activities and participate in planning of initiatives such as Monterey County's Heath in All Policies (HiAP), Building Healthy Communities (BHC)—East Salinas, Crime Prevention Through Environmental Design (CPTED) program, AMBAG's Sustainable Communities Strategy, and the City's Urban Greening Plan that contribute to the quality of community and neighborhood environments.

Policy H-3.10: Continue to ensure that access to City programs is consistent with federal and state eligibility regulations.

Policy H-3.11: Support the education programs of the Housing Resource Center and other agencies about housing resources and eligibility requirements.

Policy H-3.14: Encourage the development of housing and mixed uses that foster supportive environments for single parent female-headed households, such as on-site childcare and after school programs.

Salinas Municipal Code, Chapter 37 - Zoning

The purpose of Chapter 37, Zoning, of the City's Municipal Code is to protect and promote public health, safety, peace, comfort, convenience, prosperity, and general welfare and to regulate land use and development in accordance with the Salinas General Plan.

Approval of land use or development of a site within the General Plan designated FGA is preceded by or made concurrent with the adoption of a specific plan for that site. Specific plans located in the North of Boronda FGA are be subject to the regulations in Article III, Division 8: New Urbanism Districts (Sec. 37-40.110. - Future growth area. Sec. 37-40.110. - Future growth area (Ord. No. 2463 (NCS)) except as superseded by the Specific Plan.

The Specific Plan is intended to serve a planning and regulatory function. Any matter or issue not specifically covered by the Specific Plan is subject to the regulations and procedures of the Salinas Zoning Code (Sec. 37-30.450. b- Development Regulations). In the case of a conflict between the Specific Plan and the Zoning Code, the Specific Plan shall apply *(Sec. 37-40.120. – Conflict between regulations:*

> *"Where a conflict occurs between the specific plan overlay district and the base district or any other section of the Code, the specific plan overlay district regulations shall prevail.").*

Zoning Map: The Zoning Map identifies zoning districts within the City at the parcel level. The Zoning Map designates the Specific Plan Area (and the greater North of Boronda FGA) as New Urbanism Interim (NI). The purpose of the NI zoning district is to provide a transitional zone until such time that Specific Plans are approved by the City, specifying the location and distribution of the applicable zoning districts for the Specific Plan and the North of Boronda FGA. The New Urbanism zoning district promotes the principles of New Urbanism and the creation of distinct identifiable neighborhoods that have Traditional Neighborhood Development (TND) characteristics as expressed in the Salinas General Plan.

3.8.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on population and housing if it will:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and/or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The potential for the proposed project to displace substantial numbers of people, or housing necessitating the construction of replacement housing elsewhere was found to be less than significant during the Initial Study process. Therefore, this topic does not warrant additional analysis and will not be addressed further this EIR section. The Initial Study and NOP is available in **Appendix A** of this EIR.

IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: The proposed Project has the potential to induce substantial population growth in an area (Less than Significant)

BACKGROUND

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *The way in which a proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove*

obstacles to population growth…It is not assumed that growth in an area is necessarily beneficial, detrimental, or of little significance to the environment.

Based on the CEQA Guidelines, growth inducement refers to any growth that exceeds planned growth of an area and results in new development that would not have taken place without implementation of the project. A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342). Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply or wastewater treatment/collection in an area where this service historically limited growth could be considered growth-inducing.

The CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans, growth management plans and policies for the area affected. Local land use plans provide for land use development patterns and growth policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

Components of Growth: The timing, magnitude, and location of land development and population growth in a region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

GROWTH EFFECTS OF THE PROPOSED PROJECT

Direct Population Growth: The West Area Specific Plan proposes development on the 797-acre Specific Plan Area including housing units that would result in direct population growth. The project includes a maximum of 4,340 total residential units. The addition of 4,340 housing units at

full buildout has the potential to increase the population of the city by an estimated 16,101 persons (based on a U.S. Census Bureau estimate of 3.71 persons per household) (U.S. Census Bureau, 2017).

The Salinas General Plan (2002) and General Plan Program EIR analyzed impacts to population and housing and found that future development resulting from implementation of the General Plan had the potential to result in a significant, but mitigable impact related to substantial population and housing unit growth over existing conditions.

The 2002 General Plan identifies areas for growth within the FGAs (which includes the Specific Plan Area). The Salinas General Plan Land Use Table LU-3 identifies the development capacity of the FGAs. This includes 15,873 residential units, resulting in an additional population of 58,253 within the City's FGAs. The proposed West Area Specific Plan development proposes 4,340 units with the potential to increase the population of the city by an estimated 16,101 persons, which is within the projections identified in the Salinas General Plan.

Additionally, the General Plan identified FGAs as areas of the City where future urban development will be directed. FGAs are established as a part of the General Plan maps, and include the Specific Plan Area, as well as other nearby areas. The General Plan provides development guidance within the FGAs so that they are developed as urban neighborhoods using the principles of New Urbanism. The principles of new urbanist design are further detailed in the City's Municipal Code Chapter 37 Zoning. The Specific Plan Area is currently designated New Urbanism Interim (NI) by the City's zoning map**.** The purpose of the NI zoning district is to provide a transitional zone for the FGAs of the City located north of East Boronda Road (including the Specific Plan Area) that are within the City limits and are subject to the preparation of specific plans and subsequent subdivision maps.

The New Urbanism Districts promote the principles of New Urbanism and the creation of distinct identifiable neighborhoods that have Traditional Neighborhood Development (TND) characteristics as expressed in the Salinas General Plan and are intended to guide the development of the North of Boronda FGA. The FGA is also subject to a Specific Plan Overlay. The Overlay requires that a Specific Plan be approved by the City prior to the development of any land located in the FGA. As such, an approved Specific Plan will ultimately regulate the development in the FGA. The New Urbanism districts identified in the City's zoning code and proposed for West Area Specific Plan project are as follows: Neighborhood Edge/Low Density Residential (NE), Neighborhood General 1/Medium Density Residential (NG-1), Neighborhood General 2/High Density Residential (NG-2), and Village Center (VC).

The proposed project development is within the development types and intensities identified in the General Plan and its associated Final Program EIR. The proposed project does not change limits, amount, type, or intensity of development allowed in the Plan Area beyond what was analyzed in the certified Final Program EIR for the General Plan and Supplemental EIR for the Salinas General Plan Final Program EIR (SCH#2007031055). While there will be new growth, no new or increased significant population and housing impacts beyond those identified and analyzed in the General Plan Final Program EIR would occur.

Indirect Population Growth: As described above, projects that include employment generating uses have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served.

Implementation of the West Area Specific Plan would increase employment in the area through development of a maximum of 571,500 square feet of commercial space. The Salinas General Plan designates land uses to ensure a balance between new residential development and job-creating uses. Within the FGAs (including the Specific Plan Area) the General Plan assumes a development capacity that includes 178,000 square feet of retail space, 30,000 square feet of office space, 599,000 square feet of general commercial space, and 2,613,000 square feet of mixed use area (Salinas General Plan pg. LU 37: Land Use Element Table LU-3 Development Capacity). The proposed maximum 571,500 square feet developable by the proposed project is within the development capacities stated in the Salinas General Plan.

It is anticipated that local employment would be increased to provide administrative, management, and retail services. The proposed project is expected to require both full-time and part-time employees. It is anticipated that the employment growth would be met both by existing residents and through the attraction of new residents. Data from U.S. Bureau of Labor Statistics (2018) indicates that the City has an unemployment rate of approximately 4.9%, as of November 2018, which is higher than the State and national averages at 4.2% and 3.7%, respectively (U.S. Bureau of Labor Statistics, 2018). Many of the newly created jobs are expected to be in the retail/commercial sector and would be opportunities well-suited for second wage earners in households, the younger workforce, and others, which generally depend on the local workforce. Due to the fact there is currently a surplus of unemployed workforce within the City, it is likely that current residents would fill the majority of new positions. Additional population growth induced by the creation of new businesses could be supported by the available housing within Salinas as well as new housing planned as part of the West Area Specific Plan.

The construction of new developments within the Specific Plan Area would increase temporary construction jobs in the area. As buildout of the project is expected to occur gradually in response to market demand, construction related employment would be similarly dispersed over time. Local construction companies are likely to find ample pools of employable personnel in the Salinas area, based on the current and projected employment trends. Due to the fact there is currently a surplus of unemployed workforce within the City, it is likely that area residents would fill the majority of these temporary construction positions.

CONCLUSION

Development of the North of Boronda FGA is a component of the City's planned long-term growth as identified in the General Plan. Infrastructure needed to support development of the site and the remainder of the North of Boronda FGA, and the subsequent population, housing and employment increases expected through implementation of the West Area Specific Plan has already been planned and evaluated at the General Plan level. Therefore, development of the site will not induce growth in the Specific Plan Area or adjacent undeveloped parcels that has not already been

accounted for in the General Plan and evaluated in the Final General Plan EIR for the General Plan and Supplemental EIR for the Salinas General Plan Final Program EIR.

The Final General Plan EIR did, however, identify significant impacts to population and housing as a result of implementation of the General Plan; because the proposed project is consistent with the development assumed under the General Plan, the significant impacts to population/housing resulting from implementation of the project would be the same as those identified by the Final Program EIR. Mitigation measures were identified in the Final Program EIR that would reduce population and housing impacts created by implementing the General Plan, and these mitigation measures would continue to apply to implementation of the proposed project. A summary of mitigation measure provided in the City of Salinas General Plan FEIR are described below:

- **PH1.** The City will implement Implementation Program HE-2, which requires the City to continue to work with the Local Agency Formation Commission to ensure that sufficient land, infrastructure, and services are available to support housing development.

- **PH2.** The City will implement Implementation Program LU-12, which requires the City to review the level of services and funding levels at budget time, adjusting when necessary to ensure that adequate levels of service are provided and facilities are maintained.

- **PH3.** The City will implement Implementation Program C-3, which requires the City to continue to update on an annual basis the Capital Improvement Plan to plan for and fund future improvements to the circulation system, as well as other public facilities, including improvements to the existing pedestrian and bicycle system, within the community.

- **PH4.** The City will implement Implementation Program COS-9, which requires the City to continue to cooperate with the County of Monterey to implement the Boronda Memorandum of Understanding, which directs that City growth occur generally to the north and east from the most productive farmland.

- **PH5.** The City will implement Implementation Program COS-29, which requires the City to promote retrofit programs by the City to reduce energy usage and consequently reduce emissions from energy consumption. Encourage utility companies to provide informational literature about available retrofit programs at City offices, the Permit Center, and libraries.

- **PH6**. The City will implement Implementation Program CD-11, which requires the City to use the Smart Growth Network's Getting to Smart Growth: 100 Policies for Implementation (ICMA, 2002) or other similar policy manual, perform an "audit" of the City's Zoning and Subdivision Ordinances to identify potential impediments to the development of smart growth and traditional neighborhood development projects. Revise, adopt, and implement new standards and procedures as necessary to encourage smart growth and traditional neighborhood development in Salinas.

- **PH7.** The City will implement Implementation Program COS-23, which requires the City to continue to cooperate with the Monterey Bay Unified Air Pollution Control District to

implement the most recent Air Quality Management plan to address regional motor vehicle emissions. In particular, coordinate with the District and AMBAG, providing technical assistance and demographic data when available, during the development of future population projections by AMBAG.

While the proposed project would result in growth within the City, it is not anticipated to significantly induce growth beyond what is anticipated because growth in the Specific Plan Area has been accounted for the General Plan and subsequent General Plan EIR, and Supplemental EIR. Thus, implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

Impact 3.8-2: Cumulative impact on the potential to induce substantial population growth in an area (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography. The cumulative setting for population and housing includes Monterey County. This area was chosen because it represents the area that is reasonably expected to be affected by population and housing changes generated by the proposed project. Monterey County was also the geographic area evaluated under the cumulative analysis contained within the Final General Plan EIR.

Continued development in Salinas and Monterey County will result in housing unit and population increases in the region. Future development according to the land uses identified in the Salinas General Plan will result in a population growth of approximately 69,300 people in the City between the years of 2000 and buildout of the General Plan. Based on the growth projected to occur in the planning area, the Final General Plan EIR concluded a potentially significant impact associated with substantial growth is anticipated. However, the Final General Plan EIR concluded that implementation of the mitigation measures contained in the FEIR would reduce the population and housing impacts created by implementation of the General Plan to a less than significant level. Mitigation measures identified in the Final General Plan EIR would continue to apply to the implementation of the proposed project.

Development of the North of Boronda FGA is a component of the City's planned long-term growth as identified in the City's General Plan. Infrastructure needed to support development of the site and the FGAs, and the subsequent population, housing and employment increases expected through implementation of the West Area Specific Plan, have already been planned and evaluated. Additionally, all lands within the General Plan jurisdiction have been planned to accommodate growth within the City have been evaluated in the General Plan FEIR. The proposed project does not change the intent, intensities, or densities of land uses identified within the General Plan; therefore, development of the Specific Plan Area will not induce growth in the Specific Plan Area, adjacent undeveloped parcels, or within the City of Salinas that has not already been accounted for in the General Plan, and evaluated for environmental impacts by the City in the Final General Plan EIR.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts. The proposed project would not have cumulatively considerable impacts associated with population and housing. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to impacts to population and housing.

This section describes and evaluates potential impacts associated with the provision of police protection, fire protection and emergency services, schools, parks, and other services for the proposed project. The information in this section is derived primarily from: *City of Salinas General Plan* (2002, as amended through 2017), City of Salinas Police Department website (http://www.ci.salinas.ca.us/services/police/police.cfm), City of Salinas Police Department Crime Statistic Unit *Uniform Crime Reporting (UCR) Program,* City of Salinas Police Department *Annual Reports* (2015-2017), City of Salinas Fire Department (http://www.ci.salinas.ca.us/services/fire/fire.cfm) (2017), City of Salinas *Public Facilities Impact Fee Study* (2014), Santa Rita Union School District *School Facilities Needs Analysis* (March 16, 2018), Salinas Union High School District School *Facility Needs Analysis* (April, 2018), Salinas *Parks, Recreation & Library Master Plan* (working draft, 2018), Salinas *Fiscal Impact of Salinas' WASP and CASP Future Growth Areas* (Draft Report July 26, 2018), California Department of Education *Longitudinal Pupil Achievement Data System* (CALPADS) 2017, and communications with Sargent Kendall Gray Salinas Police Department August 2, 2018.

The documents listed above are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at the offices of the City of Salinas Community Development Department at 65 West Alisal Street, Salinas, California 93901.

Two comments were received during the public review period for the Notice of Preparation regarding this topic, including a comment letter from the Santa Rita Union School District. The comments were related to impacts to school facilities and are included in **Appendix A** of this EIR.

3.9.1 ENVIRONMENTAL SETTING

POLICE PROTECTION

The City of Salinas Police Department (Department) operates out of a single station located at 222 Lincoln Avenue. According to the Salinas Police Departments Annual Report (2017), the Department has 147 full-time sworn officers, and 60 full-time civilian employees. The Department benefits from the service of five civilian volunteers and five retired annuitant police officers. Under the current sworn staffing level, the Department has 1.00 sworn officers for every 1,088 residents. Since July of 2018, the Department has been authorized/budgeted for up to 174 sworn officers; however, due to rigorous hiring processes, officers transferring to other departments and retirement of officers, it has been challenging to fill positions with qualified officers.

The Department has one Chief, two Assistant Chiefs, one Deputy Chief, seven Commanders, 21 Sergeants, one Criminalist and 115 Officers. The Department is divided into three divisions; Field Operations, Investigations and Administration. The Field Operations Division is headed by one Assistant Chief who oversees the Patrol Division, K-9 Unit, and the Field Training and Evaluation Program (FTO). In 2017, the Salinas Police Department had 109,180 calls for service.

The demand for police services and the need for police staff will grow in direct proportion to the growth of population and businesses within the City of Salinas. Table 3.9-1 provides statistics on

police calls/service from 2015 through 2017. Table 3.9-2 provides crime statistics during that same period, and Table 3.9-3 includes arrest statistics. The most frequent crimes requiring police services from 2015 through 2017 are related to larceny and theft, and motor vehicle thefts. Violent crimes accounted for roughly 30% of crimes within the City of Salinas.

TABLE 3.9-1: SALINAS POLICE DEPARTMENT CALL/SERVICE STATS (2015-2017)

	2015	*2016*	*2017*
Total PD Calls for Service	95,994	94,746	109,180
Total Police Reports Taken	18,070	17,994	unavailable

SOURCE: SALINAS POLICE DEPARTMENT 2017 ANNUAL REPORTING.

TABLE 3.9-2: SALINAS POLICE DEPARTMENT CRIME STATS (2015-2017)

CALL TYPE	*2015*	*2016*	*2017*
Murder	40	36	29
Negligent Manslaughter	0	0	0
Forcible Rape	72	84	69
Attempted Forcible Rape	4	2	2
Robbery with Weapon	230	215	228
Robbery, Strong Arm	139	110	130
Aggravated Assault	613	559	564
Non-Aggravated Assault	1,084	1,076	1,092
Arson	19	11	24
Total Burglaries	679	695	964
Total Larcenies-Theft	1,534	2,484	2,589
Motor Vehicle Theft	1,932	1,563	1,242
Total Part 1 Crimes	**6,346**	**6,835**	**6,933**

SOURCE: SALINAS POLICE DEPARTMENT ANNUAL CRIME STATISTIC UNIT UNIFORM CRIME REPORTING (2015-2017).

TABLE 3.9-3: SALINAS POLICE DEPARTMENT ARREST STATISTICS (2015-2017)

ARRESTS TYPE	*ADULT*	*JUVENILE*	*TOTAL*
2015			
Felony	1,439	128	1,576
Misdemeanor	2854	332	3,186
Driving Under Influence	--	--	323
Total Arrests	--	--	**5,076**
2016			
Felony	1,346	129	1,475
Misdemeanor	3,194	294	3,488
Driving Under Influence	--	--	324
Total Arrests	--	--	**5,287**
2017			
Felony	1,202	119	1,321
Misdemeanor	3,218	189	3,407
Driving Under Influence	--	--	291
Total Arrests	--	--	**5,019**

SOURCE: SALINAS POLICE DEPARTMENT ANNUAL REPORT, 2017.

FIRE PROTECTION AND EMERGENCY SERVICES

The City of Salinas Fire Department (SFD) provides pre-hospital emergency medical services; minimizes loss from fires, hazardous materials incidents, and natural disasters and other emergency services; and ensures that the community's emergency service resources are effectively and efficiently managed. SFD personnel are often the first to arrive at the scene of any emergency incident in the City of Salinas. The SFD also educates the public in fire safety and prevention, and enforces safety codes. In 2017, the Salinas Fire Department responded to 14,806 calls for service.

The SFD presently has six stations with the plans and land allocated for Station 7. SFD has a contract with Monterey County Regional Fire Protection District (MCRFD) to provide fire protection services to a portion of their District. This brings the total protection area for SFD to approximately 55 square miles.

The department operates with three platoons, (A, B, and C). Each platoon has six Engine Companies that are made up of a Captain, Engineer, and Firefighter, with one of the members being a paramedic. These engine companies are the initial responder to 911 calls. There are also two ladder truck companies. They are housed at Stations 1 and 5, and staffed with a Captain, Engineer, and Firefighter. When staffing allows, one member on each ladder truck is a paramedic. The ladder company's responsibility is the rescue of trapped civilians, ventilation, access to upper floors, and forcing entry at a structure fire. The ladder truck carries a wide variety of ground ladders, tools and equipment to handle any type of emergency encountered. This includes the jaws-of-life and stabilization tools for vehicle extrications, specialty rope rescue equipment, and portable lighting. The aerial is also equipped with a water pipe capable of delivering 1000 GPM on larger fires.

Each platoon has a Battalion Chief who commands the personnel on duty for their respective shifts. In 2017, these teams responded to a total of 14,806 calls with a minimum of 25 personnel assigned to each platoon, including the Battalion Chief. Total authorized staffing for the SFD is 98 personnel, 93 of those personnel being sworn public safety employees.

SFD staffs six fire pumpers and two 100-foot ladder trucks. A second Truck company, was added at Station 5, in the summer of 2016. In 2013, the Hazardous Materials team received formal typing to the State of California Type-II status after a rigorous examination process and was reorganized as the "Monterey Operational Area Hazardous Materials Response Team". The team is divided into two divisions, the Inland Division and the Coastal Division. The team recently achieved “Type I” certification, the highest level of State certification available, and received a new haz-mat response apparatus housed at Station 5. SFD also has a specialized unit for airport responses (ARFF) housed at Station 4, which will respond to Salinas Municipal Airport emergencies. Station 5 houses a Type III wildland brush unit available for response within the City of Salinas and for State Wide Mutual Aid requests.

SFD has a minimum of six firefighter paramedics on duty each day who respond to all 911 calls for medical assistance. The quick response by firefighter paramedics on the fire engines and truck companies stationed throughout the City of Salinas provides more immediate care during those

initial critical minutes of medical emergencies.

Providing for the overall management of the Fire Department is Fire Administration. Fire Administration is made up of the Fire Chief, Deputy Fire Chief, Fire Marshal Battalion Chief, Training Battalion Chief Emergency Medical Services Officer. One Civilian Administrative Assistant supports Fire Administration.

The Fire Prevention Division (FPD) is committed to protecting the lives of citizens, emergency responders, property, environment, and business continuation. This is accomplished through comprehensive fire and life safety education, plan check, inspections and fire code enforcement programs. The FPD staff conducts fire plans examination and inspections of new construction, and permitting and inspection of fire protection systems, hazardous operations, special events, and special occupancies. This division is overseen by a Battalion Chief / Fire Marshal, three Fire Inspectors, and one part-time Fire Plan Checker. They are supported by one Civilian Office Technician.

One of SFD's primary goals is to promote fire safety in the home. The SFD uses a mix of published safety information, firehouse tours, school visits, and Sparky the Fire Dog to get the fire and life safety message out. The FPD staff is also charged by State law to regularly inspect occupancies such as places of assembly, schools, multi-family dwellings, residential care facilities, and healthcare facilities. This division is in the process of adding 3 additional P/T inspectors to conduct business occupancy inspections per the California Fire Code.

Disaster preparedness is another responsibility of the SFD. Currently, due to budget cuts, there is no dedicated disaster preparedness officer and the duties are assigned to the Fire Chief. The Disaster Preparedness Officer is responsible for the planning, development, and promotion of disaster preparedness plans and programs for the entire City of Salinas. There is limited activity in this area citywide, due to lack of funding, staffing, and competing priorities.

SCHOOLS

Santa Rita Union School District (SRUSD)

The Specific Plan Area is within the Santa Rita Union School District (SRUSD). SRUSD is comprised of approximately 3,569 students from Kindergarten through Eighth Grade. Collectively, the SRUSD's school facilities have a capacity of 3,511 seats per Section 17071.25 of the Education Code. Of these 3,511 seats, 2,654 are at the elementary school level and 857 are at the middle school level. Based on student enrollment data for school year 2017/2018, the enrollment of the SRUSD is 3,569 students. As shown in Table 3.9-4, student enrollment exceeds facilities capacity at both school levels in school year 2017/2018.

TABLE 3.9-4: EXISTING SCHOOL FACILITIES CAPACITY AND STUDENT ENROLLMENT (SRUSD)

SCHOOL LEVEL	*2017/2018 FACILITIES CAPACITY*	*2017/2018 STUDENT ENROLLMENT **	*EXCESS/(SHORTAGE) CAPACITY*
Elementary School (Grades K-6)	2,654	2,708	(54)
Middle School (Grades 7-8)	857	861	(4)
Total	3,511	3,569	(58)

**STUDENT ENROLLMENT FROM OCTOBER 2017.*

SOURCE: SANTA RITA UNION SCHOOL DISTRICT SCHOOL FACILITIES NEEDS ANALYSIS (2018)

SRUSD includes four elementary schools, and two middle schools, all located within a five mile radius of each other. Table 3.9-5 provides the enrollment for each school within the SRUSD for the 2017/2018 school year.

TABLE 3.9-5: SANTA RITA UNION SCHOOL DISTRICT: SCHOOL INVENTORY AND 2017/2018 ENROLLMENT

SCHOOL	*ENROLLMENT*
Bolsa Knolls Middle School	660
Gavilan View Middle School	588
La Joya Elementary School	544
McKinnon Elementary School	492
New Republic Elementary School	624
Santa Rita Elementary School	660
TOTAL	**3,568**

SOURCE: CALIFORNIA DEPARTMENT OF EDUCATION LONGITUDINAL PUPIL ACHIEVEMENT DATA SYSTEM (CALPADS) 2018.

Salinas Union High School District (SUHSD)

The Specific Plan Area is located within the Salinas Union High School District (SUHSD), which includes middle schools and high schools, and is comprised of approximately 15,631 students. Table 3.9-6 provides the enrollment for each school within the SRUSD for the 2017/2018 school year.

TABLE 3.9-6: SALINAS UNION HIGH SCHOOL DISTRICT: SCHOOL INVENTORY AND 2017/2018 ENROLLMENT

SCHOOL	*ENROLLMENT*
Alisal High School	2,838
Community Day School	17
El Puente School	339
El Sausal Middle School	1,102
Everett Alvarez High School	2,645
Harden Middle School	1,279
La Paz Middle School	1,114
Mount Toro High School	193
North Salinas High School	2,216
Salinas High School	2,608
Washington Middle School	1,280
TOTAL	**15,631**

SOURCE: CALIFORNIA DEPARTMENT OF EDUCATION LONGITUDINAL PUPIL ACHIEVEMENT DATA SYSTEM (CALPADS) 2018.

As outlined below in Table 3.9-7, the SUHSD's total existing capacity is 4,385 students in grades 7-8 and 9,048 students in grades 9-12. At the 7-8 grade group, the SUHSD's 2017/18 enrollment is

greater than the 7-8 grade capacity of 4,784 students. At the 9-12 grade group, the SUHSD's 2017/18 enrollment of 10,847 is greater than the 9-12 student capacity of 9,048. However, data on middle schools for SUHSD is for informational purposes only as the Santa Rita Union School District will provide the middle school in the Specific Plan Area.

As described in the SUHSD's most recent School Facilities Needs Analysis (2018), the SUHSD projects an additional 146 9-12th grade students, and 86 7-8th grade students over the next five years. Additionally, there is approximately 3,315 students added to existing school facilities through the use of portable facilities.

TABLE 3.9-7: EXISTING SCHOOL FACILITIES CAPACITY AND STUDENT ENROLLMENT (SUHSD)

SCHOOL LEVEL	*2017/2018 FACILITIES CAPACITY*	*2017/2018 STUDENT ENROLLMENT*	*EXCESS/(SHORTAGE) CAPACITY*
Middle School (Grades 7-8)	4,385	4,784	(86)
High School (Grades 9-12)	9,048	10,847	(146)
Total	13,433	15,631	(232)

SOURCE: SALINAS UNION HIGH SCHOOL DISTRICT: 2018 SCHOOL FACILITIES NEEDS ANALYSIS AND JUSTIFICATION REPORT (2018)

SUHSD is currently constructing a high school site located in the northern portion of the Specific Plan Area adjacent to Rogge Road. The Rancho San Juan High School site is approximately 38 acres and is expected to serve students both within and outside of the Specific Plan Area; however, attendance areas will ultimately be adopted by the Board of Trustees. The new high school is projected to accommodate 1,534 students at buildout, with phase 1 of the high school expected to be completed and available for an initial capacity of 1,296 students in 2019.

LIBRARY SERVICES

Library services in the City of Salinas are located at three locations. The Steinbeck Library and the Chavez Library currently provide between 0.37 and 0.38 square feet per capita of library space to the populations living in the central/south and east areas of the City of Salinas. The 3,343 square foot El Gabilan Library was recently demolished. A new 21,000 square foot library is now under construction and is anticipated to be completed in late 2019. Due to the temporary closure of the El Gabilan Library, a temporary library is currently located at the Northridge Mall. When the new 21,000 square foot El Gabilan Library opens, it will increase the overall liburary square footage to approximately 66,000 square feet, or approximately 0.42 square feet per capita, which is still below the General Plan target service standard of 0.5 square feet of library space per capita.

Library facilities within the City of Salinas include:

The **John Steinbeck Library**, located in the south/central part of Salinas, offers approximately 30,000 square feet of library space and holds the major portion of the library collection including: the John Steinbeck Collection, a local history collection, yearbooks from Salinas area high schools, as well as digital resources in finance, health, and literature. Literacy programming is offered, including GED, ESL and basic literacy coursework, as well as digital literacy and beginning computer assistance. The Library includes dedicated space for both children and teens and "storytime" programming and

playgroups are offered regularly for children. The Digital Arts Lab has Apple computers and software to create music, film, photography, and graphic arts.

The **El Gabilan Library** site is located in the northern portion of the City of Salinas on North Main Street. A new 21,000 square foot library is currently under construction on the site. The new library will include dedicated space for both children and teens, a community room, an Internet café, a Maker-Space are and a Digital Arts lab, as well as secure outdoor learning spaces

The **Cesar Chavez Library** is located in the eastern portion of Salinas in a 15,000 square foot building that underwent a major renovation and expansion in 2012. The Library features collections of books, DVDs, and CDs in both English and Spanish, as well as computers for Internet access. The Chicano Resource Center includes materials on the Chicano and Mexican American experience. The Library offers homework help for children during the after school hours, as well as housing the Digital Nest, a non-profit organization that provides technology programming for young adults in the after school hours. The library also provides GED, ESL and beginning computer classes for adults.

Planned Library Facilities:

The City of Salinas has identified an approximately 2.0-acre site in the Central Area Specific Plan Area (adjacent to the West Area Specific Plan) for a new public library branch. However, a recent assessment of library service needs conducted as part of the development of the Parks, Recreation, and Library Master Plan underway suggests that co-locating public library services with recreation services could be a more efficient model than a standalone library branch. In response to that assessment, a new library-recreation center building may be explored in the Central Area Specific Plan or West Area Specific Plan Area. Additionally, the City of Salinas will be evaluating adding square footage for library service space in any renovations undertaken in Recreation Centers in East Salinas.

PARKS AND RECREATION SYSTEM

City Parks

Salinas parks offer a variety of community recreation values covering small pocket parks to larger community parks, special sports facilities and open spaces. Existing measurements of level of service have been reviewed for all parks ranging from core parks and special facilities to all open spaces. Currently the City has an adopted standard of 3 acres per 1,000 residents (State Quimby Act).

Across the entire 731.2-acre park system, Salinas currently provides approximately 4.65 acres of park land per thousand residents, well above the adopted standard of 3 acres/1,000 set by City guidelines. However, when measured strictly by developed local and community parks, that performance standard drops to 1.7 acres/1,000 using the combined 266.8 acreage of small, neighborhood and community parks. Projecting the future park needs, the City's Draft Parks, Recreation & Library Master Plan identifies that by 2035, the need for additional park land will increase to 147.2 acres for core local parks.

Recently, the Big Sur Land Trust (BSLT) acquired a 73-acre site to implement a multi-benefit project

that includes flood management, public park land, wetland restoration, water quality improvement and groundwater recharge in the central Carr Lake area of Salinas. This project is currently in preliminary stages of planning and community outreach.

Recreational Facilities Inventory

Community Recreation Facilities provide citizens with indoor meeting areas for a variety of purposes and activities. Table 3.9-8 provides an inventory of community recreation facilities within the City of Salinas. The City has determined that in order to maintain the current service standard of 0.3653 sf of recreational facility per capita, it will be necessary to provide an additional 22,161 sf of recreation facilities to accommodate the projected population growth to 2035 allowed under the General Plan. As described in Section 2.0 (Project Description) of this EIR, the Specific Plan land use mix would result in the addition of up to 15,928 residents at project buildout. To maintain current recreation facility service levels throughout the City of Salinas, the proposed project would require an additional 5,819 square feet of recreation facility needs.

TABLE 3.9-8: CITY OF SALINAS COMMUNITY/RECREATION FACILITIES BUILDINGS

FACILITY NAME	*ADDRESS*	*SIZE (SF)*	*PARCEL SIZE (ACRES)*
Bread Box Center	754 N. Sanborn Rd.	14,410	1.00
Central Park Rec. Center	420 Central Ave.	2,255	7.8
Closter Park Rec. Center	401 Towt St.	4,865	6.95
El Dorado Park Rec. Center	1655 El Dorado Dr.	4,000	11.30
Firehouse Recreation Center	1330 E. Alisal St.	7,400	1.20
Hebbron Family Center	683 Fremont St.	8,510	0.67
Salinas Recreation Center	320 Lincoln Ave.	14,236	0.60

NOTE: IT IS ANTICIPATED THAT THE OLD MUNICIPAL SWIMMING POOL WILL BE DEVELOPED INTO A NEW RECREATIONAL FACILITY FOR SALINAS RESIDENTS. THE PROJECT WAS INITIALLY SET TO BE FINISHED BY 2017, BUT HAS BEEN DELAYED AND IS ANTICIPATED TO BE OPEN IN 2019.
SOURCE: CITY OF SALINAS. PUBLIC FACILITIES IMPACT FEE STUDY - V7 (FEB 2014).

3.9.2 REGULATORY SETTING

STATE

Police Protection

There are no State regulations related to police protection services applicable to the proposed project.

Fire Protection and Emergency Response

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

In accordance with California Code of Regulations Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment" the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly

combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

EMERGENCY RESPONSE/EVACUATION PLANS

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

FIRE PROTECTION

The California Fire Code contains regulations relating to construction and maintenance of buildings and the use of premises. Topics addressed in the Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, industrial processes, and many other general and specialized fire safety requirements for new existing buildings and premises.

UNIFORM FIRE CODE

The Uniform Fire Code with the State of California Amendments contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

CALIFORNIA HEALTH AND SAFETY CODE

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

NFPA 1710

The NFPA 1710 Standards are applicable to urban areas and where staffing is comprised of career Firefighters. According to these guidelines, a career fire department needs to respond within six minutes, 90 percent of the time with a response time measured from the 911 call to the time of

arrival of the first responder.

The standards are divided as follows:

- Dispatch time of one (1) minute or less for at least 90 percent of the alarms
- Turnout time of one (1) minute or less for EMS calls (80 seconds for fire and special operations response)
- Fire response travel time of four (4) minutes or less for the arrival of the first arriving engine company at a fire incident and eight (8) minutes or less travel time for the deployment of an initial full alarm assignment at a fire incident
- Eight (8) minutes or less travel time for the arrival of an advanced life support (ALS) (4 minutes or less if provided by the fire department

Parks/Recreation

QUIMBY ACT

The Quimby Act (California Government Code Section 66477) states that "the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map." Requirements of the Quimby Act apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development. The City collects impact fees for both parks and recreation, but anticipates that a West Area Parks Impact Fee will be established. For residential projects, the fees are collected at the time of occupancy and include both capital impacts and land acquisition. Commercial projects are required to pay impact fees at building permit issuance.

Schools

CALIFORNIA CODE OF REGULATIONS

The California Code of Regulations, Title 5 Education Code, governs all aspects of education within the State.

CALIFORNIA DEPARTMENT OF EDUCATION

The California Department of Education (CDE) School Facilities Planning Division (SFPD) prepared a School Site Selection and Approval Guide that provides criteria for locating appropriate school sites in the State of California. School site and size recommendations were changed by the CDE in 2000 to reflect various changes in educational conditions, such as lowering of class sizes and use of advanced technology. The expanded use of school buildings and grounds for community and agency joint use and concern for the safety of the students and staff members also influenced the modification of the CDE recommendations.

Specific recommendations for school size are provided in the School Site Analysis and Development

Guide. This document suggests a ratio of 1:2 between buildings and land. CDE is aware that in a number of cases, primarily in urban settings, smaller sites cannot accommodate this ratio. In such cases, the SFPD may approve an amount of acreage less than the recommended gross site size and building-to-ground ratio.

Certain health and safety requirements for school site selection are governed by State regulations and the policies of the SFPD relating to:

- Proximity to airports, high-voltage power transmission lines, railroads, and major roadways;
- Presence of toxic and hazardous substances;
- Hazardous facilities and hazardous air emissions within one-quarter mile;
- Proximity to high-pressure natural gas lines, propane storage facilities, gasoline lines, pressurized sewer lines, or high-pressure water pipelines;
- Noise;
- Results of geological studies or soil analyses;
- Traffic and school bus safety issues.

THE KINDERGARTEN-UNIVERSITY PUBLIC EDUCATION FACILITIES BOND ACT OF 2002 (PROP 47)

This Act was approved by California voters in November 2002 and provides for a bond issue of $13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

LEROY F. GREENE SCHOOL FACILITIES ACT OF 1998 (SB 50)

The "Leroy F. Greene School Facilities Act of 1998," also known as Senate Bill No. 50 or SB 50 (Chapter 407, Statutes of 1998), governs a school district's authority to levy school impact fees. This comprehensive legislation, together with the $9.2 billion education bond act approved by the voters in November 1998 known as "Proposition 1A", reformed methods of school construction financing in California. SB 50 instituted a new school facility program by which school districts can apply for State construction and modernization funds. It imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development and provided the authority for school districts to levy fees at three different levels:

- **Level I** fees are the current statutory fees allowed under Education Code 17620. This code section provides the basic authority for school districts to levy a fee against residential and commercial construction for the purpose of funding school construction or reconstruction of facilities. These fees vary by district for residential construction and commercial construction and are increased biannually.
- **Level II** fees are outlined in Government Code Section 65995.5, allowing school districts to impose a higher fee on residential construction if certain conditions are met. These

conditions include having a substantial percentage of students on multi-track year-round scheduling, having an assumed debt equal to 15–30 percent of the district's bonding capacity (percentage is based on revenue sources for repayment), having at least 20 percent of the district's teaching stations housed in relocatable classrooms, and having placed a local bond on the ballot in the past four years which received at least 50 percent plus one of the votes cast. A Facility Needs Assessment must demonstrate the need for new school facilities for unhoused pupils is attributable to projected enrollment growth from the construction of new residential units over the next five years.

- **Level III** fees are outlined in Government Code Section 655995.7. If State funding becomes unavailable, this code section authorizes a school district that has been approved to collect Level II fees to collect a higher fee on residential construction. This fee is equal to twice the amount of Level II fees. However, if a district eventually receives State funding, this excess fee may be reimbursed to the developers or subtracted from the amount of State funding.

LOCAL

City of Salinas Impact Fees

The City includes a development impact fee schedule to fund public services and facilities, including but not limited to fees to fund police and fire, library, and recreation services.

City of Salinas General Plan

The City of Salinas General Plan contains the following policies that are relevant to public services:

LAND USE ELEMENT

Policy LU-4.1: Provide an effective and responsive level of fire protection, public education and emergency response service (including facilities, personnel, and equipment) through the Salinas Fire Department.

Policy LU-5.1: Provide an effective and responsive level of police protection (including facilities, personnel, and equipment) through the Salinas Police Department.

Policy LU-5.2: Implement alternative policing methods, such as Community Policing, youth programs and crime awareness public education programs to reduce the incidence of crime within Salinas.

Policy LU-9.1: Work in partnership with local school districts and assist them in identifying land needed for new school sites so that sufficient facilities are provided for students.

Policy LU-9.2: Consider impacts of proposed projects on school enrollment and facilities when acting on annexation applications to ensure that public services and facilities service standards identified in Table LU-4 are met.

Policy LU-9.3: Support the development of career/professional schools that encourage a

well-trained work force.

Policy LU-9.4: Work with Monterey Salinas Transit to provide transit routes to serve education institutions.

Policy LU-10. 1: Provide library services and facilities that meet:

- The Library Department Mission
- The State of California guidelines for library facilities, and
- The Library Commission's recommended standards of 0.5 square feet of public use space per capita and library services within 2 miles of every City resident.

Policy LU-10.2: Maintain and continue to develop a high-quality library system that: enhances the cultural life of the community; is the repository of people's ideas, knowledge and thoughts; and is the information center for the community.

Policy LU-10.3: Improve the library system by building at least two branch libraries and by expanding current library facilities, with interim expansion of service achieved through alternative means such as bookmobiles, portable buildings and joint-use facilities.

Policy LU-10.4: Explore the potential for coordination of public and school libraries, especially for the proposed McKinnon branch.

Policy LU-10.5: Develop a high quality library system that achieves the Library Department mission to be the focal point in the community for opening doors to lifelong learning and enjoyment, and the catalyst for promoting equal access to information.

Policy LU-11.1: Provide and maintain a variety of community facilities.

Policy LU-11.2: In areas of high concentration of low-income families or where sufficient needs exist, consider assisting with the development of community facilities (e.g., youth and senior centers) to meet their special needs and provide space for necessary programs and activities.

Policy LU-11.3: As the City grows, the need for additional neighborhood, senior, youth, and day-care centers should be evaluated and facilities provided as needed.

Policy LU-11.4: Provide community facilities that encourage and facilitate public participation and pride in the community, such as cultural and public gathering centers.

Policy LU-11.5: Work with Monterey Salinas Transit to provide transit routes to serve new community and institutional facilities and to identify a North Salinas transit facility site.

HOUSING ELEMENT

Policy H-1.2: New residential developments shall be adequately served by services and facilities, including park and recreation areas, libraries, sanitary and storm sewers, transportation, public safety and other services. Ensure impact fees are adequate to provide these services and facilities to residential development.

CONSERVATION AND OPEN SPACE ELEMENT

Policy COS-7.1: Develop a high-quality public park system that provides adequate space and facilities for a variety of recreational opportunities conveniently accessible to all Salinas residents.

Policy COS-7.2: Maximize the use of built and natural features to develop a citywide network of parks and open spaces with Carr Lake, Gabilan Creek and the Sherwood Park/Rodeo Grounds complex as essential elements of the open space network.

Policy COS-7.3: Plan park and recreation facilities in cooperation with concerned public and private agencies and organizations, particularly school districts and neighborhood residents.

Policy COS-7.4: Develop an indoor sports center.

Policy COS-7.5: Identify the recreation needs of special user groups, such as the disabled and elderly, and address these in park and recreation facility development.

Policy COS-7.6: Work with all school districts in planning for parks and recreation facilities to maximize community recreation opportunities through joint use.

Policy COS-7.7: Encourage development of private commercial recreational facilities (e.g., golf courses, sports centers, bowling alleys, family fun centers, etc.) to expand community recreational opportunities and to fill unmet needs.

Policy COS-7.8: While supporting the development of private recreational facilities, ensure that the supply and maintenance of public parks and recreational opportunities is adequate to ensure permanent availability of parks and recreational facilities for use by the entire community.

Policy COS-7.9: Require new residential development to provide land and/or fees to achieve a minimum of 3.0 acres per additional 1,000 population for developed public parklands for community or neighborhood parks.

Policy COS-7.10: Consider formation of special districts, issuance of bonds and other means for financing large urban parks and special facilities serving all of Salinas.

Policy COS-7 .1 1: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainage- ways, slopes, and other natural

features.

Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes and other services to the integrated trails network.

Policy COS-7.13: Developments within Future Growth Areas shall be conditioned to provide all the land and improvements required to achieve the parkland standard of three acres of developed public parkland per 1,000 residents, to meet existing park acreage needs, as referenced in Table COS-5. All new parks constructed within the City shall meet, at a minimum, the park standards established in Table COS-2.

SAFETY ELEMENT

Policy S-1.3: Support the development and operation of community centers and recreational facilities as a pre-emptive strategy to reduce youth related crime.

Policy S-1.4: Promote after school programs, volunteer programs, and Neighborhood Watch programs to reduce the risk of criminal activity.

3.9.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on public services if it would result in:

Substantial adverse physical impacts associated with the provisions of new or physically altered government facilities, and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

- Fire Protection
- Police Protection
- Schools
- Parks
- Other public facilities

It is important to note that, in addressing public service demand issues under CEQA, the appropriate focus is on the environmental effects of whatever steps might be necessary to achieve or maintain adequate service. For example, if proposed new development would create an increased demand for law enforcement or fire protection services, an EIR should inquire as to whether new or expanded physical facilities may be required in order to provide such service. The "impacts" addressed under CEQA are the physical effects of providing service, not any possible failure to provide adequate service under applicable standards. (See *City of Hayward v. Board of Trustees of*

the Cal. State University (2015) 242 Cal.App.4th 833, 843 ["[t]he need for additional fire protection services is not an environmental impact that CEQA requires a project proponent to mitigate"]; *Goleta Union School Dist. v. Regents of Univ. of Cal.* (1995) 37 Cal.App.4th 1025, 1031–1034 [school overcrowding attributable to new development is not an environmental effect subject to CEQA, though the physical effects of new facility construction to serve new students would be]; and CEQA Guidelines, § 15131, subd. (a) ["[e]conomic or social effects of a project shall not be treated as significant effects on the environment"].)

This does not mean, however, that a city or county is powerless to require new development to take the steps needed to ensure adequate public services, such as law enforcement service. Such steps are simply beyond the scope of CEQA. They should instead be imposed under some other body of State statutory law (e.g., the Planning and Zoning Law [Gov. Code, § 65300 et seq.] or the Subdivision Map Act [Gov. Code, § 66410 et seq.]) or under a local government's broad police power under the California Constitution. (See Cal. Const., Art. XI, § 7; *Candid Enterprises, Inc. v. Grossmont Union High School Dist.* (1985) 39 Cal.3d 878, 885.)

It is also important to understand that special legal principles apply to impacts to school facilities. According to Government Code Section 65996, the development fees authorized by Senate Bill 50 (1998) (described earlier) are deemed to be "full and complete school facilities mitigation" for impact caused by new development. The legislation also recognized the need for the fee to be adjusted periodically to keep pace with inflation. The legislation indicated that in January 2000, and every two years thereafter, the State Allocation Board would increase the maximum fees according to the adjustment for inflation in the statewide index for school construction.

Section 65996 also prohibits public agencies from using CEQA or "any other provision of state or local law" to deny approval of "a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property or any change in governmental organization or reorganization" on the basis of the project's impacts on school facilities.

IMPACTS AND MITIGATION MEASURES

Impact 3.9-1: The proposed project may require the construction of fire department facilities which may cause substantial adverse physical environmental impacts (Less than Significant with Mitigation)

The SFD protects life, property and the environment from the hazards of fire, explosion and hazardous materials incidents, and provides Advanced Life Support emergency medical services to City residents, businesses, and visitors. These services are provided 24-hours per day from six fire stations strategically located throughout the City of Salinas. General Plan Table LU-4 includes a service standard that calls for fire protection facilities necessary to provide a 6-minute response from receipt of a 911 call for arrival of first company 90% of the time.

The SFD service area includes the entire area within the existing political boundaries of the City of Salinas and the future growth areas. The Fire Department also provides contractual fire services to approximately 31 square miles of Monterey County Regional Fire Protection District (MCRFPD) surrounding the city. As noted above, fire protection service level is generally defined in terms of the timely arrival of a sufficient number of appropriately trained personnel and equipment necessary to stabilize and mitigate various types of emergencies. This is accomplished through a deployment plan that strives to meet an initial response service level (6 minutes or less, 90% of the time).

The project area is currently served by Station 6 located at 45 East Bolivar Street. Station 6 houses an ALS engine company staffed with three personnel. This engine also responds into the contract area of Bolsa Knolls, Country Club Meadows and San Juan Estates through an agreement with MCRFPD.

In order to maintain the General Plan's six-minute or less first response service standard, one to two fire station facilities and an engine company will be required within the North of Boronda Future Growth Area (FGA).

One new station is required within the proposed Central Area Specific Plan Area of the North of Boronda FGA to accommodate the buildout of the West Area Specific Plan and the Central Area Specific Plan. A second station would be required in the eastern portion of the FGA to serve the proposed East Area Specific Plan Area. No application has been submitted to the City for the East Area Specific Plan to date.

The new station in the Central Area Specific Plan, or temporary facilities agreed upon by SFD is to be available before new residential development occurs outside of the existing 6-minute response area. An approximately 1.5-acre site for the new fire station has been identified in the Central Area near the corner of Natividad Road and "C" Street adjacent to the Specific Plan Area. Currently, the Central Area Specific Plan is being processed by the City including the preparation of a Draft EIR. Project-specific and construction impacts of additional fire service facilities within the Central Area Specific Plan Area are to be addressed as part of the environmental review of the Central Area Specific Plan.

As described in Section 2.0, Project Description, of this EIR, the proposed land use mix in the West Area Specific Plan would result in the addition of up to 4,340 new residential units and 15,928 residents at project build-out. The proposed project also includes a business component that identifies approximately 571,500 square feet of commercial uses that would also require fire services.

The proposed Specific Plan would create a need for new or expanded fire protection facilities that could result in offsite physical impacts on the environment. Any future development under the approved General Plan, which includes all development within the North of Boronda FGA is required to comply with regulations, policies, and standards included in the General Plan, Final Environmental Impact Report, Salinas General Plan (City of Salinas, 2002), and Final Supplement for the Salinas General Plan Final Program EIR (City of Salinas, 2007). As noted previously, the site-specific

environmental impact of constructing a new fire facility to serve the West Area Specific Plan will be reviewed under CEQA as part of the Central Area Specific Plan Draft EIR, which is expected to be circulated in 2019. Additionally, impact fees will recover future development's proportionate share of Fire Department capital asset costs. The City collects impact fees from new development based upon projected impacts from the development, for purposes of mitigating for project impacts on public facilities, including fire protection facilities. The City also reviews the adequacy of impact fees on an annual basis to ensure that the fee is commensurate with anticipated future facilities demands, assessed on a fair share basis for new development.

CONCLUSION

The proposed project may require the construction of fire department facilities which may cause substantial adverse physical environmental impacts. Payment of the applicable impact fees by the project applicant, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the project and/or as specified in a Development Agreement, would ensure that project impacts to fire services are ***less than significant***.

MITIGATION MEASURES

Mitigation Measure 3.9-1: *Prior to the issuance of a Certificate of Occupancy for each dwelling unit (and prior to issuance of building permits for non-residential uses), the applicant shall pay all applicable project impact fees per the impact fee schedule.*

Impact 3.9-2: The proposed project may result in, or have the potential to require the construction of police department facilities which may cause substantial adverse physical environmental impacts (Less than Significant)

The current service ratio for the City of Salinas Police Department is 1.00 officers per 1,088 people (148 sworn officers/161,042 people), as identified by the Department. As described in Section 2.0: Project Description of this EIR, the Specific Plan land use mix would result in the addition of up to 4,340 new residential units and 15,928 residents at project buildout. To keep current staffing levels throughout the City, the proposed project would require an additional 16 sworn officers according to the current service standard; It is of note that the service ratio from 2000 through 2012 averaged 1.21 Police Officers per 1,000 population[1]. Staffing levels are determined by the City on an annual basis. The addition of 15,928 residents would require an additional 19 sworn officers, based upon the 1.21 officers per capita standard.

Police service is evaluated and addressed annually on a citywide basis by the Salinas City Council, City Manager and Police Chief. The City Council adopts an annual budget allocating resources to police services, which effectively establishes the service ratio for that particular year. The annual

[1] City of Salinas Budget (Public Facilities Impact Fee Study: Police Services Impact Fees, 2014)

budget is based on an assessment of community needs and available resources as determined by the City Council, City Manager, and the Police Chief.

As described in the Salinas Police Department Annual Report (2017), the Police Department completed a needs analysis in 2014, and a new police facility is being built over the next two years on property that is was acquired from the County. Measure G was approved by the voters and financing of the police facility was accomplished through the use of a 63-20 structure (a tax-exempt bonds process), and utilizing a non-profit corporation that will cause the project to be designed and developed through a fixed-price contract to meet the specifications that are set by the City of Salinas. The new police station is currently being constructed within the Alisal Marketplace area, specifically at 312 East Alisal Street, and will replace the existing police station that was built in 1958 on Lincoln Avenue. The new police station is expected to be completed and operational in the first quarter of 2020. A CEQA Initial Study and Mitigated Negative Declaration was prepared and approved by City Council for the Project to identify potential impacts associated with the development of the facility.

CONCLUSION

The proposed project would not result in, or have the potential to require the construction of police department facilities which may cause substantial adverse physical environmental impacts. Development of the Specific Plan Area did not directly trigger the need for a new facility; however, additional staffing and patrols are required to serve the proposed Specific Pan Area. The City collects impact fees from new development based upon projected impacts from the development. The City also reviews the adequacy of impact fees on an annual basis to ensure that the fee is commensurate with anticipated future facilities demands, assessed on a fair share basis for new development. Payment of the applicable impact fees by the project applicant as required by Mitigation Measure 3.9-1, and ongoing revenues that would come from, property taxes, sales taxes, and other revenues generated by the project, would ensure that project impacts to police services are ***less than significant***.

Impact 3.9-3: Project implementation may result in the need for the construction of new schools, which has the potential to cause substantial adverse physical environmental impacts (Significant and Unavoidable)

As described in Section 2.0: Project Description of this EIR, the Specific Plan land use mix would result in the addition of up to 4,340 new residential units and 15,928 residents at project build-out. The increase in population of 15,928 people would result in the introduction of additional students to the SUHSD, and SRUSD. Table 3.9-9 presents the estimated increase in student enrollment as a result of the proposed project.

TABLE 3.9-9: PROJECTED PLAN AREA STUDENT GENERATION ESTIMATES

DU TYPE	MIN. DU	MAX. DU	EDUCATION LEVEL	GENERATION FACTOR	STUDENTS GENERATED		ESTIMATED NUMBER OF STUDENTS GENERATED BY EDUCATION LEVEL (MIN. / MAX.)
					MIN.	MAX.	
SFD	1,114	1,361	Elementary	.3416	380	465	Elementary 910 / 1,114
			Middle	.1948	217	265	
			High	.149	166	202	
SFA	1,476	1,803	Elementary	.1967	290	355	Middle School 417 / 509
			Middle	.0738	109	133	
			High	.149	220	268	
MF	963	1,176	Elementary	.2492	240	294	High School 600 / 731
			Middle	.0944	91	111	
			High	.222	214	261	
Total	3,553	4,340			1,927	2,354	1,927 / 2,354

SOURCE: SALINAS UNION HIGH SCHOOL DISTRICT (JANUARY 2014), SANTA RITA UNION SCHOOL DISTRICT/COOPERATIVE STRATEGIES (OCTOBER 2018).

The proposed project is expected to generate approximately between 1,927 and 2,354 additional students for the SUHSD and SRUSD. It is also important to understand that special legal principles apply to impacts to school facilities. According to Government Code Section 65996, the development fees authorized by Senate Bill 50 (1998) (described earlier) are deemed to be "full and complete school facilities mitigation" for impact caused by new development. The legislation also recognized the need for the fee to be adjusted periodically to keep pace with inflation. The legislation indicated that in January 2000, and every two years thereafter, the State Allocation Board would increase the maximum fees according to the adjustment for inflation in the statewide index for school construction. However, even where applicants have agreed to pay school impact mitigation fees, if the proposed development requires the construction or expansion of additional facilities that would cause other physical environmental impacts, then those physical impacts to non-school resources may be analyzed under CEQA (Gov. Code § 65995(i)).

The proposed project includes five schools within the Specific Plan Area. One of these schools (McKinnon Elementary School) has already been constructed and another (a new high school) is currently under construction on Rogge Road. A description of the additional planned schools (including the high school, which is under construction) are listed below:

- Two elementary schools are planned to be constructed on opposite sides of the Specific Plan Area. One school will be located on a 10.0-acre site in Neighborhood 2, while the other will be located in Neighborhood 3 on a 10.0-acre site. The two new elementary schools would be expected to serve students residing in the Specific Plan Area and adjacent areas. Attendance areas will ultimately be adopted by the SRUSD Board of Trustees.

- The Specific Plan provides a site for one middle school. The middle school site, approximately 20 acres in size, is located adjacent to and north of the community park. The middle school is expected serve students residing in the Specific Plan Area as well as adjacent areas as determined by attendance areas ultimately adopted by the SRUSD Board

of Trustees.

- A high school site is located in the northern portion of the Specific Plan Area adjacent to Rogge Road. The site is approximately 38 acres and it has already been acquired by the Salinas Union High School District and the high school facility is currently under construction. The high school is expected to serve students both within and outside of the Specific Plan Area. Attendance areas will ultimately be adopted by the SUHSD Board of Trustees.

The elementary schools and middle school will be part of the SRUSD. The high school will be part of the SUHSD. Physical impacts from construction of these school sites within the Specific Plan Area would be related to relevant environmental topics included in this EIR, such as: air quality (Section 3.1), biological resources (Section 3.2), cultural resources (Section 3.3), greenhouse gas emissions and climate change (Section 3.4), hazards and hazardous materials (Section 3.5), hydrology and water quality (Section 3.6), noise (Section 3.7) population (Section 3.8), public services (Section 3.9), transportation (Section 3.10), and utilities (Section 3.11). A detailed discussion of relevant operational and construction impacts can be found in each respective section of this EIR. Furthermore, site-specific environmental review would be required for each school by the responsible school district prior to approval of a design for the facility and would consider any site-specific impacts unknown at this time.

CONCLUSION

Project implementation may result in the need for the construction of new schools, which has the potential to cause substantial adverse physical environmental impacts. Potential environmental impacts associated with the future construction of each school within the Plan Area are addressed throughout this EIR. This EIR analyzes the physical environmental effects that may occur as a result of development and introduction of new urban land uses within the Plan Area. Each future school, if constructed, would fall within the range of environmental impacts disclosed in this EIR, and would be subject to relevant mitigation measures included in this EIR.

It is noted, however, that development of a school within the proposed Plan Area would contribute to significant and unavoidable impacts related to air quality (Impacts 3.1-2, and 3.1-7), biological resources (Impacts 3.2-9 and 3.2-12), greenhouse gases (Impacts 3.4-1, 3.4-2, and 3.4-4), noise (Impacts 3.7-1, and 3.7-8), and transportation and circulation (Impacts 3.10-3, and 3.10-4). Therefore, consistent with the analysis included in this Draft EIR, impacts related to constructing new school facilities to serve the proposed Project are considered **significant and unavoidable**.

MITIGATION MEASURES

Mitigation Measure 3.9-2: *Prior to the issuance of building permits for each dwelling unit, the applicant shall pay applicable school fees mandated by SB 50 to the Salinas Union High School District (SUHSD), and Santa Rita Union School District (SRUSD) and provide documentation of said payment to the City.*

Impact 3.9-4: Project implementation may result in effects on parks, or has the potential to require the construction of park facilities which may cause substantial adverse physical environmental impacts (Significant and Unavoidable)

The General Plan establishes a park dedication standard of three acres of parkland per 1,000 residents, which is consistent with the State Quimby Act. The proposed project includes a total of 11 parks, consisting of 49.76 net acres of public parkland proposed within the Specific Plan Area (Figure 3.9-2). This acreage slightly exceeds the City's Parkland (Quimby Act) requirements of three acres per 1,000 persons (47.78 net acres). The Specific Plan includes three types of public parks: community, neighborhood, and small parks. Further details of each park type are provided below:

- **Community Park**: The approximately 30-acre community park will be the focal point of the residential neighborhoods and the entire West Area Specific Plan. It would provide a wide variety of amenities and significant open space to both residents of the community and surrounding areas. As the largest park in the Future Growth Area, it would contain a significant concentration of sports fields as well as passive recreational amenities. The community park would be adjacent to an approximately 10-acre open space area for periodic supplemental storm water detention and retention. This combined area of park and open space totals approximately 40 acres.

- **Neighborhood Parks**: Four neighborhood parks are proposed. These parks will vary from approximately 2.35 to 3.63 acres in size. They would serve as focal points within each of the four residential neighborhoods. These parks would provide a variety of amenities and open space to the residents of the Specific Plan Area and surrounding areas. Proposed features of these parks would include open space for active recreation and areas for passive recreation. Special features may be located within these parks to further enhance the character and identity of the neighborhood that each park serves.

- **Small Parks**: Six small parks totaling 4.54 acres are proposed. Small parks are 1.86 acres or less in size, and average approximately 1.1 acres. These parks will not be characterized by large sports fields that may be found in the community park and some neighborhood parks, but they would provide passive open space and recreation. Potential amenities include seating areas, picnic areas, sports courts, and children's tot lots or playgrounds.

While the proposed project would increase the demand for parks and other recreational facilities based on the population growth, the amount of parkland and open space provided within the Specific Plan Area sufficiently meets the City's General Plan parkland requirements. No additional need for park space is required, and it is not anticipated that any substantial physical deterioration of existing facilities would occur or be accelerated.

CONCLUSION

Project implementation may result in effects on parks, or has the potential to require the

construction of park facilities which may cause substantial adverse physical environmental impact. Potential environmental impacts associated with the future construction of park and other recreational facilities within the Plan Area are addressed throughout this EIR. This EIR analyzes the physical environmental effects that may occur as a result of development and introduction of new urban land uses within the Plan Area. Each future park, if constructed, would fall within the range of environmental impacts disclosed in this EIR, and would be subject to relevant mitigation measures included in this EIR.

It is noted, however, that development of 49.76 acres of park land within the Plan Area would contribute to significant and unavoidable impacts related to air quality (Impacts 3.1-2, and 3.1-7), biological resources (Impacts 3.2-9 and 3.2-12), greenhouse gases (Impacts 3.4-1, 3.4-2, and 3.4-4), noise (Impacts 3.7-1, and 3.7-8), and transportation and circulation (Impacts 3.10-3, and 3.10-4). Therefore, consistent with the analysis included in this Draft EIR, impacts related to constructing new park facilities to serve the proposed project are considered ***significant and unavoidable***.

Impact 3.9-5: Project implementation may result in effects on other public facilities (Less than Significant)

The proposed project would increase demand for other public facilities within the City of Salinas, such as libraries, and community/recreation buildings. However, to mitigate increased demand on library and community facilities, the City collects public facilities impact fees from new development based upon projected impacts from the development. The City also reviews the adequacy of impact fees on an annual basis to ensure that the fee is commensurate with the service or facility.

The City has identified an approximately 2.0-acre site in the Central Area Specific Plan for a new branch library. Based on the 2-mile service area prescribed in the General Plan, the new branch library will also service significant areas of the existing City of Salinas, south of Boronda Road. The West Area Specific Plan will contribute its fair share to the acquisition of the site and the construction of the new branch library through the Public Facilities Impact Fee program.

The City also seeks to develop one or more recreation centers within the proposed neighborhood parks of the FGA. The precise location and configuration of recreation centers is yet to be determined by the City. The timing and phasing of construction of the recreation centers will be determined by the City concurrently with development of the FGA. The Specific Plan provides that the West Area Specific Plan will contribute its fair share of the costs of construction of the recreation centers through the Public Facilities Impact Fee program.

CONCLUSION

Project implementation may result in effects on other public facilities. The West Area Specific Plan would result in new demand for public facilities, including library facilities and recreational facilities. The West Area Specific Plan does not propose a library or other public facility such as a community building within the Plan Area, therefore, it does not have a direct physical impact on the environment. The West Area Specific Plan would be responsible for paying the applicable impact

fees, and ongoing revenues from the Specific Plan would be generated from property taxes, sales taxes, and other appropriate fees/payments. Such fees/payments would be the financial contribution for any new demand created by the West Area Specific Plan. The demand for public facilities that is created by the West Area Specific Plan, however, would result in indirect physical impacts due to the fact that new facilities will be developed within the Central Area Specific Plan. The Central Area Specific Plan, located immediately east of the Plan Area, includes a library site, and potentially other public facilities that will serve the community, including the West Area Specific Plan. The Central Area Specific Plan is undergoing its own separate CEQA review, which is anticipated to be available for public review in 2019. Any environmental impacts of associated with new public facilities in the Central Area Specific Plan would be addressed in that CEQA document. The West Area Specific Plan itself would result in a ***less than significant*** environmental impact related to this topic.

Impact 3.9-6: Under cumulative conditions the proposed project may result in the construction of public facilities, which may cause substantial adverse physical environmental impacts (Cumulatively Considerable and Significant and Unavoidable)

The cumulative setting would include all areas covered in the service areas of the City of Salinas Police Department, City of Salinas Fire Department, City of Salinas Recreation and Community Services Department, the Santa Rita Union School District, Salinas Union High School District, and the Salinas Public Library System. This geographic area was chosen because these service providers would be required to serve the proposed project and contains those service providers that have to potential to bear a cumulative impact from the proposed project, when the proposed project is considered together with all past, present, and probably future projects.

Under cumulative conditions future local and regional growth will result in increased demand for schools, police protection, fire protection, schools, parks/recreation, and library services. The City and its associated service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand.

The 2002 General Plan Final Program EIR analyzed impacts to public services (including police protection, fire and emergency services, schools, parks, and libraries), and found that General Plan policies addressed the public services needs of future development resulting from implementation of the General Plan. The specific environmental impact of constructing new facilities could not be determined at the time, but the Final Program EIR found that construction and operation of such facilities could potentially cause significant impacts. These potential impacts, however, were addressed and mitigated to the greatest extent feasible by the General Plan policies and mitigation measures included in Sections 5.1 through 5.12 of the Salinas General Plan Final Program EIR.[2]

[2] Sphere of Influence Amendment and Annexation Initial Study, August 2007

CONCLUSION

Under cumulative conditions the proposed project may result in the construction of public facilities, which may cause substantial adverse physical environmental impacts. The impact fees developed and reviewed by the City will recover future development's proportionate share of City-related capital asset costs. Fees, as applied only to new development, represent future development's proportionate share of public services and facilities capital costs.

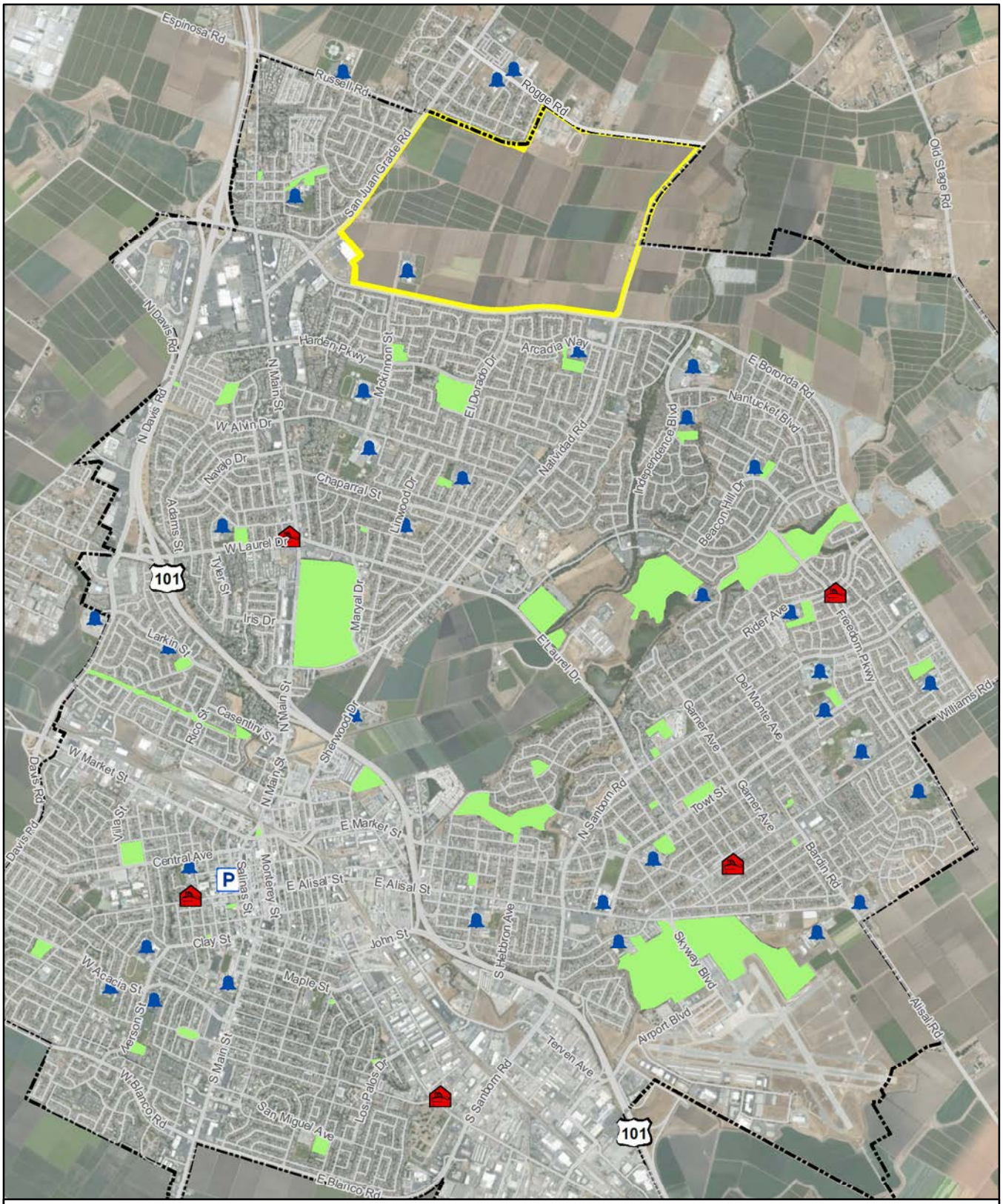
However, while new development will avoid project level impacts associated with service ratios to the extent allowed by the associated impact fees, there are existing deficiencies with regard to library services that will need to be addressed by the City in order to meet service goals set forth by the General Plan. It is important to note that impact fees may not be used to correct existing deficiencies, but may be used to pay for increased demand for public facilities or increased demand upon existing capital facilities provided that those facilities are needed to serve additional development and have the capacity to do so, given relevant level-of-service standards.

It is also important to note that, in addressing public service demand issues under CEQA, the appropriate focus is on the environmental effects of whatever steps might be necessary to achieve or maintain adequate service. For example, if proposed new development would create an increased demand for law enforcement or fire protection services, an EIR should inquire as to whether new or expanded physical facilities may be required in order to provide such service. The "impacts" addressed under CEQA are the physical effects of providing service, not any possible failure to provide adequate service under applicable standards. (See *City of Hayward v. Board of Trustees of the Cal. State University* (2015) 242 Cal.App.4th 833, 843 ["[t]he need for additional fire protection services is not an environmental impact that CEQA requires a project proponent to mitigate"]; *Goleta Union School Dist. v. Regents of Univ. of Cal.* (1995) 37 Cal.App.4th 1025, 1031–1034 [school overcrowding attributable to new development is not an environmental effect subject to CEQA, though the physical effects of new facility construction to serve new students would be]; and CEQA Guidelines, § 15131, subd. (a) ["[e]conomic or social effects of a project shall not be treated as significant effects on the environment"].)

Moreover, it is critical to understand that special legal principles apply to impacts to school facilities. According to Government Code Section 65996, the development fees authorized by Senate Bill 50 (1998) (described earlier) are deemed to be "full and complete school facilities mitigation" for impact caused by new development. The legislation also recognized the need for the fee to be adjusted periodically to keep pace with inflation. The legislation indicated that in January 2000, and every two years thereafter, the State Allocation Board would increase the maximum fees according to the adjustment for inflation in the statewide index for school construction.

Section 65996 also prohibits public agencies from using CEQA or "any other provision of state or local law" to deny approval of "a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property or any change in governmental organization or reorganization" on the basis of the project's impacts on school facilities.

The construction and operation of future public facilities required to serve cumulative development (including the West Area Specific Plan Area) could potentially cause significant impacts. Cumulative development including additional parks, schools, library, and other public facilities within the city and service area would contribute to significant and unavoidable cumulative impacts that have been identified within this EIR related to: air quality (Impact 3.1-7), biological resources (Impact 3.2-12), greenhouse gases (Impact 3.4-4), noise (Impact 3.7-8), and transportation and circulation (Impacts 3.10-3, and 3.10-4). Therefore, consistent with the analysis included in this Draft EIR, cumulative impacts related to the construction of public facilities needed to meet future demand are considered ***significant and unavoidable*** *and* ***cumulatively considerable***.



Public Facilities

- Fire Station
- Police Department
- School
- Park

Planning Areas

- City of Salinas
- West Area Specific Plan

N

0 1,000 2,000

Feet

1:45,000

Sources: Monterey County GIS; City of Salinas GIS; Google Maps; ArcGIS Online BING Aerial Imager Service. Map date: June 30, 2016. Boundary update: February 25, 2019.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 3.9-1: Public Facilities

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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Figure 3.9-2: Proposed Parks

Source: AECOM, City of Salina Figure 8 Parks and Open Space

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This chapter describes the potential impacts to the transportation system associated with adoption and implementation of the proposed West Area Specific Plan. To provide a context for the impact analysis, this chapter begins with the regulatory framework influencing the transportation system and providing the basis for impact significance thresholds used in the impact analysis, followed by an overview of the analysis methodologies that were used. The transportation setting, which is a description of the existing physical and operational conditions for the transportation system, is then discussed along with an overview of existing and future conditions without the Specific Plan. The chapter concludes with a description of the Specific Plan, followed by the impact analysis findings and recommended mitigation measures.

Information in this section is derived primarily from *The Draft West Area Specific Plan Transportation Impact Analysis* prepared by Fehr & Peers (2018), which is included as **Appendix I** in Volume II of this Draft EIR.

There were four comments received during the public review period for the Notice of Preparation related to transportation and circulation: one from Monterey-Salinas Transit (MST) regarding transit service, one from the California Department of Transportation (Caltrans), one from the Transportation Agency of Monterey County (TAMC), and one from the Santa Rita Union School District. These comments are provided in **Appendix A** of this EIR.

3.10.1 REGULATORY SETTING

The City of Salinas General Plan and a variety of regional, State, and federal plans, legislation, and policy directives provide guidelines for the safe operation of streets and circulation facilities in Salinas. While the City of Salinas has primary responsibility for the maintenance and operation of local circulation facilities in its jurisdiction, Salinas staff works on a continual basis with responsible regional, State, and federal agencies, including the Transportation Agency for Monterey County (TAMC), the Association of Monterey Bay Governments (AMBAG), Caltrans, and the Federal Highway Administration (FHWA), as well as others, to maintain, improve, and balance the competing transportation needs of the community.

STATE

Caltrans

Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Caltrans carries out its mission of providing a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability, with six primary programs: Aeronautics, Highway Transportation, Mass Transportation, Transportation Planning, Administration and the Equipment Service Center.

DEPUTY DIRECTIVE 64-R1: COMPLETE STREETS – INTEGRATING THE TRANSPORTATION SYSTEM

In 2001, Caltrans adopted Deputy Directive (DD) 64; a policy directive related to non-motorized travel throughout the State. In October 2008, DD 64 was strengthened to reflect changing priorities and challenges. DD 64-R1 states:

> *The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. Providing safe mobility for all users, including motorists, bicyclists, pedestrians and transit riders, contributes to the Department's mission/vision: "Improving Mobility across California."*

DIRECTOR'S POLICY 22: "DIRECTOR'S POLICY ON CONTEXT SENSITIVE SOLUTIONS"

Director's Policy 22, a policy regarding the use of "Context Sensitive Solutions" on all State highways, was adopted by Caltrans in November of 2001. The policy reads:

> *The Department uses "Context Sensitive Solutions" as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.*
>
> *The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.*

REGIONAL

Transportation Agency for Monterey County (TAMC)

TAMC serves as Monterey County's regional transportation planning agency, and is a State designated agency responsible for planning and financial programming of transportation projects.

REGIONAL TRANSPORTATION PLAN (RTP)

TAMC is responsible for preparing the Regional Transportation Plan (RTP) for Monterey County. The RTP includes policy guidance, plans, and programs to attain a balanced comprehensive, multimodal transportation system; proposed solutions to transportation issues; addresses all modes of travel; and identifies anticipated funding for projects and programs. The RTP is embedded in the Association of Monterey Bay Area Government's *2040 Metropolitan Transportation Plan/Sustainable Communities Strategy* (Association of Monterey Bay Area Governments, 2018)

(MTP/SCS). The objective of the RTP and the MTP/SCS is to comply with current California Transportation Commission Regional Transportation Plan Guidelines.

AMBAG, as the federally-designated metropolitan planning organization representing Monterey, San Benito and Santa Cruz counties, is required by both federal and State law to prepare a long-range (at least 20 years) transportation planning document known as a Metropolitan Transportation Plan (MTP). The MTP contains a compilation of the projects proposed in the RTPs prepared by the Council of San Benito County Governments, the Santa Cruz County Regional Transportation Commission and TAMC. The MTP is a document used to achieve a coordinated and balanced regional transportation system.

TAMC REGIONAL DEVELOPMENT IMPACT FEE PROGRAM

The RTP also includes funding sources and strategies for financing improvements to the regional transportation system. Key components of the funding strategy are a regional development impact fee and a local (countywide) sales tax increase that was approved by voters in 2016. The regional fee is applied to new development within local jurisdictions that are members of TAMC, including the City of Salinas. Funds generated through the regional development impact fee would, among other major projects, be used to fund projects included in the RTP that would benefit circulation conditions in and around the City. Member agencies must adopt the regional development impact fee before they can begin to collect the fee from new development. The City of Salinas adopted the fee program in August 2008. Caltrans considers payment of the regional development impact fee as mitigation for cumulative impacts on the regional (State) highway system.

LOCAL

City of Salinas General Plan

The City of Salinas General Plan is a long-range, comprehensive planning document required by State law. The General Plan was adopted by the City in 2002 to set policy and guide future growth, development, and conservation of resources.

The City of Salinas General Plan Circulation Element provides policy direction for the transportation systems that serve the City, including roadways that could be affected by the proposed project. The element describes how the City intends to serve transportation needs for the next 20 years as the population grows. It identifies the general location and extent of existing and proposed major circulation facilities for vehicle, rail, air, water, and bicycle transportation including goals relative to: major roadways, movement of people and goods, scenic highways, and public transit. Policies from the element that generally apply to consideration of impacts of the proposed project on City roadway facilities include:

CIRCULATION ELEMENT

Policy C-1.2: Strive to maintain traffic Level of Service (LOS) D or better for all

intersections and roadways.

Policy C-1.3: Require that new development and any proposal for an amendment to the Land Use Element of the General Plan demonstrate that traffic service levels meeting established General Plan standards will be maintained on arterial and collector streets.

Policy C-1.4: Continue to require new development to contribute to the financing of street improvements, including formation of roadway maintenance assessment districts, required to meet the demand generated by the project.

Policy C-1.5: Ensure that new development makes provisions for street maintenance through appropriate use of gas tax and formation of maintenance assessment districts.

Policy C-1.6: Discourage diversion of traffic to local streets by providing maximum capacity on arterial streets and locating high traffic-generating uses on or near arterial frontages.

Policy C-1.7: Design roadway capacities to adequately serve planned land uses.

Policy C-1.10: Encourage car-pooling, at government offices, business, schools, and other facilities, to reduce the number of vehicles using the roadway system.

Policy C-2.2: Cooperate with Caltrans in making improvements to U.S. Highway 101 and support construction of Prunedale freeway improvements by Caltrans to serve through trips, and trips to and from Salinas.

Policy C-3.2: Design development and reuse/revitalization projects to be transit-oriented to promote the use of alternative modes of transit and support higher levels of transit service.

Policy C-3.4: Support public transportation that is “bike” friendly, such as buses with bicycle racks and reduced fares for bicycle riders and provision of bicycle racks at public transportation stations.

Policy C-4.1: Continue to develop a network of on- and off-street bicycle routes to encourage and facilitate the use of bicycles for commute, recreational, and other trips. Eliminate gaps and provide connections between existing bicycle routes.

Policy C-4.2: Increase availability of facilities, such as bike racks and well-maintained and well-lit bike lanes that promote bicycling.

Policy C-4.3: Encourage existing businesses and require new construction to provide on-premise facilities to aid bicycle commuters, such as on-site safe bicycle parking.

Policy C-4.4: Improve the biking environment by providing safe and attractive cut-throughs, bike lanes, and bike paths for both recreational and commuting purposes.

Policy C-4.5: Where possible, ensure that roadway improvements (i.e., widening and re-striping), as well as new overpasses and underpasses, allow for safe on-street bike lanes or adequate right-lane space for bicycles.

Policy C-4.7: Encourage parking lot designs that provide for safe and secure bicycle parking.

Policy C-5.1: Increase availability of safe and well-maintained sidewalks in all areas of the City.

Policy C-5.2: Encourage all new bus stops and changes in existing bus stops to take pedestrian access into consideration.

Policy C-5.4: Encourage parking lot designs that promote pedestrian access and safety.

City of Salinas Traffic Improvement Program (TIP)

The City has adopted a traffic improvement program that helps fund transportation infrastructure improvements that become necessary as a result of new development. Traffic impact fees are paid by project developers to off-set the impacts of their projects on the City's circulation facilities. The fees are used for circulation network improvements that are designed to ensure that the City's circulation facilities operate at an acceptable level of service.

The City periodically updates the traffic impact fee to reflect costs of construction of new circulation facilities or expand existing facilities. It reflects the costs of improving the circulation network to accommodate traffic volumes anticipated at buildout of the city as foreseen in the General Plan. The General Plan and the TIP identify the specific circulation network improvements that are needed. Several of the improvements are particularly relevant to the proposed project, as the traffic it generates has been found to have a significant impact on a number of circulation facilities that are included in the TIP. A project applicant's payment of the impact fee is considered to be mitigation for project impacts on those facilities provided the impacts of the project on the facilities were anticipated when the TIP was prepared.

City of Salinas Bikeways Plan

The 2002 *Salinas Bikeways Plan* includes goals and actions along with maps identifying the City's existing and proposed bikeways, bike parking facilities, bike support facilities, routes for buses with bike racks, and the design requirements for those facilities. The *Salinas Bikeways Plan* provides prioritized lists of projects and programs for bicycle transportation within the City of Salinas.

City of Salinas Pedestrian Plan

The 2004 *Salinas Pedestrian Plan* contains goals and strategies for improving and expanding pedestrian access and safety throughout the City. Goal 3 of the plan requires that new development be conditioned to install appropriate streets, sidewalks, pedestrian access ramps, traffic calming measures and related facilities to encourage walking. Future development within the Plan Area is subject to such conditions.

City of Salinas Roundabout Concept

In May 2017, the City Council approved Resolution No. 21169 establishing the roundabout concept along East Boronda Road at the following intersections: Mckinnon Street, El Dorado Drive, Natividad Road, Independence Boulevard, and Hemingway Drive.

3.10.2 METHODOLOGY

STUDY PERIODS AND SCENARIOS

This section evaluates the potential impacts to multimodal circulation that could result from implementation of the West Area Specific Plan, as compared to conditions that would occur without the project. With respect to the traffic analysis components of the evaluation, quantitative analyses were conducted for the following scenarios:

- Existing Conditions – Reflects the current circulation system.
- Existing Plus Project Conditions – Reflects the impact of the West Area Specific Plan on the transportation network, assuming that full buildout of the plan would occur absent of other growth assumptions that are included in the cumulative scenarios.
- Existing Plus Project and Central Area Specific Plan (Central Area Specific Plan) Conditions – Incorporates the combined effect of development of the West Area Specific Plan and the Central Area Specific Plan on the local transportation network.
- Cumulative Conditions – Reflects the projected traffic volumes and planned transportation infrastructure projects for 2045 including traffic generated by pending developments extraneous to the proposed project (including the development contemplated under the City's Economic Development Element Target Areas), as well as various assumed roadway network changes.
- Cumulative Plus Project Conditions – Reflects the overall change in traffic volumes in Salinas as a result of forecasted development (under cumulative conditions), with the addition of the West Area Specific Plan.

- Cumulative Plus Project and Central Area Specific Plan Conditions – Reflects the overall change in traffic volumes in Salinas as a result of forecasted development (under cumulative conditions), with the addition of the West Area Specific Plan and Central Area Specific Plan.

The City based its significance conclusions and mitigation recommendations for project-specific traffic effects on the analysis of Existing Plus Project Conditions. Significance conclusions and mitigation recommendations for cumulative traffic effects on the analyses for both Cumulative Plus Project Conditions and Cumulative Plus Project and Central Area Specific Plan Conditions were also based on Existing Plus Project conditions.

METHODS OF ANALYSIS

LOS is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F.

Intersections

The study intersections were analyzed using methodologies published in the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2010). This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The operation of signalized intersections is based on various intersection characteristics (such as traffic volumes, lane geometry, and signal phasing) to estimate the average control delay experienced by motorists traveling through an intersection. Control delay incorporates delay associated with deceleration, acceleration, stopping, and moving up in the queue. Table 3.10-1 summarizes the relationship between average delay per vehicle and LOS for signalized intersections.

TABLE 3.10-1: SIGNALIZED INTERSECTION LOS CRITERIA

LOS	*DESCRIPTION*	*AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)*
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	< 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and/or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0
E	Operations with long delays indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80.0

SOURCE: HIGHWAY CAPACITY MANUAL, TRANSPORTATION RESEARCH BOARD, 2010

Traffic conditions at unsignalized intersections were evaluated using the method from Chapters 19 (two-way stop control), 20 (all-way stop control) and 21 (roundabouts) of the 2010 *Highway Capacity Manual*. With this method, operations are defined by the average control delay per vehicle (measured in seconds) for each movement that must yield to the right-of-way. At all-way stop-controlled intersections and roundabouts, the weighted average control delay for all movements that must yield to the right-of-way is reported. Roundabouts were evaluated using *Sidra* software. At two-way or side street-controlled intersections, the control delay (and LOS) is calculated for each controlled movement, as well as the left-turn movement from the major street, and the entire intersection. For controlled approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. The delays for the entire intersection and for the movement or approach with the highest delay are reported. Table 3.10-2 summarizes the relationship between delay and LOS for unsignalized intersections.

TABLE 3.10-2: UNSIGNALIZED INTERSECTION LOS CRITERIA

LOS	*DESCRIPTION*	*AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)*
A	Little or no delays	< 10.0
B	Short traffic delays	> 10.0 to 15.0
C	Average traffic delays	> 15.0 to 25.0
D	Long traffic delays	> 25.0 to 35.0
E	Very long traffic delays	> 35.0 to 50.0
F	Extreme traffic delays with intersection capacity exceeded	> 50.0

SOURCE: HIGHWAY CAPACITY MANUAL, TRANSPORTATION RESEARCH BOARD, 2010

Freeway

Freeway mainline segments were analyzed by Fehr & Peers using an internal spreadsheet tool based on the methodology described in Chapter 11 of HCM (Transportation Research Board, 2010). This method takes into consideration peak hour traffic volumes, free-flow speeds, percentage of heavy vehicles, and number of travel lanes. These factors are used to determine the vehicle density, measured in passenger cars per mile per lane. The operational performance of ramp junctions at certain locations on the freeway were also analyzed according to a methodology based on the *Highway Capacity Manual*.

Based on the methodology described in the Transportation Research Board's *Highway Capacity Manual*, ramp merge and diverge analysis determines LOS scores for freeway ramp junctions based on the density of entering and exiting traffic along the highway mainline. In this case, LOS describes the traffic and delay experienced by people driving as a result of traffic density on the ramps. It is important to note that the US. 101 northbound on-ramp and southbound off-ramp at East Boronda Road were not analyzed because they add or remove an entire lane, thus creating a weaving segment; only ramp diverge or merge segments were analyzed.

3.10.3 TRANSPORTATION SETTING

The following information describes the transportation network relevant to the proposed project.

EXISTING CIRCULATION NETWORK

This section describes the existing roadway facilities relevant to the proposed project, which are shown in Figure 3.10-1.

Roadway System

NORTH/SOUTH ROADWAYS

U.S. Route 101 (U.S. 101) is a north-south, four-lane freeway extending through the City of Salinas. The highway becomes a six-lane freeway between Boronda Road and Russell Road, through the north City limits of Salinas. The intersection of U.S. 101 and major roadways in Salinas are either an interchange or grade separated overpass.

San Juan Grade Road is a four-lane roadway south of Boronda Road that intersects at North Main Street and continues as a two-lane roadway north of Boronda Road. The posted speed limit is 45 mph. Major intersections are controlled by traffic signals and minor intersections are controlled by side street stop control, with San Juan Grade Road as a free flow roadway. Sidewalks and striped Class II bicycle lanes are provided on San Juan Grade Road between Northridge Way and Main Street. Intermittent sidewalks are provided on some portions of the roadway between Russell Road and Rogge Village Way.

McKinnon Street is a two-lane collector with bicycle lanes and sidewalks that connects with Boronda Road and Alvin Drive. The posted speed limit is 35 mph.

El Dorado Drive is a two-lane collector with bicycle lanes and sidewalks that connects with Boronda Road and Alvin Drive, with a two-way left turn lane between Harden Parkway and Alvin Drive. The posted speed limit is 25 mph.

Natividad Road is a six-lane divided major arterial from East Laurel to East Boronda Road with a posted speed limit of 45 mph. A portion of Natividad Road, between East Boronda Road and Los Coches Drive, has sound walls on each side of the roadway. Natividad Road is a two-lane rural roadway north of East Boronda Road. South of East Bernal Drive, this road is known as Sherwood Drive, a four-lane arterial.

North Main Street is a six-lane divided major arterial between U.S. 101 in the south and East Boronda Road in the north with a posted speed limit of 35 miles per hour in this section. South of U.S. 101 to East Market Street, North Main is a four-lane undivided arterial with a two-way left turn lane. At the terminus it transitions into a couplet with Salinas Street continuing southbound, while Monterey Street provides northbound access.

Alisal Road is a two-lane rural road with a posted speed limit of 55 miles per hour. It runs from Spence Road in the east to East Alisal Street/Bardin Road at the Salinas City Limit. Alisal Road borders the Salinas Municipal Airport to the north but does not provide direct access to it.

Independence Boulevard is a divided collector roadway extending from Boronda Road to Constitution Boulevard. It provides Class II bicycle lanes along with a continuous sidewalk on the eastern side of the roadway for its entire length. Independence Boulevard is four lanes wide from Boronda Road to Nantucket Boulevard and two lanes wide south of Nantucket Boulevard.

Sanborn Road is a four-lane major arterial roadway connecting Boronda Road in the north with Abbott Street in the south. Traffic signals are provided at all major intersections and a full interchange with U.S. 101 provides access to regional destinations. Continuous sidewalks are provided on both sides of Sanborn Road for its entire length. Striped Class II bicycle lanes have been installed on the segment of Sanborn Road north of Del Monte Avenue (to Boronda Road).

EAST/WEST ROADWAYS

Russell Road begins at the Espinosa Road/Russell Road interchange with U.S. 101 and extends east to San Juan Grade Road. Russell Roadway provides two through lanes of travel (one in each direction), widening to provide additional turn lanes at intersections. The posted speed limit ranges from 35 to 45 mph. Intermittent sidewalks are provided along some sections of the facility.

Boronda Road begins at the Boronda Road interchange with U.S. 101 as a six-lane major arterial to North Main Street. East of North Main Street, Boronda Road transitions to two lanes eastbound and three lanes westbound to San Juan Grade Road. East Boronda Road then narrows to a two-lane arterial east of Dartmouth Way until it terminates at Williams Road. Traffic signals control the intersections of Boronda Road and all major arterials.

Rogge Road is a two-lane collector connecting San Juan Grade Road and Natividad Road. The speed limit ranges from 55 mph to 25 mph (school zone). Sidewalks and a striped Class II bicycle lane are provided on the section of Rogge Road between Natividad Road and La Joya Elementary School. Intermittent facilities are provided west of La Joya Elementary.

Williams Road is a four-lane divided arterial with left-turn lanes between Del Monte Avenue and Freedom Parkway. Between Del Monte Avenue and East Alisal Street, Williams Road is a four-lane arterial with a center turn lane and left turn lanes. There is a painted bicycle lane between Freedom Parkway and Bardin Way.

Constitution Boulevard is a divided four-lane minor arterial roadway extending from Laurel Drive to Boronda Road. The facility provides striped Class II bicycle lanes and sidewalks on both sides of the roadway.

Truck Routes

U.S. 101 and City-designated truck routes serve the primary industrial areas of the community. These roads are intended to move goods efficiently within the City, between outlying agricultural uses, and packing/distribution centers. Additionally, they serve to separate truck traffic from local streets where the larger vehicles may conflict with other uses.

Aside from U.S. 101, the following roads in part or in whole serve as truck routes on City streets:

- Blanco Road
- Davis Road
- Boronda Road
- Williams Road
- Alisal Street
- Skyway Boulevard
- Airport Boulevard
- Sanborn Road
- Laurel Drive

As shown in Figure 3.10-2, these roads combine to form concentric rings that provide access to existing industrial uses and shipping centers throughout the City.

Pedestrian Facilities

Pedestrian facilities consist of sidewalks, curb ramps, crosswalks, and off-street paths, among other things. These facilities should provide safe and convenient routes for people walking to traverse the City. Pedestrian facilities are typically identified in the General Plan as part of the transportation or circulation element, along with any proposed improvements or extensions to the existing pedestrian network. Policies and programs relating to walking in Salinas are defined in the City of Salinas Circulation Element Goal C-5 and the 2004 *Salinas Pedestrian Plan*.

Pedestrian facilities exist in Salinas to varying degrees of comprehensiveness. Improved pedestrian facilities typically correspond to more recent development, while roads adjacent to agricultural uses or undeveloped lots typically do not provide pedestrian facilities, which is common in urbanizing communities. Near the project area, wider sidewalks are more common in the presence of schools.

Pedestrian facilities relevant to the proposed project areas are listed below:

- **San Juan Grade Road** has intermittent facilities on the east and west sides of the street between Boronda Road and Rogge Road.
- **East Boronda Road** has a continuous southerly sidewalk for its entire length of approximately four miles from Williams Road and San Juan Grade Road, in the form of a curvilinear path – sometimes with landscaped vegetation – that parallels the roadway. The path is approximately 9 feet wide from Williams Road to San Juan Grade Road. Sidewalk switches to the north side of the road between San Juan Grade and North Main Street.
- **McKinnon Street** is equipped with approximately 9-foot sidewalks on the western side between Boronda Road and East Alvin Drive. Western side has an approximately 9-foot

sidewalk between East Alvin Drive that narrows into approximately five feet approximately 400 feet south of Westminster Drive. McKinnon Street does not have sidewalks for 1,000 feet north of Boronda in the proximity of McKinnon Elementary School.

- **Natividad Road** has sidewalks on at least one side of the street between East Laurel Drive and Boronda Road. There are no sidewalks present north of Boronda Road.
- **Rogge Road** has been recently improved between San Juan Grade Road and Jasper Way. On this section, the sidewalk on the north and south side of the street. The sidewalk is approximately 10-feet wide; the southern sidewalk narrows to approximately five feet west of Rogge Village Loop. No sidewalks are present east of Jasper Way.
- **Williams Road** has continuous sidewalks present between Alisal Street and Freedom Parkway, where it passes through entirely urban land uses. In the proximity of Alisal High School, the sidewalk widens and parallels the road in a curvilinear fashion similar to the facility on Boronda Road. Between Freedom Parkway and Boronda Road, the sidewalk is only present on the north side of the street, in correlation with the residential land use present there; the south side of the street is agricultural use. North of Boronda Road, the adjacent land use is entirely agricultural, and no sidewalks are present.
- **Old Stage Road** is a rural road serving mostly agricultural uses. It does not have any sidewalks.

Existing pedestrian facilities may have barriers in the form of signposts, utility poles, or overgrown vegetation. Such barriers can also provide challenges to the access requirements for those with disabilities, as mandated in Americans with Disabilities Act (ADA). As parcels are developed and required to install sidewalks, there can also be gaps in the sidewalk system when adjacent parcels are vacant or not redeveloped.

BICYCLE FACILITIES

Bicycle facilities consist of paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are separate areas on roadways designated for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only, but may not include substantial width for bicycle travel. Like pedestrian facilities, bicycle networks are typically included in the General Plan, along with any proposed improvements or extensions. The list of existing bicycle facilities is summarized below and shown on Figure 3.10-3 based on the 2002 *Salinas Bicycle Plan* and cross-checked against field observations.

CLASS I SHARED-USE PATHS

- Rossi Rico Parkway
- Natividad Creek Park Trail
- Gabilan Creek Bike Path

- Front-Sherwood Underpass

CLASS II BICYCLE LANES

- Williams Road
- Freedom Parkway
- North Sanborn Road between Del Monte Ave and East Boronda Road
- Constitution Boulevard
- Independence Boulevard
- East Boronda Road between Williams Road and North Davis Road
- North Davis Road between Boronda Road and SR 183
- South Davis Road between SR 183 to Blanco Road
- Nantucket Boulevard
- Rider Avenue
- Hemingway Drive
- El Dorado Drive
- Harden Parkway
- McKinnon Street
- East Alvin Drive between Kip Drive and North Main Street
- North Main Street between East Alvin Drive and San Juan Grade Road
- San Juan Grade Road between East Boronda Road and North Main Street
- Harden Parkway
- East and West Rossi Street
- Pajaro Street Between East Market Street and East San Joaquin Street
- South Main Street between East San Joaquin Street and Stephanie Drive
- East Alisal Street between Front Street and North Madeira Avenue
- Work Street between East Alisal Street and John Street
- Abbott Street between John Street and Harkins Road
- Front Street between East Alisal Street and John Street
- Laurel Drive between Constitution Boulevard and Saint Edwards
- Sherwood Drive

CLASS III ROUTES

These facilities are ubiquitous throughout Salinas neighborhoods and are typically located on low-volume local streets.

Existing Transit Service

MST provides fixed-route bus service in Monterey County and in the City of Salinas. Most routes in Salinas follow a hub-and-spoke service pattern, originating and returning to the Salinas Transit Center in downtown Salinas. Express and commuter buses are also provided to regional destinations in Monterey and Santa Cruz counties. Buses also connect Salinas to San Jose. MST welcomed 4,635,954 passengers across all MST services during the fiscal year ending June 30, 2018. Figure 3.10-4 shows a map of transit bus service in Salinas.

The proposed project is served by MST routes 41, 45, 49, 72 and 95. Many of these routes start at the Downtown Salinas Transit Center and end at the Northridge Mall, in the northwest corner of the city. Table 3.10-3 below summarizes the hours of operation and service frequencies of these routes. Routes 45, 72 and 95 have stops on East Boronda Road near San Juan Grade Road, McKinnon Street, El Dorado Drive, Shaker Square (a retail shopping center), Natividad Road, and Independence Road.

TABLE 3.10-3: EXISTING TRANSIT SERVICE

ROUTE #	ROUTE NAME/DESTINATION	WEEKDAY	SATURDAY	SUNDAY	COMMUTE HEADWAY (PEAK HOUR)
41	Northridge via East Alisal	5:17 AM – 10:16 PM	5:55 AM -10:14 PM		30 Minutes
45	Northridge via East Market	Daily: 7:00 AM – 7:00 PM			75 minutes
49	Santa Rita via Northridge	Daily: 6:15 AM – 10:00 PM			60 Minutes
72	Presidio – North Salinas Express	6:00 AM – 6:15 PM	n/a		1 AM Trip/1 PM Trip
95	Northridge – Williams Ranch	Daily: 7:02 AM – 5:20 PM			120 Minutes

Source: Fehr & Peers, 2018

3.10.4 EXISTING CONDITIONS

Study intersections, highway segments, and highway ramp junctions were selected based on the proposed project location, expected directions of travel to/from the site, and the amount of traffic that will be added to the transportation network.

STUDY INTERSECTIONS

Figure 3.10-5 shows a map of the study intersections. These are also listed below.

1. U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road
2. U.S. 101 Northbound Ramps/Crazy Horse Canyon Road

3. U.S. 101 Northbound Ramps/U.S. 101 Southbound Ramps/Sala Road
4. Harrison Road/Sala Road/Driveway
5. Crazy Horse Canyon Road/San Juan Grade Road
6. Hebert Road/San Juan Grade Road
7. Old Stage Road/Hebert Road
8. North Main Street/Harrison Road/Russell Road
9. Van Buren Avenue/Russell Road
10. San Juan Grade Road/Rogge Road
11. San Juan Grade Road/Russell Road
12. Natividad Road/Rogge Road
13. Natividad Road/Russell Road (future extension)
14. San Juan Grade Road/Van Buren Avenue
15. U.S. 101 Southbound Ramps/Boronda Road
16. U.S. 101 Northbound Ramps/Boronda Road
17. North Main Street/Boronda Road
18. North Main Street/San Juan Grade Road
19. San Juan Grade Road/Boronda Road
20. McKinnon Street/Boronda Road
21. El Dorado Drive/Boronda Road
22. Natividad Road/Boronda Road
23. Independence Boulevard/Boronda Road
24. Hemingway Drive/Boronda Road
25. Old Stage Road/Constitution Boulevard (future extension)
26. North Main Street/East Alvin Drive
27. Natividad Road/East Alvin Drive
28. Independence Boulevard/Constitution Boulevard
29. Boronda Road/Constitution Boulevard
30. U.S. 101 Southbound Ramps/West Laurel Drive
31. U.S. 101 Northbound Ramps/West Laurel Drive
32. North Main Street/West Laurel Drive
33. Natividad Road/East Laurel Drive
34. Constitution Boulevard/East Laurel Drive
35. North Sanborn Road/Boronda Road
36. Old Stage Road/Williams Road/Private Road
37. North Main Street/East Bernal Drive
38. Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way

39. East Laurel Drive/North Sanborn Road
40. Williams Road/Boronda Road
41. Freedom Pkwy/Williams Road
42. Bardin Road/Bardin Way/Williams Road
43. East Market Street/Williams Road
44. John Street/Williams Road/E Alisal Street
45. South Sanborn Road/North Sanborn Road/John Street
46. Bardin Road/East Alisal Street/Driveway
47. Skyway Boulevard/Airport Boulevard
48. South Sanborn Road/North Sanborn Road/East Alisal Street
49. West Laurel Drive/Adams Street
50. North Davis Road/West Laurel Drive
51. East Front Street/Sherwood Drive/Market Street
52. East Market Street/East Front Street
53. South Davis Road/Blanco Road
54. Monterey Street/Monterey Street/East Market Street
55. Salinas Street/North Main Street/West Market Street/East Market Street
56. South Main Street/West Blanco Road/East Blanco Road

FREEWAY SEGMENTS

1. U.S. 101 from San Juan Road to Crazy Horse Canyon Road
2. U.S. 101 from Crazy Horse Canyon Road to San Miguel Canyon Road
3. U.S. 101 from San Miguel Canyon Road to SR 156
4. U.S. 101 from SR 156 to Sala Road
5. U.S. 101 from Sala Road to Boronda Road
6. U.S. 101 from Boronda Road to W. Laurel Drive
7. U.S. 101 from W. Laurel Drive to N. Main Street/SR 183
8. U.S. 101 from N. Main Street/ SR 183 to E. Market Street
9. U.S. 101 from SR 68/John Street to S. Sanborn Road
10. U.S. 101 from S. Sanborn Road to Abbott Street

FREEWAY RAMP JUNCTIONS

1. U.S. 101 and East Boronda Road Southbound Loop On-Ramp
2. U.S. 101 and East Boronda Road Southbound On-Ramp
3. U.S. 101 and East Boronda Road Northbound Loop On-Ramp

4. U.S. 101 and East Boronda Road Northbound Off-Ramp
5. U.S. 101 and West Laurel Drive Southbound Off-Ramp
6. U.S. 101 and West Laurel Drive Southbound On-Ramp
7. U.S. 101 and West Laurel Drive Southbound Loop On-Ramp
8. U.S. 101 and West Laurel Drive Northbound On-Ramp
9. U.S. 101 and West Laurel Drive Northbound Loop On-Ramp
10. U.S. 101 and West Laurel Drive Northbound Off-Ramp

3.10.5 NO PROJECT CONDITIONS

Fehr & Peers collected intersection turning movement and segment volumes for US 101 in January, February, and April of 2016. The data was collected midweek. Volumes were collected in January and February to capture school-related travel. However, in order to account for possible seasonal variances in traffic volume due to the local context of Salinas, a volume adjustment factor for these winter counts was considered. Using prior data collected by the City from the summer of 2015, winter counts were found to be larger than summer counts by about 2 percent. Such a variance is likely due to simple day-to-day fluctuations in travel behavior, and as such an adjustment factor for winter volumes was ultimately not used.

Existing with No Project Conditions Intersection Operations Analysis

Existing level of service levels were evaluated at 54 intersections in Salinas, presented in Table 3.10-4, below. Intersections that function below the minimum threshold (LOS D) in either the morning or evening peak period are shown in bold.

TABLE 3.10-4: EXISTING WITH NO PROJECT INTERSECTION LEVEL OF SERVICE

Int. No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road	SSSC	6.9 (15.2)	A (C)	11.2 (17.6)	B (C)
2	U.S. 101 Northbound Ramps/Crazy Horse Canyon Road	SSSC	3.4 (12)	A (B)	2.9 (13.3)	A (B)
3	U.S. 101 Northbound Ramps/U.S. 101 Southbound Ramps/Sala Road	AWSC	8.6	A	10.1	B
4	Harrison Road/Sala Road	Signal	8.7	A	9.2	A
5	Crazy Horse Canyon Road/San Juan Grade Road	AWSC	9.2	A	11.1	B
6	Hebert Road/San Juan Grade Road	SSSC	5.9 (11.3)	A (B)	7.1 (21.6)	A (C)

TABLE 3.10-4: EXISTING WITH NO PROJECT INTERSECTION LEVEL OF SERVICE

Int. No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
7	Old Stage Road/Hebert Road	SSSC	0.6 (11.7)	A (B)	0.6 (13.5)	A (B)
8	North Main Street/Harrison Road/Russell Road	Signal	16.9	B	21.5	C
9	Van Buren Ave/Russell Road	Signal	17.5	B	18.8	B
10	San Juan Grade Road/Rogge Road	AWSC	17.4	C	13.4	B
11	San Juan Grade Road/Russell Road	Signal	14.9	B	13.1	B
12	Natividad Road/Rogge Road	SSSC	5.7 (10.4)	A (B)	5.2 (12.4)	A (B)
14	San Juan Grade Road/Van Buren Avenue	SSSC	4.6 (29.8)	A (D)	3.1 (19.4)	A (C)
15	U.S. 101 Southbound Ramps/Boronda Road	Signal	6	A	7.1	A
16	U.S. 101 Northbound Ramps/Boronda Road	Signal	7.9	A	18.1	B
17	North Main Street/Boronda Road	Signal	47.3	D	46.2	D
18	North Main Street/San Juan Grade Road	Signal	11.3	B	22.5	C
19	San Juan Grade Road/Boronda Road	Signal	39.5	D	42.7	D
20	McKinnon Street/Boronda Road	Signal	26.5	C	24.8	C
21	El Dorado Drive/Boronda Road	Signal	12.7	B	8.9	A
22	Natividad Road/Boronda Road	Signal	36.1	D	54.9	D
23	Independence Boulevard/Boronda Road	Signal	14.3	B	10.7	B
24	**Hemingway Drive/Boronda Road**	**SSSC**	**17.9 (114.3)**	**C (F)**	**5.6 (99.4)**	**A (F)**
26	North Main Street/East Alvin Drive	Signal	41.2	D	40.9	D
27	Natividad Road/East Alvin Drive	Signal	14.4	B	12.7	B
28	Independence Boulevard/Constitution Boulevard	Signal	21.4	C	20.4	C

TABLE 3.10-4: EXISTING WITH NO PROJECT INTERSECTION LEVEL OF SERVICE

Int. No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
29	Boronda Road/Constitution Boulevard	Signal	8.5	A	10.4	B
30	U.S. 101 Southbound Ramps/West Laurel Drive	Signal	9.5	A	11.7	B
31	U.S. 101 Northbound Ramps/West Laurel Drive	Signal	6.6	A	12.2	B
32	**North Main Street/West Laurel Drive**	**Signal**	38.6	D	**56.7**	**E**
33	Natividad Road/East Laurel Drive	Signal	54.9	D	48.9	D
34	East Laurel Drive/Constitution Boulevard	Signal	17.5	B	22.9	C
35	**North Sanborn Road/Boronda Road**	**SSSC**	**19.3 (123.6)**	**B (F)**	**7.3 (38.4)**	**A (E)**
36	Old Stage Road/Williams Road/Private Road	SSSC	5.1 (10.2)	A (B)	4.0 (11.6)	A (B)
37	North Main Street/East Bernal Drive	Signal	45.4	D	40.1	D
38	**Sherwood Drive/Natividad Road/E Bernal Drive/La Posada Way**	**Signal**	41.9	D	**60**	**E**
39	East Laurel Drive/North Sanborn Road	Signal	20.1	C	26.5	C
40	Williams Road/Boronda Road	SSSC	7.2 (15.4)	A (C)	6.8 (25.9)	A (D)
41	Freedom Parkway/Williams Road	Signal	19.3	B	20.4	C
42	Bardin Road/Bardin Way/Williams Road	Signal	16.8	B	19.5	B
43	East Market Street/Williams Road	Signal	19.7	B	29.1	C
44	John Street/Williams Road/East Alisal Street	Signal	12.3	B	13	B
45	South Sanborn Road/North Sanborn Road/John Street	Signal	44.6	D	25.5	C
46	Bardin Road/East Alisal Street/Driveway	AWSC	9.9	A	9.8	A
47	Skyway Boulevard/Airport Boulevard	SSSC	2.6 (9.5)	A (A)	10.9 (14.9)	B (B)

TABLE 3.10-4: EXISTING WITH NO PROJECT INTERSECTION LEVEL OF SERVICE

Int. No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	25.6	C	31.5	C
49	West Laurel Drive/Adams Street	Signal	12.7	B	17	B
50	North Davis Road/West Laurel Drive	Signal	25.9	C	43.7	D
51	East Front Street/Sherwood Drive/Market Street	Signal	11.6	B	13.9	B
52	East Market Street/East Front Street	Signal	8.8	A	9.1	A
53	South Davis Road/Blanco Road	Signal	38.3	D	45.5	D
54	Monterey Street/Monterey Street/East Market Street	Signal	17.1	B	25.2	C
55	Salinas Street/North Main Street/West Market Street/East Market Street	Signal	28.4	C	29.5	C
56	South Main Street/West Blanco Road/East Blanco Road	Signal	37	D	40.9	D

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes:

- *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS).*
- *All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle*

Currently, four intersections operate at a level of service below the City threshold of LOS D or better during the morning and/or evening peak period. Of these, only two intersections function at LOS F in either peak period: Hemingway Drive & Boronda Road, and North Sanborn Road & Boronda Road.

Existing with No Project Conditions Freeway Mainline Capacity Analysis

Traffic volume observations were recorded at ten locations along U.S. 101 by Fehr & Peers in the spring of 2016, during the same period as the intersection turning movement counts. For freeway mainline segments, level of service (LOS) is a function of traffic density and describes the resulting delay experienced by people driving. LOS scores are compared to the minimum operating standards defined by the Monterey County CMP in Table 3.10-5 and Table 3.10-6 below.

TABLE 3.10-5: AM EXISTING WITH NO PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	1,949	16.4	B	1,894	15.9	B
Crazy Horse Canyon Road to San Miguel Canyon Road	2,013	16.9	B	1,882	15.8	B
San Miguel Canyon Road to SR 156	2,953	16.5	B	2,406	20.2	C
SR 156 to Sala Road	2,065	17.3	B	1,824	15.3	B
Sala Road to Boronda Road	2,613	14.6	B	1,659	9.3	A
Boronda Road to Laurel Drive	2,924	24.7	C	1,831	15.4	B
Laurel Drive to N. Main Street/SR 183	2,843	24	C	1,726	14.5	B
N. Main Street/SR 183 to E. Market Street	2,858	24.1	C	1,811	15.2	B
SR 68 John Street to S. Sanborn Road	1,934	16.2	B	1,508	12.6	B
S. Sanborn Road to Abbott Street	1,668	14	B	1,526	12.8	B

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

TABLE 3.10-6: PM EXISTING WITH NO PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	2,624	22	C	2,188	18.4	C
Crazy Horse Canyon Road to San Miguel Canyon Road	2,278	19.1	C	2,208	18.5	C
San Miguel Canyon Road to SR 156	3,061	17.1	B	3,120	26.7	D

TABLE 3.10-6: PM EXISTING WITH NO PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
SR 156 to Sala Road	2,404	20.2	C	2,456	20.6	C
Sala Road to Boronda Road	2,562	14.3	B	2,453	13.7	B
Boronda Road to Laurel Drive	2,696	24.7	C	3,124	26.7	D
Laurel Drive to N. Main Street/SR 183	2,553	21.4	C	3,300	28.7	D
N. Main Street/SR 183 to E. Market Street	2,638	22.1	C	3,465	30.7	D
SR 68 John Street to S. Sanborn Road	2,039	17.1	B	2,370	19.9	C
S. Sanborn Road to Abbott Street	1,777	14.9	B	2,327	19.5	C

[1] *Density Reported in Passenger Cars per Mile Per Lane*
Source: Fehr & Peers, 2018

All of the analysis segments operate at or above the minimum level of service standards for highway facilities as set by the CMP, LOS D or better.

Existing with No Project Conditions Freeway Ramp Junctions Capacity Analysis

The existing operational performance of merging and diverging ramp junctions was analyzed at the Boronda Road and Laurel Drive interchanges of U.S. 101. Ramp junction merge and diverge movement level of service results for the northbound and southbound segments, in the morning and evening peak periods, are shown and compared to minimum operational standards in Table 3.10-7 and Table 3.10-8**,** below.

Currently, all ramp junction merge and diverge movements operate at acceptable levels of service during the morning and evening peak periods.

TABLE 3.10-7: AM EXISTING WITH NO PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	25.4	C	Loop On-Ramp	12	B
	On-Ramp	26.4	C	Off-Ramp	20.8	C
West Laurel Drive	Off-Ramp	31.1	D	On-Ramp	18.5	B
	On-Ramp	24.6	C	Loop On-Ramp	15	B
				Off-Ramp	19.5	B

Source: Fehr & Peers, 2018

TABLE 3.10-8: PM EXISTING WITH NO PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	23.1	C	Loop On-Ramp	19.4	B
	On-Ramp	24.3	C	Off-Ramp	33.5	D
West Laurel Drive	Off-Ramp	28.9	D	On-Ramp	30	D
	On-Ramp	21	C	Loop On-Ramp	26.3	C
				Off-Ramp	34	D

Source: Fehr & Peers, 2018

3.10.6 PROJECT CONDITIONS

In the Transportation Impact Analysis developed by Fehr & Peers, the West Area Specific Plan is considered to be the proposed project. However, the Central Area Specific Plan is considered simultaneously in some existing and future growth scenarios in order to evaluate the impact of West Area Specific Plan together with Central Area Specific Plan, as well as the baseline growth assumptions. The next two sections describe each plan in more detail.

WEST AREA SPECIFIC PLAN

The West Area Specific Plan (West Area Specific Plan) encompasses approximately 797 acres. It is relatively flat land bounded by the future Russell Road and Rogge Road extensions to the north, Natividad Road to the east, Boronda Road to the south, and San Juan Grade Road to the west.

Regional access to the site is provided by State Route 101, located 0.5 mile west of the project site, and by Boronda Road, which connects to State Route 101 and forms the south boundary of the West Area Specific Plan. In the southwest portion of the project site is the existing McKinnon Elementary School, which is surrounded by agricultural fields. Two small clusters of buildings supporting the agricultural operations are located on the project site. A new high school is under construction in the northwest portion of the site.

For the purposes of this analysis, the following assumptions were made regarding school enrollment in West Area Specific Plan:

- There will be 600 students enrolled in each of the three elementary schools, totaling 1,800 students.
- The middle school will contain the average California enrollment of 803 students.
- The High School is projected to have 1,534 students and a commensurate number of staff

The new schools are expected to primarily serve students living in the project area and/or areas immediately surrounding.

Internal Circulation Network

According to the *West Area Specific Plan,* the locations of collector and local streets are approximate and the local streets are shown for illustrative purposes only. Arterial streets may be constructed in advance of residential subdivision development, as needed for access and public safety.

Local streets within residential subdivisions will be designed to emphasize internal circulation and to discourage unsafe speeds through the incorporation of traffic calming features. The overall street pattern in the residential areas is intended to be simple in design and form an interconnected multi-modal network that includes automobile, bicycle, and pedestrian routes that provide direct connections to local destinations. Residential streets will provide for both intra-neighborhood and inter-neighborhood connections and thus will knit neighborhoods together and not form barriers between them.

All residential developments will be designed to provide convenient pedestrian and bicycle access to schools, parks, and open space areas. Sidewalks or pedestrian paths will be provided on both sides of all streets, except for the linear park streets. In locations where paths bisect blocks or clusters of homes, the intrusion upon the privacy of residential property shall be minimized. Bicycle facilities will be located within designated arterial and collector street rights-of-way as well as on the southerly greenway shared-use path. Safe and convenient crossings of all major roads should be provided for pedestrians and bicyclists. Pedestrian trails and paths are encouraged within and adjacent to open space areas designated for detention and retention basins, to the extent possible.

Bus shelters and turnouts, designed in accordance with Monterey Salinas Transit improvement standards, will be located along arterial streets at key residential neighborhood entrances and

adjacent to the Village Center as shown on the West Area Specific Plan public transit plan. All transit routes and stops/shelters in the Plan Area will be subject to approval by Monterey Salinas Transit and the City. Transit stop locations to serve the Plan Area will be coordinated with Monterey Salinas Transit as it develops interim and ultimate transit routing plans as funding allows.

Streets proposed as part of the West Area Specific Plan circulation system vary in design, depending on the land use the streets will serve and the desired design character. Some of the proposed streets and their designs are described below.

COMMUNITY PARK PROMENADE STREET 1: EL DORADO DRIVE

The Community Park Promenade Street-1 (El Dorado Drive) includes bicycle lanes extending the existing bicycle lanes on El Dorado Drive south of Boronda Road into the Specific Plan Area and north to Rogge Road. On-street parking is planned on the westerly (community park) side of the street for a total width of 40-feet curb to curb. The 13-feet of parkway on the west side of the street will include portions of the meandering 10-foot, shared-use, paved ADA-compliant path located within the community park. The 13-foot parkway with an additional 8-foot building/fence setback easement on the east side of the roadway will create an improved landscape planter with a double line of trees to help create a visual extension of the park to this side of the street. This is also typical for all four community park promenade streets.

COMMUNITY PARK PROMENADE STREET 2: ROAD A

The Community Park Promenade Street-2 (Road A) is a bicycle route connecting bike lanes on Boronda and Russell Roads. On-street parking is provided on both sides of the roadway for a total of 38-feet curb to curb. This relatively narrower roadway section combined with bulb-outs, traffic circles, and speed tables at key intersections is to function as a traffic calming feature to make this a lower speed street adjacent to the community park while providing for water quality and hydro-modification attenuation to meet the SWDS requirements.

COMMUNITY PARK PROMENADE STREET 3: ROAD G

The Community Park Promenade Street-3 (Road G) is part of the northerly greenway (collector) street that extends east-west through the North of Boronda FGA. It is also a bicycle route that connects bicycle lanes on San Juan Grade Road easterly to bicycle lanes on McKinnon Street, El Dorado Drive, Natividad Road, Independence Boulevard, Constitution Boulevard, Sanborn Road, and Williams Road. On-street parking is provided on both sides of the roadway for a total of 38 feet curb to curb. This relatively narrower roadway section combined with bulb-outs, and speed tables at the key intersections is to function as a traffic calming feature to make this a lower speed street adjacent to the community park.

COMMUNITY PARK PROMENADE STREET 4: ROAD C

The Community Park Promenade Street-4 (Road C) is part of the southerly greenway street that extends through the North of Boronda FGA. It is a bicycle route and, similar to Promenade Street-3, connects bicycle lanes from San Juan Grade to Williams Road. This is also the location of the North

of Boronda FGA greenway. The greenway is a shared-use, paved, all-weather, ADA-compliant path on the north side of the southerly greenway street. The path will be located within a landscaped planter (a portion is within the ROW and a portion is within a landscape easement/setback area) consisting of a minimum 8-foot-wide landscaped planter between the curb and edge of the 10-foot-wide, multi-use, paved ADA-compliant path, and a minimum 8-foot landscaped easement (no fences) and 12-foot building setback from the back of the path to the nearest building. No fences or buildings are permitted in the easement and no buildings are permitted within the setback area. On-street parking is provided on both sides of the roadway for a total width of 38-feet curb to curb. As with the other street sections around the community park, this parking also functions as a traffic calming feature.

Collector Feature Street Section 1: McKinnon Street and El Dorado Drive

Collector Feature Street Section 1 (McKinnon Street and El Dorado Drive) represents McKinnon Street and the portion of El Dorado Drive north and south of the community park. It includes bicycle lanes that extend existing bicycle lanes on McKinnon Street and El Dorado Drive south of Boronda Road into the Specific Plan Area and north to Russell and Rogge Roads. Parking is provided on the side of the street adjacent to the community path. The 21-foot landscaped parkway on the east side of McKinnon Street and the west side of El Dorado Drive includes a 7-foot-wide community path.

COLLECTOR FEATURE STREET SECTION 2: ROAD A

Collector Feature Street Section 2 (Road A) is represented by Road A north and south of the community park. It is part of a bicycle route connecting bicycle lanes on Boronda and Russell Roads. On-street parking is provided on both sides of the roadway for a total of 38-feet curb to curb. Widening of the curb-to-curb dimension to allow for turns is expected in the vicinity of the mixed use Village Center.

Collector Feature Street Section 3: Street C

Collector Feature Street Section 3 (Road C) is part of the southerly greenway street that extends east and west through the entire North of Boronda FGA. It is a bicycle route that connects bicycle lanes on San Juan Grade Road easterly to bicycle lanes on McKinnon Street, El Dorado Drive, Natividad Road, Independence Boulevard, Constitution Boulevard, Sanborn Road, and Williams Road. This is also the location of the North of Boronda FGA southerly greenway. The greenway is a shared-use path within an 18-foot minimum landscaped parkway on the north side of the street with an additional 8-foot easement and 12-foot building setback. On-street parking is provided on both sides of the roadway for a total width of 38-feet curb to curb. To maintain an all-weather paved ADA-compliant path as uninterrupted as possible, private driveway access across the shared-use path is prohibited on both streets. However, common private driveways/streets and access to alleyways may be approved in limited locations across the path as approved by the City Engineer. Appropriate striping, signage and design will be utilized to ensure safety of pedestrians.

COLLECTOR FEATURE STREET SECTION 4: ROAD G

Collector Feature Street Section 4 (Road G) is part the northerly greenway street that runs east-west through the entire North of Boronda FGA. It is a bicycle route and, like Collector Feature Street 3, connects bicycle lanes from San Juan Grade Road to Williams Road. The 15-foot landscaped parkway on the south side of Road G and the 8-foot landscape easement includes a 7-foot community path with an additional 8-foot easement and 12-foot building setback. On-street parking is provided on both sides of the roadway for a total width of 38- feet curb to curb. To maintain an all-weather (ADA-compliant) path as uninterrupted as possible, private driveway access across the shared-use path is prohibited on both streets. However, common private driveways/streets and access to alleyways may be permitted in limited locations across the path as approved by the City Engineer. Appropriate striping, signage and design will be utilized to ensure safety of pedestrians.

RUSSELL ROAD

The extension of Russell Road into the Specific Plan Area will be improved as a major arterial. Improvements will be installed within a 130-foot ROW. Russell Road will have four 12-foot lanes, two in each direction, separated by a 22-foot wide median. Where feasible, travel lanes will be sloped toward the median, and trees and other landscaping along the LID SCMs will be installed in this median. The two traffic lanes in each direction will be located within a 30-foot-wide curb to curb pavement section, for a total of 60- feet of pavement width. Both sides of Russell Road will consist of an 8-foot-wide parkway, a path 8-feet wide, and an 8-foot-wide landscaped area between the path and a perimeter wall on the adjacent property line.

For the portion of Russell Road adjacent to a supplemental storm water detention/retention basin, improvements will be installed within a 130-foot ROW. The south side of Russell Road, adjacent to the supplemental detention/retention basin, will have an 8-foot wide path and an 8-foot-wide landscaped area between the path and the Type 3 wall (if approved by the City Engineer).

ROGGE ROAD

The segment of Rogge Road adjacent to the Specific Plan Area will be improved with two different ways depending on the adjacent use. For the portion of Rogge Road adjacent to the new high school, improvements have been installed within an interim 52-foot ROW. The ultimate ROW is planned to be 92 feet including two travel lanes, a left-turn lane, and bike lanes. For the portion of Rogge Road east of the future extension of El Dorado Drive and adjacent to residential, initial improvements will be installed within an interim 53-foot ROW. The ultimate ROW is planned to be 82-feet including two travel lanes and adjacent bike lanes.

CENTRAL AREA SPECIFIC PLAN

The Central Area Specific Plan is approximately 820 acres and shares the boundary of Natividad Road with the West Area Specific Plan. The Central Area Specific Plan is generally bounded by Boronda Road, the future extension of Constitution Boulevard, Old Stage Road, the future Russell Road extension, and Natividad Road.

Like the West Area Specific Plan, the Central Area Specific Plan will also be a master-planned community based on New Urbanism principles. The new community proposes a minimum of 3,419 and a maximum of 3,983 new homes and apartments. In addition to the residential uses, approximately 250,000 square feet of retail and office uses may also be built within the Village Center Mixed Use Zone and a portion of the Neighborhood General-2 (NG-2) Zones. Approximately 100,000 square feet of retail or office square footage could be converted to an additional 100 residential units. These residential and commercial uses will be built within the Plan's Residential/Mixed Use Zoning Districts. Approximately 183 net acres of public streets are included in the plan.

Three school sites are proposed within the Central Area Specific Plan on three parcels for a combined 48 acres. They include a middle school (7th and 8th grade only) on 18 acres, an elementary school (kindergarten through 6th grade) on 12 acres, and another elementary and or middle school (kindergarten through 8th grade) on 18 acres. Also proposed are an approximately 22,000 square foot library on 2 acres and a fire station on 1.5 acres.

For the purposes of analysis, the following land use assumptions have been made:

- Residential: full buildout of 3,983 dwelling units
- Mixed Use Commercial: 250,000 square feet of retail and office
- Schools: two elementary schools with 600 students enrolled in each and one middle school with 803 students enrolled
- Other: 50 acres of parks, 30 acres of utilities, 22,000 square feet of libraries, one fire station

3.10.7 PROJECT CHARACTERISTICS

Buildout of the Specific Plan includes the construction of new roadways, intersections, roundabouts, transit, pedestrian, and bicycle facilities to effectively manage traffic generated by the various land use changes within the Specific Plan Area boundaries. Buildout of the Specific Plan also includes a circulation system that aligns with the existing and planned roadway network beyond the boundaries of the Specific Plan Area.

PROJECT CONDITIONS NETWORK CHANGES

Fehr & Peers assumes a number of changes to the network under the project conditions scenarios, based on what capacity-enhancing improvements would be implemented under buildout of each scenario. These expected changes include implementation the East Boronda Road Widening Project, which was approved by the City of Salinas on May 16, 2017. The remainder of the project assumptions are components of the West Area Specific Plan project (under the Existing Plus Project Network assumptions). These network changes are fully approved and fully funded, or are part of the proposed project and would become a condition of approval and/or mitigation requirement for the new development. Changes to the network in the Existing plus West Area Specific Plan scenario are also included in the Existing Plus Project and Central Area Specific Plan scenario. The Existing

Plus Project and Central Area Specific Plan scenario also includes network changes that would occur upon implementation of the Central Area Specific Plan. The assumptions are detailed below.

Existing plus Project Network Assumptions

- Widen Boronda Road to 4 lanes from San Juan Grade to Natividad Road (Approved and Funded by the City of Salinas May 16, 2017)
    - Boronda Road & McKinnon Street – 2 lane roundabout
    - Boronda Road & El Dorado Drive – 2 lane roundabout
    - Boronda Road & Natividad Road – 3 lane roundabout
- Widen Russell Road to 4 lanes from San Juan Grade to Natividad Road (new road) (To be Approved/Funded with the West Area Specific Plan Project)
- Widen Natividad Road to 4 lanes from Boronda to Rogge Road (To be Approved/Funded with the West Area Specific Plan Project)
- Widen San Juan Grade Road to 4 lanes from Boronda to Rogge Road (To be Approved/Funded with the West Area Specific Plan Project)
- Add north leg at the intersection of El Dorado Drive and East Boronda Road; El Dorado Drive extends north of East Boronda Road to Rogge Road (new road). (To be Approved/Funded with the West Area Specific Plan Project)

Existing plus Project and Central Area Specific Plan Network Assumptions

- Widen Boronda Road to 4 lanes from San Juan Grade Road to Constitution Boulevard (Approved and Funded by the City of Salinas May 16, 2017)
    - Boronda Road & Independence Boulevard – 2 lane roundabout
- Widen Russell to 4 lanes from San Juan Grade Road to Natividad Road (new road) (To be Approved/Funded with the West Area Specific Plan Project)
- Widen Natividad to 4 lanes from Boronda Road to Rogge Road (To be Approved/Funded with the West Area Specific Plan Project)
- Widen San Juan Grade to 4 lanes from East Boronda Road to Rogge Road (To be Approved/Funded with the West Area Specific Plan Project)
- Widen Old Stage Road to 4 lanes from Russell Road to Constitution Boulevard (To be Approved/Funded with the Central Area Specific Plan Project)
- Extend the following roadways north of East Boronda Road: El Dorado Drive, Independence Boulevard, and Hemingway Drive (new road) (To be Approved/Funded with the West Area Specific Plan and Central Area Specific Plan Projects)

- Extend Constitution Boulevard as 4-lane arterial to Old Stage Road (new road) (To be Approved/Funded with the Central Area Specific Plan Project)

It should be noted that the City of Salinas is considering the potential installation of roundabouts at additional locations on Boronda Road between Hemingway Drive and Williams Road. While this analysis assumes the widening and installation of traffic signal improvement at these locations, the installation of properly designed and sized roundabouts would offer similar levels of roadway capacity and would not change the overall conclusions of this analysis (Fehr & Peers, 2018).

TRIP GENERATION

Trip generation refers to the process of estimating the amount of vehicular traffic a project might add to the local roadway network. Using available data, the expected level of vehicle trip generation during the peak one-hour periods during the morning (AM) and evening (PM) peak hours, when traffic volumes on adjacent streets are typically at their highest, was calculated.

Fehr & Peers' trip generation tool, MainStreet, was used to estimate trip generation for this project. The MainStreet application combines Institute of Transportation Engineers (ITE) methods and Big Data to provide a more robust analysis platform as an alternative to using only the ITE Trip Generation Manual, a more traditional analysis method. The Trip Generation Manual contains data primarily collected at suburban, single-use, freestanding sites, which can overestimate vehicle trip generation. This is due to an inability of traditional tools to accurately reflect the amount of internal trip linking or the level of trips made by transit, biking, and/or walking. This can result in increased development costs due to oversized infrastructure and skewed perceptions of likely impacts. MainStreet begins with ITE trip generation estimates, but then adjusts those estimates to account for internal trips. MainStreet also recognizes that traffic generation relates closely to the density, diversity, design, destination accessibility, transit proximity, and scale of development, providing a more accurate and realistic trip generation estimate. Because the proposed project would use New Urbanist design principles that include mixed use development, MainStreet tool is more appropriate than trip generation rates which strictly rely on the ITE methodology.

Trip generation estimates for West Area Specific Plan are presented below in Table 3.10-9. Trip generation estimates for Central Area Specific Plan are presented in Table 3.10-10.

TABLE 3.10-9: WEST AREA SPECIFIC PLAN TRIP GENERATION

Land Use	Units	Quantity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
Elementary School	Students	1,800	2,322	446	365	810	132	138	270
Middle School	Students	803	1,301	239	195	434	63	65	128
High School	Students	1,534	2,623	449	211	660	94	105	199
General Office Building	1000 square feet gross floor area	143	1,576	224	31	255	40	198	238
Supermarket	1000 square feet gross floor area	57	5,828	120	74	194	275	265	540
Shopping Center	1000 square feet gross floor area	371	15,862	221	136	357	661	717	1,378
Single-Family Detached Housing	Dwelling Units	1,361	12,957	241	722	962	857	504	1,361
Condominium/ Townhouse	Dwelling Units	2,888	16,779	129	632	761	635	313	948
Apartment	Dwelling Units	91	605	9	37	46	44	24	68
City Parks	Acres	50	94	125	99	224	99	75	174
Utilities	Acres	37		57	34	91	22	26	48
Net Raw Project Trips			*59,947*	*2,260*	*2,536*	*4,794*	*2,922*	*2,430*	*5,352*
Internal Capture			*-5,455*	*-348*	*-391*	*-738*	*-593*	*-493*	*-1,086*
External Walk, Bike, and Transit			*-2,398*	*-136*	*-152*	*-288*	*-143*	*-119*	*-262*
Total Reductions			*-7,853*	*-484*	*-543*	*-1,026*	*-736*	*-612*	*-1,349*
Net New Project Trips			**52,094**	**1,776**	**1,993**	**3,768**	**2,186**	**1,818**	**4,003**

Source: Fehr & Peers, 2018, ITE Trip Generation Manual, Ninth Edition
Notes: See Appendix A of Appendix I of this EIR for West Area Specific Plan trip generation rate assumptions.

TABLE 3.10-10: CENTRAL AREA SPECIFIC PLAN TRIP GENERATION

Land Use	Units	Quantity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
Elementary School	Students	1,200	1,548	297	243	540	88	92	180
Middle School	Students	803	1301	239	195	434	63	65	128
High School	Students	1481	2533	433	204	637	91	102	193
General Office Building	1000 square feet gross floor area	125	1379	172	23	195	32	154	186
Supermarket	1000 square feet gross floor area	25	2556	53	32	85	121	116	237
Shopping Center	1000 square feet gross floor area	200	8,540	119	73	192	356	386	742
Single-Family Detached Housing	Dwelling Units	1,200	11,424	225	675	900	756	444	1,200
Condominium	Dwelling Units	2,700	15,687	202	986	1,188	941	463	1,404
Apartment	Dwelling Units	83	552	8	34	42	33	18	51
Library	1000 square feet gross floor area	22	1237	16	7	23	77	84	161
City Parks	Acres	50	76	101	79	180	80	60	140
Utilities	Acres	30	N/A	47	28	75	18	22	40
Net Raw Project Trips			46,833	1,912	2,579	4,491	2,656	2,006	4,662
Internal Capture			-4,028	-329	-444	-772	-494	-373	-867
External Walk, Bike, and Transit			-983	-69	-93	-162	-93	-70	-163
Total Reductions			-5,011	-398	-536	-934	-587	-443	-1,030
Net New Project Trips			**41,822**	**1,514**	**2,043**	**3,557**	**2,069**	**1,563**	**3,632**

Source: Fehr & Peers, 2018, ITE Trip Generation Manual, Ninth Edition

Notes: See Appendix B of Appendix I of this EIR for trip generation rate assumptions.

Fehr & Peers projects that buildout of the proposed West Area Specific Plan results in a total of 52,094 net new daily project trips. Buildout of the Central Area Specific Plan results in 41,822 net new daily project trips.

TRIP DISTRIBUTION

New traffic generated by West Area Specific Plan and Central Area Specific Plan was distributed through the roadway network using a trip distribution pattern developed using the City of Salinas Travel Demand Model. The distribution used for West Area Specific Plan-related traffic is shown on Figure 3.10-6**.**

3.10.8 THRESHOLDS OF SIGNIFICANCE

The following standards of significance are based on Appendix G of the CEQA Guidelines, in addition to criteria set forth by the City of Salinas, Monterey County, and Caltrans. The proposed West Area Specific Plan would result in a significant impact on transportation if it would:

1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
    - Policy C-1.2 of the General Plan states that the City shall "strive to maintain traffic Level of Service (LOS) D or better for all intersections and roadways." Furthermore, Policy C-1.3 states that these standards must be maintained with the addition of new development. Significant impacts at signalized intersections are defined to occur when:
        i. The addition of project traffic causes intersection operations to degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or worse); or
        ii. Project traffic is added to an intersection operating at an unacceptable level (LOS E or worse).
    - Significant impacts at unsignalized intersections are defined to occur when:
        iii. The addition of project traffic causes intersection operations (either the intersection as a whole or the worst movement for a two-way stop-controlled intersection) to degrade to an unacceptable level and satisfy the peak-hour signal warrant from the *Manual on Uniform Traffic Control Devices* (MUTCD); or
        iv. The project's access to a major street causes a potentially unsafe situation or requires a new traffic signal or roundabout based on standard warrant criteria.

- Policy C-1.1 of the plan states that "the acceptable level of service for County roads and intersections shall be a Level of Service (LOS) D". Significant impacts at mainline freeway segments and ramp junctions are defined to occur when:

    v. The addition of project traffic causes freeway mainlines or ramp junction operations to degrade from an acceptable (LOS D or better) to an unacceptable (LOS E or worse); or

    vi. Project traffic is added to a freeway mainline or ramp junction operating at an unacceptable level (LOS E or worse).

2. Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

    - Significant impacts at Caltrans facilities are defined to occur when:

        i. A standard of LOS D or better not maintained (this is the standard set for Caltrans facilities in the study area by the Monterey County Congestion Management Plan, or CMP).

    - Significant impacts at mainline freeway segments and ramp junctions are defined to occur when:

        i. The addition of project traffic causes freeway mainlines or ramp junction operations to degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or worse), or

        ii. Project traffic is added to a freeway mainline or ramp junction operating at an unacceptable level (LOS E or worse).

3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
4. Substantially increase hazards due to a design feature;
5. Result in inadequate emergency access; or
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

3.10.9 IMPACTS AND MITIGATION MEASURES

This section describes the transportation analysis completed for the Specific Plan and identifies potential impacts and mitigation measures.

The proposed project includes development of the West Area Specific Plan. As a result, it is estimated the existing and proposed circulation network will undergo increased use due to the anticipated increase in population and employment. Like the City's General Plan, the Specific Plan encourages the reduction of vehicle use by encouraging the use of alternate transportation modes such as walking, bike, and public transit.

Each project applicant for development within the Specific Plan Area will be required to contribute fair-share funding towards mitigation measures in proportion to the area planned for development and in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas.

As described earlier in this Chapter, the City of Salinas has established a Traffic Improvement Program (TIP). The last major update of the TIP occurred in 2010. The TIP is implemented through the City's Traffic Fee Ordinance (TFO). The TIP and TFO reflect the costs of improving the circulation network to accommodate traffic volumes anticipated at buildout of the City as foreseen in the General Plan. A project applicant's payment of the impact fee as established in the TFO is considered to be mitigation for project impacts.

Some of the required transportation mitigations outlined below are included in the TIP and would either require the fair-share payment of these fees or installation of the mitigation measure directly. Some of the transportation mitigations were not anticipated when the TIP was adopted. The City plans to update the TIP in conjunction with the upcoming update of the General Plan expected to begin in 2019. Because this process will take at least three years to complete, the City plans to use a Development Agreement as the mechanism to fund fair-share contribution of any transportation mitigations not covered by the TIP or the TAMC RDIF Program.

Both the City's TIP and TAMC's RDIF contemplated improvements to ramps off the 101 freeway. However, some mitigation measures identified in the DEIR will require the involvement of Caltrans for implementation. The City would work with Caltrans and TAMC to ensure that an associated capital improvement program is in place to reflect mitigations in the DEIR. Project applicants would fund their fair-share of those capital improvements through the collection of fees. The City would only collect fees for Caltrans related capital improvements when such a program is established.

EXISTING PLUS PROJECT TRAFFIC IMPACT ANALYSIS

The Existing Plus Project scenario reflects the addition of trips associated with buildout of the potential land uses that would be allowed within the Specific Plan Area upon its adoption, as well as creation of the Specific Plan circulation network. The Existing Plus Project network scenario also include the following assumptions:

- Widen Boronda Road to 4 lanes from San Juan Grade to Natividad Road
    - Boronda Road & McKinnon Street – 2 lane roundabout
    - Boronda Road & El Dorado Drive – 2 lane roundabout
    - Boronda Road & Natividad Road – 3 lane roundabout
- Widen Russell Road to 4 lanes from San Juan Grade to Natividad Road (new road)
- Widen Natividad Road to 4 lanes from Boronda to Rogge Road
- Widen San Juan Grade Road to 4 lanes from Boronda to Rogge Road

- Add north leg at the intersection of El Dorado Drive and East Boronda Road; El Dorado Drive extends north of East Boronda Road to Rogge Road (new road).

The following is a summary of the intersection, freeway, and nearby ramp junction operation analysis under Existing Plus Project conditions.

Intersections

Under Existing Plus Project conditions, eight of the 30 study intersections are projected to operate unacceptably at LOS E or LOS F during one or both peak hours. A summary of the intersection LOS calculations is contained in Table 3.10-11. Intersections that experience significant impacts in either the morning or evening peak period are shown in bold. Intersection LOS calculations are provided in **Appendix I** of this EIR.

TABLE 3.10-11: SUMMARY OF EXISTING PLUS PROJECT PEAK HOUR INTERSECTION LOS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	U.S 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road	SSSC	8.1 (16.9)	A (C)	13.1 (20.1)	B (C)
2	U.S 101 Northbound Ramps/Crazy Horse Canyon Road	SSSC	2.9 (12.6)	A (B)	2.6 (14.0)	A (B)
3	U.S 101 Northbound Ramps/U.S 101 Southbound Ramps/Sala Road	AWSC	9.4	A	11.1	B
4	Harrison Road/Sala Road/Driveway	Signal	8.9	A	9.9	A
5	Crazy Horse Canyon Road/San Juan Grade Road	AWSC	10.5	B	13.4	B
6	Hebert Road/San Juan Grade Road	SSSC	5.6 (12.1)	A (B)	7.0 (24.3)	A (C)
7	Old Stage/Hebert Road	SSSC	1.2 (12.3)	A (B)	1.2 (14.4)	A (B)
8	North Main Street/Harrison Road/Russell Road	Signal	17.1	B	22.9	C
9	Van Buren Avenue/Russell Road	Signal	19.5	B	19.5	B
10	San Juan Grade Road/Rogge Road	AWSC	19	C	15.5	C
11	San Juan Grade Road/Russell Road	Signal	29.7	C	25	C
12	Natividad Road/Rogge Road	SSSC	7.2 (14.3)	A (B)	6 (13.8)	A (B)

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
13	Natividad Road/Russell Road	SSSC	4.2 (9.6)	A (A)	3.9 (9.9)	A (A)
14	**San Juan Grade Road/Van Buren Avenue**	**SSSC**	**80.7 (>150)**	**F (F)**	**129.3 (>150)**	**F (F)**
15	U.S 101 Southbound Ramps/Boronda Road	Signal	6.4	A	7.7	A
16	U.S 101 Northbound Ramps/Boronda Road	Signal	9.7	A	22.1	C
17	North Main Street/Boronda Road	Signal	46.8	D	54.7	D
18	North Main Street/San Juan Grade Road	Signal	14	B	27.1	C
19	**San Juan Grade Road/Boronda Road**	Signal	42.0	D	**67**	**E**
20	McKinnon Street/Boronda Road	Roundabout	7.4	A	7.5	A
21	El Dorado Drive/Boronda Road	Roundabout	10.8	A	10.0	A
22	Natividad Road/Boronda Road	Roundabout	8.1	A	9.1	A
23	Independence Boulevard/Boronda Road	Signal	32.1	C	52.4	D
24	**Hemingway Drive/Boronda Road**	**SSSC**	**61.2 (>150)**	**F (F)**	**17.1 (>150)**	**C (F)**
26	North Main Street/East Alvin Drive	Signal	42	D	43.9	D
27	Natividad Road/East Alvin Drive	Signal	16.5	B	12.9	B
28	Independence Boulevard/Constitution Boulevard	Signal	22.5	C	21	C
29	Boronda Road/Constitution Boulevard	Signal	9.1	A	13.5	B
30	U.S 101 Southbound Ramps/West Laurel Drive	Signal	9.5	A	11.7	B
31	U.S 101 Northbound Ramps/West Laurel Drive	Signal	6.6	A	12.6	B
32	**North Main Street/West Laurel Drive**	**Signal**	38.2	D	**72**	**E**

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
33	**Natividad Road/East Laurel Drive**	**Signal**	**74.6**	**E**	**63.6**	**E**
34	Constitution Boulevard/East Laurel Drive	Signal	17.6	B	23	C
35	**North Sanborn Road/Boronda Road**	**SSSC**	**123.5 (>150)**	**F (F)**	**52.4 (>150)**	**D (F)**
36	Old Stage Road/Williams Road/Private Road	SSSC	5.5 (10.4)	A (B)	4.3 (11.8)	A (B)
37	North Main Street/East Bernal Drive	Signal	46.2	D	41.5	D
38	**Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way**	**Signal**	**82.8**	**F**	**76.1**	**E**
39	East Laurel Drive/North Sanborn Road	Signal	20.3	C	26.6	C
40	Williams Road/Boronda Road	SSSC	8.0 (18.1)	A (C)	8.0 (34.4)	A (D)
41	Freedom Pkwy/Williams Road	Signal	20	C	22.2	C
42	Bardin Road/Bardin Way/Williams Road	Signal	17.7	B	20.5	C
43	East Market Street/Williams Road	Signal	20	C	29.6	C
44	John Street/Williams Road/E Alisal Street	Signal	12.3	B	12.9	B
45	South Sanborn Road/North Sanborn Road/John Street	Signal	45.6	D	25.6	C
46	Bardin Road/East Alisal Street/Driveway	AWSC	10.1	B	10	A
47	Skyway Boulevard/Airport Boulevard	SSSC	2.7 (9.8)	A (A)	11.5 (16.2)	B (C)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	25.7	C	31.6	C
49	West Laurel Drive/Adams Street	Signal	12.8	B	17.7	B
50	North Davis Road/West Laurel Drive	Signal	26.1	C	44	D

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
51	East Front Street/Sherwood Drive/Market Street	Signal	14.1	B	19.9	B
52	East Market Street/East Front Street	Signal	9.6	A	11.1	B
53	South Davis Road/Blanco Road	Signal	38.8	D	46.3	D
54	Monterey Street/Monterey Street/East Market Street	Signal	21.6	C	28.5	C
55	**Salinas Street/North Main Street/West Market Street/East Market Street**	**Signal**	**84.2**	**F**	**59.7**	**E**
56	South Main Street/West Blanco Road/East Blanco Road	Signal	38	D	41.9	D

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes: *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS). All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle*

Freeway Operation

Table 3.10-12 and Table 3.10-13 reflect the results of the freeway mainline capacity analysis for U.S. 101 in the Existing Plus Project Condition in the morning and evening peak hour, respectively. All study segments of U.S. 101 analyzed perform within County CMP standards.

TABLE 3.10-12: AM EXISTING PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Mainline Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	2,149	18.0	C	2,114	17.7	B
Crazy Horse Canyon Road to San Miguel Canyon Road	2,213	18.6	C	2,102	17.6	B
San Miguel Canyon Road to SR 156	3,153	17.6	B	2,626	22.0	C
SR 156 to Sala Road	2,265	19.0	C	2,044	17.1	B

Sala Road to Boronda Road	2,693	15.1	B	1,951	10.9	A
Boronda Road to Laurel Drive	3,004	25.5	C	1,991	16.7	B
Laurel Drive to N. Main Street/SR 183	2,983	25.3	C	1,886	15.8	B
N. Main Street/SR 183 to E. Market Street	2,898	24.5	C	1,851	15.5	B
SR 68 John Street to S. Sanborn Road	1,974	16.6	B	1,548	13.0	B
S. Sanborn Road to Abbott Street	1,708	14.3	B	1,566	13.1	B

[1] *Density Reported in Passenger Cars per Lane Per Hour*
Source: Fehr & Peers, 2018

TABLE 3.10-13: PM EXISTING PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Mainline Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	2,864	24.2	C	2,388	20.0	C
Crazy Horse Canyon Road to San Miguel Canyon Road	2,518	21.1	C	2,408	20.2	C
San Miguel Canyon Road to SR 156	3,301	18.5	C	3,320	28.9	D
SR 156 to Sala Road	2,644	22.2	C	2,656	22.3	C
Sala Road to Boronda Road	2,581	14.4	B	3,244	18.1	C
Boronda Road to Laurel Drive	2,776	23.4	C	3,284	28.5	D
Laurel Drive to N. Main Street/SR 183	2,693	22.6	C	3,460	30.6	D
N. Main Street/SR 183 to E. Market Street	2,678	22.5	C	3,505	31.2	D
SR 68 John Street to S. Sanborn Road	2,079	17.4	B	2,410	20.2	C
S. Sanborn Road to Abbott Street	1,817	15.2	B	2,367	19.9	C

[1] *Density Reported in Passenger Cars per Lane Per Hour*
Source: Fehr & Peers, 2018

Ramp Junctions

Two interchanges on U.S. 101 in Salinas were analyzed by Fehr & Peers to identify the performance of ramp junctions. The results of this analysis for the Existing Plus Project scenario during the morning and evening peak periods are shown in Table 3.10-14 and Table 3.10-15**,** respectively. The U.S. 101 Northbound Off-ramps at East Boronda Road and West Laurel Drive perform at LOS E in the evening peak period, which is below County CMP standards.

TABLE 3.1-14: AM EXISTING PLUS PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	26	C	Loop On-Ramp	11.7	B
	On-Ramp	27.1	C	Off-Ramp	22.4	C
West Laurel Drive	Off-Ramp	31.9	D	On-Ramp	19.9	B
	On-Ramp	25.2	C	Loop On-Ramp	16.4	B
				Off-Ramp	16.4	B

Source: Fehr & Peers, 2018

TABLE 3.10-15: PM EXISTING PLUS PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	23	C	Loop On-Ramp	18.8	B
	On-Ramp	25	C	**Off-Ramp**	**35.1**	**E**
West Laurel Drive	Off-Ramp	29.6	D	On-Ramp	31.4	D
	On-Ramp	21.6	C	Loop On-Ramp	27.8	C
				Off-Ramp	**35.4**	**E**

Source: Fehr & Peers, 2018

Impact 3.10-1: Under Existing Plus Project conditions, implementation of the proposed Specific Plan would conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans (Less than Significant with Mitigation)

Implementation of the Specific Plan, without mitigations, results in unacceptable operation at eight of the study intersections, and two of the U.S. 101 ramp junctions. All study segments of U.S. 101 performed within the County CMP standards. This would be a ***potentially significant*** impact.

The reductions in automobile LOS attributable to the West Area Specific Plan include the following intersections:

- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- San Juan Grade Road/East Boronda Road (#19): LOS E during PM peak hour
- Hemingway Drive/East Boronda Road (#24): LOS F during both peak hours
- North Main Street/West Laurel Drive (#32): LOS E during PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS E during both peak hours
- North Sanborn Road/Boronda Road (#35): LOS F during both peak hours
- Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38): LOS F during AM peak hour and LOS E during PM peak hour
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during AM peak hour and LOS E during PM peak hour

In addition, the following ramp junctions would function below County CMP standards during the p.m. peak hour:

- U.S. 101 Northbound Boronda Road Off-Ramp: LOS E (35.1 passenger cars per vehicle per lane)
- U.S. 101 Northbound West Laurel Drive Off-Ramp: LOS E (35.4 passenger cars per vehicle per lane)

Because these potential impacts are attributable to the addition of project-generated traffic to existing volumes, development within the West Area Specific Plan would generally be responsible for funding the required mitigations.

Operation at all eight of these intersections and both the aforementioned ramp junctions could be mitigated to acceptable levels of delay under Existing Plus Project conditions. With implementation of the mitigation measures included below, operation at all eight of the affected intersections and both ramp junctions, as identified above, would be improved to acceptable levels:

- **San Juan Grade Road & Van Buren Avenue (#14):** Implement Mitigation Measure 3.10-1 - Install traffic signal. The addition of a traffic signal would improve the intersection LOS to A for both peak periods, with 4.9 seconds of delay and 4.2 seconds of delay during the AM

and PM peak hours, respectively. As this impact is a result of project traffic, the project applicant would be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be **less than significant.**

- **San Juan Grade Road & East Boronda Road (#19):** Implement Mitigation Measure 3.10-2 - Optimize existing signal timing. Optimizing the intersection's signal timing during the PM peak hour would improve its operation to LOS D (50.1 seconds). As this impact is a result of project traffic, the project applicant would be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Hemingway Drive & East Boronda Road (#24):** Implement Mitigation Measure 3.10-3 – Install a traffic signal or roundabout. Signal mitigation would improve LOS in both the morning and evening peak periods to LOS A (7.8 seconds per vehicle) and LOS B (11.2 seconds per vehicle), respectively. As this impact is a result of project traffic, the project applicant would be responsible for its funding and implementation at the project approval stage. Alternatively, a roundabout that would reduce traffic to the same LOS (or better) is also acceptable. With the implementation of the identified mitigation measure, the impact would be less than significant**.**

- **North Main Street & West Laurel Drive (#32):** Implement Mitigation Measure 3.10-4 **-** Optimize existing signal timings. This mitigation was found to improve level of service to LOS D, with 49.1 seconds of delay during the evening peak hour. As this impact is a result of project traffic, the project applicant would be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant**.**

- **Natividad Road & East Laurel Drive (#33):** Implement Mitigation Measure 3.10-5 **-** The proposed mitigation is to widen the intersection to add additional northbound and southbound through lanes. This mitigation was found to improve the level of service to D, with 48.2 seconds of delay and 51.2 seconds of delay in the morning and evening peak periods, respectively. As this impact is a result of project traffic, the project applicant shall be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant**.**

- **North Sanborn Road/Boronda Road (#35): Implement** Mitigation Measure 3.10-5 - Install a traffic signal or roundabout. Traffic signal mitigation was found to improve level of service to C in the morning peak hour and LOS B during the evening peak hour, with 22.8 seconds of delay and 15.1 seconds of delay, respectively. As this impact is a result of project traffic, the project applicant shall be responsible for its funding and implementation at the project

approval stage. Alternatively, a roundabout that would reduce traffic to the same LOS (or better) is also acceptable. With the implementation of the identified mitigation measure, the impact would be less than significant**.**

- **Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38):** Mitigation Measure 3.10-6: Optimize existing signal timings and add an eastbound left turn pocket. The proposed mitigation is to add an eastbound left turn pocket and optimize the existing signal timing to better accommodate the expected changes in traffic distribution and volume in the with-project scenario. The proposed mitigation was found to improve LOS in the morning and evening peak periods to LOS B, with 18.0 seconds of delay and 18.3 seconds of delay, respectively. As this impact is a result of project traffic, the project applicant shall be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Salinas Street/North Main Street/West Market Street/East Market Street (#55):** Mitigation Measure 3.10-7: Add a southbound left turn lane and optimize the traffic signal timing. The implementation of this mitigation measure would improve intersection operation to LOS D in both the morning and evening peak hours, with 45.5 and 35.9 seconds of delay per vehicle, respectively. As this impact is a result of project traffic, the project applicant shall be responsible for its funding and implementation at the project approval stage. With the implementation of the identified mitigation measure, the impact would be less than significant**.**

- **U.S 101 Ramp Junctions: Mitigation Measures 3.10-8 and 3.10-9:** Contribution to the TAMC RDIF Program and payment of the City of Salinas's Traffic Impact Fees. The proposed mitigation for this impact is the project requirements to contribute to the TAMC Regional Development Impact Fee (RDIF) Program and the City of Salinas's Traffic Impact Fee (TIF) Program. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate this project impact to a less than significant level**.**

CONCLUSION

Under Existing Plus Project conditions, implementation of the proposed Specific Plan would conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans. With implementation of these mitigation measures, the impacts to the above eight intersections and two ramp junctions are considered ***less than significant***, and no further mitigation is required.

MITIGATION MEASURES

Mitigation Measure 3.10-1*: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the installation of a traffic signal at San Juan Grade Road/Van*

Buren Avenue, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans for each stage of project development shall note this improvement and the fair-share funding requirement.

***Mitigation Measure 3.10-2**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the optimization of the existing signal timing at San Juan Grade Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-3**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the signalization of the intersection at Hemingway Drive/East Boronda Road or equivalent traffic control (such as a roundabout), in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-4**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the optimization of existing signal timings at North Main Street/Laurel Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-5**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the widening of the intersection at Natividad Road/East Laurel Drive to add additional northbound and southbound through lanes, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-6**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the installation of a traffic signal or equivalent traffic control (such as a roundabout) at the intersection of North Sanborn Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit*

issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.

***Mitigation Measure 3.10-7**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the optimization of existing signal timings and to add an eastbound left turn pocket at the intersection of Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. This mitigation includes the addition of an eastbound left turn pocket and optimization of the existing signal timing to better accommodate the expected changes in traffic distribution and volume with implementation of the proposed project. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-8**: Each project applicant for development within the Specific Plan Area shall provide its fair-share funding for the addition a southbound left turn lane and optimization of the traffic signal's timing at the intersection of Salinas Street/North Main Street/West Market Street/East Market Street, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share requirement.*

***Mitigation Measure 3.10-9**: Each project applicant for development within the Specific Plan Area shall contribute its fair-share funding to the Transportation Agency for Monterey County (TAMC) Regional Development Impact Fee (RDIF) Program and the City of Salinas' Traffic Impact Fee (TIF) Program, as determined by the TAMC and the City of Salinas, respectively, in proportion to the area planned for development by each project applicant. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate the proposed project's impact to the U.S. 101 ramp junctions affected by the proposed project (i.e. the Northbound Road Off-Ramp and Northbound West Laurel Drive Off-Ramp. Fees are payable prior to issuance of a Certificate of Occupancy for residential and prior to building permit issuance for non-residential development.*

EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN TRAFFIC IMPACT ANALYSIS

The Existing Plus Project and Central Area Specific Plan Conditions Scenario incorporates the combined effect of the West Area Specific Plan and the Central Area Specific Plan on the local transportation network.

Intersections

The expected trip generation for West Area Specific Plan and Central Area Specific Plan were overlaid on the existing conditions on the local transportation network. The magnitude of this effect on study intersections is documented by Table 3.10-16 below.

TABLE 3.10-16: EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN INTERSECTION LEVEL OF SERVICE ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	U.S 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road	SSSC	8.8 (17.8)	A (C)	14.3 (21.7)	B (C)
2	U.S 101 Northbound Ramps/Crazy Horse Canyon Road	SSSC	2.8 (12.9)	A (B)	2.6 (14.4)	A (B)
3	U.S 101 Northbound Ramps/U.S 101 Southbound Ramps/Sala Road	AWSC	11.3	B	12.9	B
4	Harrison Road/Sala Road/Driveway	Signal	9.5	A	10.7	B
5	Crazy Horse Canyon Road/San Juan Grade Road	AWSC	11	B	14.6	B
6	Hebert Road/San Juan Grade Road	SSSC	5.9 (12.5)	A (B)	7.4 (26.8)	A (D)
7	Old Stage Road/Hebert Road	SSSC	1.1 (12.9)	A (B)	1.2 (15.1)	A (C)
8	North Main Street/Harrison Road/Russell Road	Signal	17.5	B	24.9	C
9	Van Buren Avenue/Russell Road	Signal	36.7	D	15.4	B
10	San Juan Grade Road/Rogge Road	AWSC	19	C	15.5	C
11	San Juan Grade Road/Russell Road	Signal	44.1	D	35.4	D
12	Natividad Road/Rogge Road	SSSC	8.2 (18.0)	A (C)	6.0 (14.0)	A (B)
13	Natividad Road/Russell Road	SSSC	10.6 (16.3)	B (C)	12.2 (24.4)	B (C)
14	**San Juan Grade Road/Van Buren Avenue**	**SSSC**	**80.7 (>150)**	**F (F)**	**129.3 (>150)**	**F (F)**
15	U.S 101 Southbound Ramps/Boronda Road	Signal	6.6	A	8	A

TABLE 3.10-16: EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN INTERSECTION LEVEL OF SERVICE ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
16	U.S 101 Northbound Ramps/Boronda Road	Signal	10.9	B	26	C
17	**North Main Street/Boronda Road**	Signal	46.2	D	**62.9**	**E**
18	North Main Street/San Juan Grade Road	Signal	14.8	B	28.3	C
19	**San Juan Grade Road/Boronda Road**	**Signal**	44.4	D	**88.1**	**F**
20	McKinnon Street/Boronda Road	Roundabout	9.8	A	9.5	A
21	El Dorado Drive/Boronda Road	Roundabout	21.8	C	15.4	C
22	Natividad Road/Boronda Road	Roundabout	20.2	C	22.6	C
23	Independence Boulevard/Boronda Road	Roundabout	8.4	A	9.8	A
24	Hemingway Drive/Boronda Road	Signal	37.8	D	29.4	C
25	Old Stage Road/Constitution Boulevard	AWSC	7.8	A	7.8	A
26	North Main Street/East Alvin Drive	Signal	42	D	43.9	D
27	Natividad Road/East Alvin Drive	Signal	23.5	C	19.2	B
28	Independence Boulevard/Constitution Boulevard	Signal	36.9	D	28.5	C
29	Boronda Road/Constitution Boulevard	Signal	36.2	D	39.4	D
30	U.S 101 Southbound Ramps/West Laurel Drive	Signal	9.6	A	12	B
31	U.S 101 Northbound Ramps/West Laurel Drive	Signal	6.7	A	12.9	B
32	**North Main Street/West Laurel Drive**	**Signal**	39.8	D	**72.1**	**E**
33	**Natividad Road/East Laurel Drive**	**Signal**	**106.7**	**F**	**90.1**	**F**
34	Constitution Boulevard/East Laurel Drive	Signal	21.2	C	28.6	C
35	**North Sanborn Road/Boronda Road**	**SSSC**	**>150 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
36	Old Stage Road/Williams Road/Private Road	SSSC	6.4 (13.7)	A (B)	7.7 (19.4)	A (C)

TABLE 3.10-16: EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN INTERSECTION LEVEL OF SERVICE ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
37	North Main Street/East Bernal Drive	Signal	46.7	D	41.7	D
38	**Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way**	**Signal**	**116**	**F**	**93**	**F**
39	East Laurel Drive/North Sanborn Road	Signal	26.7	C	32.7	C
40	**Williams Road/Boronda Road**	**SSSC**	**15.8 (64.2)**	**B (F)**	**21.0 (>150)**	**C (F)**
41	Freedom Pkwy/Williams Road	Signal	26.4	C	34.9	C
42	Bardin Road/Bardin Way/Williams Road	Signal	22.6	C	26.6	C
43	East Market Street/Williams Road	Signal	20.7	C	31.6	C
44	John Street/Williams Road/E Alisal Street	Signal	13	B	14.8	B
45	**South Sanborn Road/North Sanborn Road/John Street**	**Signal**	**73.5**	**E**	**45**	**D**
46	Bardin Road/East Alisal Street/Driveway	AWSC	11	B	10.6	B
47	Skyway Boulevard/Airport Boulevard	SSSC	2.8 (10.0)	A (B)	12.3 (17.6)	B (C)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	33.8	C	39.6	D
49	West Laurel Drive/Adams Street	Signal	13.3	B	18.2	B
50	North Davis Road/West Laurel Drive	Signal	26.2	C	44	D
51	East Front Street/Sherwood Drive/Market Street	Signal	16.6	B	32.7	C
52	East Market Street/East Front Street	Signal	10	B	12.5	B
53	South Davis Road/Blanco Road	Signal	39.1	D	46.9	D
54	Monterey Street/Monterey Street/East Market Street	Signal	22.6	C	29.3	C
55	**Salinas Street/North Main Street/West Market Street/East Market Street**	**Signal**	**95**	**F**	**62.7**	**E**

TABLE 3.10-16: EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN INTERSECTION LEVEL OF SERVICE ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
56	South Main Street/West Blanco Road/East Blanco Road	Signal	40.1	D	43.3	D

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes:

- *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS).* All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle

Nine intersections were found to operate below local minimum service standards in either the morning or evening peak period. More intersections fail in the Existing plus Project and Central Area Specific Plan Scenario due to the increased volumes of trips associated with the Central Area Specific Plan.

Freeway Operation

Table 3.10-17 and Table 3.10-18 document the findings of a capacity analysis focused on the U.S. 101 study segments through Salinas in the Existing Plus Project and Central Area Specific Plan Conditions scenario for the morning and evening peak periods, respectively.

TABLE 3.10-17: AM EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	2,319	19.4	C	2,334	19.6	C
Crazy Horse Canyon Road to San Miguel Canyon Road	2,383	20.0	C	2,322	19.5	C
San Miguel Canyon Road to SR 156	3,323	18.6	C	2,864	24.0	C
SR 156 to Sala Road	2,435	20.4	C	2,264	19.0	C
Sala Road to Boronda Road	2,713	15.2	B	2,101	11.8	B
Boronda Road to Laurel Drive	3,024	25.7	C	2,141	18.0	B

TABLE 3.10-17: AM EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
Laurel Drive to N. Main Street/SR 183	3,123	26.7	D	2,036	17.1	B
N. Main Street/SR 183 to E. Market Street	2,938	24.9	C	1,881	15.8	B
SR 68 John Street to S. Sanborn Road	2,014	16.9	B	1,578	13.2	B
S. Sanborn Road to Abbott Street	1,748	14.7	B	1,596	13.4	B

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

TABLE 3.10-18: PM EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	3,094	26.4	D	2,558	21.6	C
Crazy Horse Canyon Road to San Miguel Canyon Road	2,748	23.1	C	2,578	21.6	C
San Miguel Canyon Road to SR 156	3,531	19.7	C	3,490	31.0	D
SR 156 to Sala Road	2,874	24.3	C	2,826	23.8	C
Sala Road to Boronda Road	2,602	14.6	B	3,404	19.0	C
Boronda Road to Laurel Drive	2,796	23.5	C	3,444	30.4	D
Laurel Drive to N. Main Street/SR 183	2,823	23.8	C	3,620	32.7	D
N. Main Street/SR 183 to E. Market Street	2,708	22.7	C	3,545	31.7	D
SR 68 John Street to S. Sanborn Road	2,109	17.7	B	2,450	20.6	C

TABLE 3.10-18: PM EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
S. Sanborn Road to Abbott Street	1,847	15.5	B	2,407	20.2	C

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

All study segments perform within the minimum standards set by the County CMP.

Ramp Junctions

Table 3.10-19 and Table 3.10-20 document the findings of a capacity analysis for U.S 101 ramp junctions at two interchanges in Salinas under the Existing Plus Project and Central Area Specific Plan scenario, during the morning and evening peak periods, respectively.

TABLE 3.10-19: AM EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	26.1	C	Loop On-Ramp	13	B
	On-Ramp	27.3	C	Off-Ramp	23.9	C
West Laurel Drive	Off-Ramp	32.1	D	On-Ramp	21.6	C
	On-Ramp	25.3	C	Loop On-Ramp	17.7	B
				Off-Ramp	17.4	B

Source: Fehr & Peers, 2018

TABLE 3.10-20: PM EXISTING PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	23.2	C	Loop On-Ramp	20.1	C
	On-Ramp	25.2	C	**Off-Ramp**	**36.6**	**E**
West Laurel Drive	Off-Ramp	29.8	D	On-Ramp	33.1	D
	On-Ramp	21.8	C	Loop On-Ramp	29.2	D
				Off-Ramp	**37.0**	**E**

Source: Fehr & Peers, 2018

The Northbound Off-Ramps at East Boronda Road and West Laurel Drive perform at LOS E, which is below the minimum County CMP standards.

Impact 3.10-2: Under Existing Plus Project and Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans (Less than Significant with Mitigation)

Implementation of the Specific Plan would result in unacceptable operation at ten of the study intersections, and two of the U.S. 101 ramp junctions, under the Existing Plus Project and Central Area Specific Plan scenario. All study segments of U.S. 101 performed within the County CMP standards. This would be a ***potentially significant*** impact.

The reductions in automobile LOS attributable to the West Area Specific Plan plus Central Area Specific Plan scenario include the following intersections:

- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during PM peak hour
- San Juan Grade Road/East Boronda Road (#19): LOS F during PM peak hour
- North Main Street/West Laurel Drive (#32): LOS E during PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- North Sanborn Road/Boronda Road (#35): LOS F during both peak hours
- Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- Williams Road/Boronda Road (#40): LOS F during both peak hours
- South Sanborn Road/North Sanborn Road/John Street (#45): LOS E during AM peak hour

- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours

In addition, the following ramp junctions would function below County CMP standards during the p.m. peak hour:

- U.S. 101 Northbound Boronda Road Off-Ramp: LOS E (36.6 passenger cars per vehicle per lane)
- U.S. 101 Northbound West Laurel Drive Off-Ramp: LOS E (37.0 passenger cars per vehicle per lane)

Operation at all ten of these intersections and both of the aforementioned ramp junctions could be mitigated to acceptable levels of delay under Existing Plus Project and Central Area Specific Plan conditions. With implementation of the mitigation measures included below, operation at all eight of the affected intersections and both ramp junctions, as identified above, would be improved to acceptable levels:

- **San Juan Grade Road & Van Buren Avenue (#14):** Implement the previously identified Mitigation Measure 3.10-1 - Install traffic signal. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **North Main Street & East Boronda Road (#17):** Mitigation Measure 3.10-10 – Optimize signal timing. The optimization of the existing traffic signal timing and splits at this coordinated intersection would mitigate the identified impact. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **San Juan Grade Road & East Boronda Road (#19):** Implement the previously identified Mitigation Measure 3.10-2 - Optimize existing signal timing and splits. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **North Main Street & West Laurel Drive (#32):** Implement the previously identified Mitigation Measure 3.10-4 **-** Optimize existing signal timing. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Natividad Road & East Laurel Drive (#33):** Mitigation Measure 3.10-11 **-** The proposed mitigation is to as convert the eastbound right turn lane to a shared through-right turn lane. With the implementation of the identified mitigation measure, as well as implementation of the previously identified Mitigation Measure 3.10-5 (which requires the widening of the intersection and the addition of northbound and southbound through lanes), the impact would be less than significant.

- **North Sanborn Road/Boronda Road (#35):** Mitigation Measure 3.10-12 – Add an eastbound right turn pocket. With the implementation of this mitigation measure, and with

implementation of the previously identified Mitigation Measure 3.10-6 (which requires the installation of a traffic signal), the impact would be less than significant.

- **Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38):** Implement the previously identified Mitigation Measure 3.10-7: Optimize existing signal timings and add an eastbound left turn pocket. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Williams Road/East Boronda Road (#40):** Mitigation Measure 3.10-13: Install a traffic signal or roundabout, to improve the intersection's LOS to A during the evening peak hour. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **South Sanborn Road/North Sanborn Road/John Street (#45)**: Mitigation Measure 3.10-14. Optimize signal timing. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Salinas Street/North Main Street/West Market Street/East Market Street (#55)**: Implement the previously identified Mitigation Measure 3.10-8: Add a southbound left turn lane and optimize the traffic signal's timing. With implementation of this mitigation measures, the impact would be less than significant.

- **U.S. 101 Ramp Junctions:** Implement the previously identified Mitigation Measure 3.10-9. Contribution to the TAMC RDIF Program and payment of the City of Salinas's Traffic Impact Fees for the U.S. 101 Northbound Boronda Road Off-Ramp and the U.S. 101 Northbound West Laurel Drive Off-Ramp. The proposed mitigation for this impact is the project requirement to contribute to the TAMC Regional Development Impact Fee (RDIF) Program and the City of Salinas's Traffic Impact Fee (TIF) Program. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate this project impact to a less than significant level.

CONCLUSION

Under Existing Plus Project and Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the performance measures established by the City of Salinas, Monterey County, and Caltrans. With implementation of Mitigation Measures 3.10-1, 3.10-2, 3.10-4, 3.10-6, 3.10-7, 3.10-8, and 3.10-9, and the following mitigation measures, the impacts to the ten intersections and two ramp junctions described above are considered ***less than significant***, and no further mitigation is required.

MITIGATION MEASURES

Mitigation Measure 3.10-10*: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding to optimize the existing traffic signal timing and splits at*

intersection of North Main Street/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.

Mitigation Measure 3.10-11*: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding to convert the eastbound right turn lane to a shared through-right turn lane at Natividad Road/East Laurel Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-12*: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding for addition of an eastbound right turn pocket at the intersection of North Sanborn Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-13*: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding for the installation of a traffic signal at the intersection of Williams Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-14*: Each project applicant for development within the Specific Plan Area shall provide its fair-share of funding to optimize the existing traffic signal timing and splits at the South Sanborn/North Sanborn/John Street intersection, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

CUMULATIVE PLUS PROJECT TRAFFIC IMPACT ANALYSIS

The Cumulative Conditions Plus Project scenario models the overall change in traffic volumes in Salinas as a result of forecast development, with the addition of the proposed project. The intent is to understand how the proposed project will influence travel behavior in light of future conditions, and to identify possible significant future impacts.

2045 is the horizon year for cumulative condition impact analyses. Based on observed volumes in the existing condition, Fehr & Peers used travel behavior forecasting software to estimate and distribute future vehicle traffic onto the roadway network in order to test how the proposed project would impact the transportation network. The roadway network improvements included in the City's General Plan, including the eastside and westside bypasses, are reflected in the cumulative analyses. This reflects the level of development anticipated within the foreseeable future. The geographic area includes the City of Salinas and some nearby areas of unincorporated County (the location of the 56 study intersections under study); this geographic limitation was used because it represents the area that would reasonably be expected to be affected by the proposed project in in combination with past, present, and probable future projects.

Intersections

The results of the intersection analysis for this scenario are shown in Table 3.10-21 below.

TABLE 3.10-21: CUMULATIVE PLUS PROJECT INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	**U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road**	**SSSC**	8.3 (18.8)	A (C)	**150 (>150)**	**F (F)**
2	**U.S. 101 Northbound Ramps/Crazy Horse Canyon Road**	**SSSC**	2.4 (13.1)	A (B)	**5.1 (51.5)**	**A (F)**
3	U.S 101 Northbound Ramps/U.S 101 Southbound Ramps/Sala Road	AWSC	10.2	B	13.5	B
4	Harrison Road/Sala Road	Signal	11	B	12.4	B
5	**Crazy Horse Canyon Road/San Juan Grade Road**	**AWSC**	11.3	B	**147.3**	**F**
6	**Hebert Road/San Juan Grade Road**	**SSSC**	6.6 (14.2)	A (B)	**10.0 (40.3)**	**A (E)**
7	Old Stage Road/Hebert Road	SSSC	5.8 (14.6)	A (B)	9.1 (32.9)	A (D)
8	North Main Street/Harrison Road/Russell Road	Signal	17.4	B	29.4	C
9	Van Buren Avenue/Russell Road	Signal	21.9	C	17.2	B
10	San Juan Grade Road/Rogge Road	AWSC	23.1	C	17.3	C
11	San Juan Grade Road/Russell Road	Signal	33.2	C	42.2	D

TABLE 3.10-21: CUMULATIVE PLUS PROJECT INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
12	**Natividad Road/Rogge Road**	**SSSC**	7.1 (13.4)	A (B)	**37.3 (125)**	**E (F)**
13	**Natividad Road/Russell Road**	**SSSC**	**11.2 (67.1)**	**B (F)**	**24.6 (>150)**	**C (F)**
14	**San Juan Grade Road/Van Buren Avenue**	**SSSC**	**100.8 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
15	U.S 101 Southbound Ramps/Boronda Road	Signal	7	A	8.9	A
16	U.S 101 Northbound Ramps/Boronda Road	Signal	9.8	A	27.4	C
17	**North Main Street/Boronda Road**	**Signal**	50.3	D	**99.5**	**F**
18	North Main Street/San Juan Grade Road	Signal	15.5	B	42.9	D
19	San Juan Grade Road/Boronda Road	Signal	41	D	45.7	D
20	McKinnon Street/Boronda Road	Roundabout	10.6	B	9.0	A
21	El Dorado Drive/Boronda Road	Roundabout	10.8	B	12.5	B
22	Natividad Road/Boronda Road	Roundabout	9.5	A	17.8	C
23	Independence Boulevard/Boronda Road	Roundabout	5.4	A	5.9	A
24	Hemingway Drive/Boronda Road	Signal	47.0	D	4.5	A
25	Old Stage Road/Constitution Boulevard	AWSC	9.1	A	10	A
26	N Main Street/East Alvin Drive	Signal	43.3	D	44.7	D
27	Natividad Road/East Alvin Drive	Signal	23.3	C	15.4	B
28	Independence Boulevard/Constitution Boulevard	Signal	30.8	C	29.9	C
29	Boronda Road/Constitution Boulevard	Signal	8.5	A	9.8	A

TABLE 3.10-21: CUMULATIVE PLUS PROJECT INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
30	U.S 101 Southbound Ramps/West Laurel Drive	Signal	14.4	B	17.5	B
31	U.S 101 Northbound Ramps/West Laurel Drive	Signal	9.1	A	16.5	B
32	**N Main Street/West Laurel Drive**	**Signal**	41.8	D	**158.6**	**F**
33	**Natividad Road/East Laurel Drive**	**Signal**	**86.9**	**F**	**95.9**	**F**
34	**Constitution Boulevard/East Laurel Drive**	**Signal**	55	D	**69.7**	**E**
35	North Sanborn Road/Boronda Road	Signal	16.3	B	45.6	D
36	**Old Stage Road/Williams Road/Private Road**	**SSSC**	**>150 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
37	**North Main Street/East Bernal Drive**	**Signal**	**60**	**E**	**75.2**	**E**
38	**Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way**	**Signal**	**91.9**	**F**	**133.9**	**F**
39	East Laurel Drive/North Sanborn Road	Signal	24.2	C	29.4	C
40	Williams Road/East Boronda Road	Signal	20.3	C	47.3	D
41	Freedom Parkway/Williams Road	Signal	21.6	C	31.5	C
42	Bardin Road/Bardin Way/Williams Road	Signal	21.6	C	26.6	C
43	East Market Street/Williams Road	Signal	22.9	C	49.1	D
44	John Street/Williams Road/East Alisal Street	Signal	13.7	B	21.2	C
45	South Sanborn Road/North Sanborn Road/John Street	Signal	31.6	C	34.1	C
46	Bardin Road/East Alisal Street/Driveway	AWSC	9.6	A	14.2	B

TABLE 3.10-21: CUMULATIVE PLUS PROJECT INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
47	Skyway Boulevard/Airport Boulevard	SSSC	7.5 (10.0)	A (B)	18.9 (21.4)	C (C)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	27.5	C	37.8	D
49	West Laurel Drive/Adams Street	Signal	19.4	B	22.1	C
50	North Davis Road/West Laurel Drive	Signal	36.3	D	54.2	D
51	East Front Street/Sherwood Drive/Market Street	Signal	25	C	49.6	D
52	East Market Street/East Front Street	Signal	10.4	B	14.2	B
53	**South Davis Road/Blanco Road**	**Signal**	**187.2**	**F**	**145.7**	**F**
54	Monterey Street/Monterey Street/East Market Street	Signal	23	C	30.6	C
55	**Salinas Street/North Main Street/West Market Street/East Market Street**	**Signal**	**84.8**	**F**	**95.1**	**F**
56	**South Main Street/West Blanco Road/East Blanco Road**	**Signal**	**50.3**	**D**	**69.8**	**E**

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes:

- *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS).*
- *All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle*

Overall, seventeen intersections were found to operate below the local minimum LOS threshold in the morning and/or evening peak period under the Cumulative Plus Project analysis. Intersections that operate below the local threshold as a result of project-related traffic are considered project contributions to significant cumulative impacts.

Freeway Operation

The Travel Demand Model was also used to forecast vehicle volumes on ten study segments of U.S. 101.

TABLE 3.10-22: AM CUMULATIVE PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Table 3.10-22 shows the morning peak period results, and Table 3.10-23 shows the evening results. LOS scores are compared to the minimum operating standards defined by the County CMP in the tables below.

Similar to the Cumulative Conditions results, San Juan Road to Crazy Horse Canyon Road, San Miguel Canyon Road to SR 156, and SR 156 to Sala Road all fall below the minimum LOS standards in the evening periods. In the morning period San Miguel Canyon Road to SR 156 falls below the LOS standard.

TABLE 3.10-22: AM CUMULATIVE PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density [1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	3,260	28.2	D	3,750	34.6	D
Crazy Horse Canyon Road to San Miguel Canyon Road	2,830	23.8	C	3,140	26.9	D
San Miguel Canyon Road to SR 156	**3,780**	**35.0**	**E**	**4,100**	**40.6**	**E**
SR 156 to Sala Road	3,430	30.2	D	3,210	27.7	D
Sala Road to Boronda Road	3,400	19.0	C	3,080	17.2	C
Boronda Road to Laurel Drive	3,880	21.7	C	3,340	18.7	C
Laurel Drive to N. Main Street/SR 183	3,890	21.8	C	3,120	17.4	B
N. Main Street/SR 183 to E. Market Street	3,260	18.2	C	2,500	14.0	B
SR 68 John Street to S. Sanborn Road	2,340	13.1	B	2,050	11.5	B
S. Sanborn Road to Abbott Street	2,580	14.4	B	1,760	9.8	A

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

TABLE 3.10-23: PM CUMULATIVE PLUS PROJECT FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Segment	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	**4,410**	**47.4**	**F**	3,670	33.4	D
Crazy Horse Canyon Road to San Miguel Canyon Road	3,550	31.8	D	3,310	28.6	D
San Miguel Canyon Road to SR 156	**5,010**	**68.6**	**F**	**4,430**	**47.9**	**F**
SR 156 to Sala Road	**4,530**	**50.7**	**F**	3,480	30.8	D
Sala Road to Boronda Road	4,350	24.5	C	3,380	18.9	B
Boronda Road to Laurel Drive	4,510	25.5	C	3,910	21.9	C
Laurel Drive to N. Main Street/SR 183	4,290	24.1	C	4,030	22.6	C
N. Main Street/SR 183 to E. Market Street	3,700	20.7	C	3,940	22.0	C
SR 68 John Street to S. Sanborn Road	3,010	16.8	B	2,690	15.0	B
S. Sanborn Road to Abbott Street	2,350	13.1	B	3,220	18.0	B

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

Ramp Junctions

Capacity analyses for ramp junctions were analyzed at two interchanges along U.S. 101 in Salinas. The results of this analysis for Cumulative Plus Project scenario during the morning and evening peak period are shown in Table 3.10-24 and Table 3.10-25, respectively**.** All ramp junctions perform at or above the minimum standards set by County CMP.

TABLE 3.10-24: AM CUMULATIVE PLUS PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Broad	Loop On-Ramp	23.7	C	Loop On-Ramp	14.1	B
	On-Ramp	21.5	C	Off-Ramp	26.3	C
West Laurel Drive	Off-Ramp	28.3	D	On-Ramp	20.7	C
	On-Ramp	21.8	C	Loop On-Ramp	18.2	B
				Off-Ramp	24.1	C

Source: Fehr & Peers, 2018

TABLE 3.10-25: PM CUMULATIVE PLUS PROJECT RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	26.0	C	Loop On-Ramp	14.4	B
	On-Ramp	25.2	C	Off-Ramp	31.2	D
West Laurel Drive	Off-Ramp	31.8	D	On-Ramp	23.6	C
	On-Ramp	24.1	C	Loop On-Ramp	22.0	C
				Off-Ramp	30.9	D

Source: Fehr & Peers, 2018

Impact 3.10-3: Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans (Cumulatively Considerable and Significant and Unavoidable)

Implementation of the Specific Plan under the cumulative Plus Project scenario would result in unacceptable operation at seventeen of the study intersections, and three of the freeway segments. This would be a ***potentially significant*** impact.

The locations that would operate with unacceptable LOS under the cumulative scenario include the following intersections:

- U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1): LOS F during the PM peak hour
- U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2): LOS F during the PM peak hour
- Crazy Horse Canyon Road/San Juan Grade Road (#5): LOS F during the PM peak hour
- Hebert Road/San Juan Grade Road (#6): LOS E during the PM peak hour
- Natividad Road/Rogge Road (#12): LOS F during the PM peak hour
- Natividad Road/Russell Road (#13): LOS F during both peak hours
- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during the PM peak hour
- North Main Street/West Laurel Drive (#32): LOS F during the PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- Constitution Boulevard/East Laurel Drive (#34): LOS E during the PM peak hour
- Old Stage Road/Williams Road/Private Road (#36): LOS F during both peak hours
- North Main Street/East Bernal Drive (#37): LOS E during both peak hours
- Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- South Davis Road/Blanco Road (#53): LOS F during both peak hours
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours
- South Main Street/West Blanco Road/East Blanco Road (#56): LOS D during the AM peak hour and LOS E during the PM peak hour

In addition, the following freeway segments would operate with unacceptable LOS under the cumulative scenario:

- San Juan Road to Crazy Horse Canyon Road (southbound): LOS F during the PM peak hour
- San Miguel Canyon Road to SR 156:
    - Northbound: LOS E during AM peak hour and LOS F during PM peak hour
    - Southbound: LOS E during AM peak hour and LOS F during PM peak hour
- SR 156 to Sala Road (southbound): LOS F during the PM peak hour

All ramp junctions perform at or above the minimum standards set by the County CMP under this scenario.

With implementation of the mitigation measures included below, operation at all seventeen of the affected intersections and each of the freeway segments would be improved:

- **U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1)**: Mitigation Measure 3.10-15: install a traffic signal at this intersection. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2)**: Mitigation Measure 3.10-16: Install traffic signal. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Crazy Horse Canyon Road/San Juan Grade Road (#5)**: Mitigation Measure 3.10-30: Install traffic signal. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Hebert Road/San Juan Grade Road (#6):** No feasible mitigation is available. Furthermore, there is no mechanism to ensure the full funding and completion of an improvement, should one become available. Thus, this cumulative impact is considered significant and unavoidable.

- **Natividad Road/Rogge Road (#12)**: Mitigation Measure 3.10-18: Install traffic signal. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Natividad Road/Russell Road (#13)**: Mitigation Measure 3.10-19: Install traffic signal. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **San Juan Grade Road/Van Buren Avenue (#14)**: Implement previously identified Mitigation Measure 3.10-1. With implementation of this mitigation measure, the impact would be less than significant.

- **North Main Street/East Boronda Road (#17)**: Mitigation Measure 3.10-20: Install southbound and westbound left turn lanes. The project should make a fair-share contribution to mitigate its contribution to this significant cumulative adverse impact. As the City has been collecting funds from other development projects to improve this intersection, this contribution would mitigate the project's contribution to the significant adverse cumulative impact at this location.

- **North Main Street/West Laurel Drive (#32)**: No feasible mitigation is available. Furthermore, there is no mechanism to ensure the full funding and completion of an improvement, should one become available. Thus, this cumulative impact is considered significant and unavoidable.

- **Natividad Road/East Laurel Drive (#33)**: Implement previously identified Mitigation Measure 3.10-5: Install northbound and southbound through lanes. However, under cumulative conditions, the degradations in service levels are considered to be significant adverse cumulative impacts based on the City's significance thresholds.. Thus, this cumulative impact is considered significant and unavoidable.

- **Constitution Boulevard/East Laurel Drive (#34)**: Mitigation Measure 3.10-21: Install southbound left turn lane. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Old Stage Road/Williams Road/Private Road (#36)**: Mitigation Measure 3.10-22: Install traffic signal. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **North Main Street/East Bernal Drive (#37)**: Mitigation Measure 3.10-23: Install a northbound through lane, add in a northbound right turn overlap phase, and convert the westbound through lane to a westbound shared through-left turn lane. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38)**: Mitigation Measure 3.10-24. Install northbound and southbound through lanes. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **South Davis Road/Blanco Road (#53)**: Mitigation Measure 3.10-25. Install a westbound left turn lane. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **Salinas Street/North Main Street/West Market Street/East Market Street (#55)**: Mitigation Measure 3.10-26. Install an eastbound left turn lane and a southbound left turn lane. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **South Main Street/West Blanco Road/East Blanco Road (#56)**: Mitigation Measure 3.10-27. Install a northbound left turn lane. However, while the project would make a fair-share contribution to mitigate its contribution to this impact, there is no mechanism to ensure the full funding and completion of the improvement. Thus, this cumulative impact is considered significant and unavoidable.

- **U.S. 101 Mainline Segments:** Implement the previously identified Mitigation Measure 3.10-9. Contribution to the TAMC RDIF Program and payment of City of Salinas Traffic Impact Fees. The proposed mitigation for this impact is the project requirement to contribute to the TAMC Regional Development Impact Fee (RDIF) Program and the City of Salinas's Traffic Impact Fee (TIF) Program. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate this project impact.

CONCLUSION

Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans. The proposed project under the cumulative scenario would require the implementation of the following mitigation measures, as well as previously identified Mitigation Measures 3.10-1, 3.10-5, and 3.10-9, which are provided within the Traffic Impact Assessment developed by Fehr & Peers. However, even with implementation of these mitigation measures, the project would have a ***cumulatively considerable*** and ***significant and unavoidable*** impact under this scenario.

MITIGATION MEASURES

Mitigation Measure 3.10-15*: Each project applicant for development within the Specific Plan Area shall contribute its fair-share of funding to the TAMC Regional Development Impact Fee provides mitigation for this impact identified as the installation of a traffic signal at intersection of U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road. Regional fees shall be determined by the City of Salinas in consultation with TAMC. Fees are payable prior to issuance of a Certificate of Occupancy for residential and prior to building permit issuance for non-residential development.*

Mitigation Measure 3.10-16*: Each project applicant for development within the Specific Plan Area shall contribute its fair-share of the TAMC Regional Development Impact Fee to provide mitigation for this impact identified as the installation of a traffic signal at intersection of U.S. 101 Northbound Ramps/Crazy Horse Canyon Road. Total fees shall be determined by the City of Salinas in consultation with TAMC. Fees are payable prior to issuance of a Certificate of Occupancy for residential and prior to building permit issuance for non-residential development.*

Mitigation Measure 3.10-17*: Prior to the approval of final improvement plans for each tentative map, each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at intersection of Crazy Horse Canyon Road/San*

Juan Grade Road, in proportion to the area planned for development by such project applicant. Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.

***Mitigation Measure 3.10-18**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at intersection of Natividad Road/Rogge Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-19**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at intersection of Natividad Road/Russell Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-20**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of southbound and westbound left turn lanes at the intersection of North Main Street/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-21**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a southbound left turn lane at the intersection of Constitution Boulevard/East Laurel Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-22**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at the intersection of Old Stage Road/Williams Road/Private Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-23*: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a northbound through lane, the addition of a northbound right turn overlap phase, and the conversion of the westbound through lane to a westbound shared through-left turn lane at the intersection of North Main Street/East Bernal Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note these improvements and the fair-share funding requirement.*

Mitigation Measure 3.10-24*: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a northbound and southbound through lanes at the intersection of Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-25*: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a westbound left turn lane at the intersection of South Davis Road/Blanco Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-26*: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of an eastbound left turn lane and a southbound left turn lane at the intersection of Salinas Street/North Main Street/West Market Street/East Market Street, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-27*: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a northbound left turn lane at the intersection of South Main Street/West Blanco Road/East Blanco Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-28*: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a northbound left turn lane at the intersection of South Main Street/West Blanco Road/East Blanco Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

CUMULATIVE PLUS PROJECT WITH CENTRAL AREA SPECIFIC PLAN

The Cumulative Conditions Plus Project with Central Area Specific Plan scenario models the overall change in traffic volumes in Salinas as a result of forecast development, with the addition of the proposed project and the Central Area Specific Plan. The intent is to understand how the proposed project combined the Central Area Specific Plan will influence travel behavior in light of future conditions, and to identify possible significant future impacts.

Intersections

The results of the intersection operations analysis for the Cumulative Plus Project and Central Area Specific Plan conditions are shown in Table 3.10-26 below. Overall, twenty-two intersections were found to operate below the local LOS thresholds set by the City.

TABLE 3.10-26: CUMULATIVE PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
1	**U.S 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road**	**SSSC**	8.9 (19.8)	A (C)	**150 (>150)**	**F (F)**
2	**U.S 101 Northbound Ramps/Crazy Horse Canyon Road**	**SSSC**	2.3 (13.4)	A (B)	**5.3 (54.4)**	**A (F)**
3	U.S 101 Northbound Ramps/U.S 101 Southbound Ramps/Sala Road	AWSC	12.6	B	16.6	C
4	Harrison Road/Sala Road/Driveway	Signal	14.4	B	19.7	B
5	**Crazy Horse Canyon Road/San Juan Grade Road**	**AWSC**	**11.8**	**B**	**>150**	**F**
6	**Hebert Road/San Juan Grade Road**	**SSSC**	6.7 (14.6)	A (B)	**10.8 (45.7)**	**B (E)**
7	**Old Stage Road/Hebert Road**	**SSSC**	5.6 (15.0)	A (B)	**8.6 (36.3)**	**A (E)**

TABLE 3.10-26: CUMULATIVE PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
8	North Main Street/Harrison Road/Russell Road	Signal	18.3	B	32.3	C
9	Van Buren Avenue/Russell Road	Signal	45.6	D	29.8	C
10	San Juan Grade Road/Rogge Road	AWSC	23.1	C	17.3	C
11	San Juan Grade Road/Russell Road	Signal	47	D	47.8	D
12	**Natividad Road/Rogge Road**	**SSSC**	7.1 (13.4)	A (B)	**37.3 (125)**	**E (F)**
13	**Natividad Road/Russell Road**	**SSSC**	**>150 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
14	**San Juan Grade Road/Van Buren Avenue**	**SSSC**	**100.8 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
15	U.S 101 Southbound Ramps/Boronda Road	Signal	7.2	A	9.2	A
16	U.S 101 Northbound Ramps/Boronda Road	Signal	10.5	B	32.6	C
17	**North Main Street/Boronda Road**	**Signal**	52.8	D	**117.2**	**F**
18	North Main Street/San Juan Grade Road	Signal	16.3	B	45.1	D
19	San Juan Grade Road/Boronda Road	Signal	43.9	D	50.2	D
20	McKinnon Street/Boronda Road	Roundabout	17.1	C	12.0	B
21	El Dorado Drive/Boronda Road	Roundabout	21.2	C	23.1	C
22	**Natividad Road/Boronda Road**	**Roundabout**	22.4	C	**57.7**	**F**
23	Independence Boulevard/Boronda Road	Roundabout	23.3	C	11.9	B
24	Hemingway Drive/Boronda Road	Signal	53.3	D	25.1	C
25	Old Stage Road/Constitution Boulevard	AWSC	11.5	B	12.9	B
26	N Main Street/East Alvin Drive	Signal	43.3	D	44.7	D

TABLE 3.10-26: CUMULATIVE PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
27	Natividad Road/East Alvin Drive	Signal	34.5	D	17.4	B
28	Independence Boulevard/Constitution Boulevard	Signal	52.7	D	44.9	D
29	Boronda Road/Constitution Boulevard	Signal	35.3	D	46.3	D
30	U.S 101 Southbound Ramps/West Laurel Drive	Signal	14.5	B	17.7	B
31	U.S 101 Northbound Ramps/West Laurel Drive	Signal	9.4	A	16.8	B
32	**N Main Street/West Laurel Drive**	**Signal**	43.6	D	**161.3**	**F**
33	**Natividad Road/East Laurel Drive**	**Signal**	**118.7**	**F**	**116.8**	**F**
34	**Constitution Boulevard/East Laurel Drive**	**Signal**	**82.8**	**F**	**114.2**	**F**
35	**North Sanborn Road/Boronda Road**	**Signal**	30.6	C	**83.1**	**F**
36	**Old Stage Road/Williams Road/Private Road**	**SSSC**	**>150 (>150)**	**F (F)**	**>150 (>150)**	**F (F)**
37	**North Main Street/East Bernal Drive**	**Signal**	**61**	**E**	**75.7**	**E**
38	**Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way**	**Signal**	**105**	**F**	**165.7**	**F**
39	East Laurel Drive/North Sanborn Road	Signal	30.6	C	34.2	C
40	**Williams Road/East Boronda Road**	Signal	38	D	**108.2**	**F**
41	Freedom Parkway/Williams Road	Signal	27.9	C	54.5	D
42	Bardin Road/Bardin Way/Williams Road	Signal	26.5	C	31.3	C
43	East Market Street/Williams Road	Signal	23.7	C	53.4	D

TABLE 3.10-26: CUMULATIVE PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN INTERSECTION OPERATION ANALYSIS

Int No	Study Intersection	Traffic Control	AM		PM	
			Delay	LOS	Delay	LOS
44	John Street/Williams Road/East Alisal Street	Signal	14.2	B	28.1	C
45	South Sanborn Road/North Sanborn Road/John Street	Signal	37.3	D	39.5	D
46	Bardin Road/East Alisal Street/Driveway	AWSC	10.1	B	15.6	C
47	Skyway Boulevard/Airport Boulevard	SSSC	7.1 (10.2)	A (B)	20.6 (24.1)	C (C)
48	South Sanborn Road/North Sanborn Road/East Alisal Street	Signal	33.3	C	46.8	D
49	West Laurel Drive/Adams Street	Signal	19.6	B	22.6	C
50	North Davis Road/West Laurel Drive	Signal	36.3	D	54.3	D
51	**East Front Street/Sherwood Drive/Market Street**	**Signal**	28.7	C	**66.8**	**E**
52	East Market Street/East Front Street	Signal	11.3	B	21.1	C
53	**South Davis Road/Blanco Road**	**Signal**	**189.2**	**F**	**146.5**	**F**
54	Monterey Street/Monterey Street/East Market Street	Signal	24.2	C	32.4	C
55	**Salinas Street/North Main Street/West Market Street/East Market Street**	**Signal**	**98.3**	**F**	**102.3**	**F**
56	**South Main Street/West Blanco Road/East Blanco Road**	**Signal**	52.3	D	**71.8**	**E**

Source: Fehr & Peers, 2018
AWSC = All-Way Stop Control, SSSC = Side Street Stop Control, LOS = Level of Service
Notes:

- *Side-street stop-controlled (SSSC) intersection LOS is reported as: overall intersection delay and LOS (worst-case stop-controlled movement or approach delay and LOS).*
- *All-way stop controlled (AWSC) LOS is reported for the overall intersection, based on average delay per vehicle*

Freeway Operation

The Travel Demand Model was used to forecast vehicle volumes on the ten study segments of U.S. 101. Table 3.10-27 shows the morning peak period results while Table 3.10-28 shows the evening

results. LOS scores are compared to the minimum operating standards defined by the County CMP. Two segments of U.S. 101 were found to operate below the LOS standard in the AM peak period and four segments were found to function below the LOS standard during the evening peak period.

TABLE 3.10-27: AM CUMULATIVE PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN FREEWAY MAINLINE OPERATION ANALYSIS

Freeway Mainline Segments	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	3,430	29.9	D	**3,970**	**38.2**	**E**
Crazy Horse Canyon Road to San Miguel Canyon Road	3,000	25.5	C	3,360	29.4	D
San Miguel Canyon Road to SR 156	**3,950**	**37.8**	**E**	**4,320**	**45.2**	**F**
SR 156 to Sala Road	3,600	32.4	D	3,410	30.0	D
Sala Road to Boronda Road	3,490	19.5	C	3,160	17.7	B
Boronda Road to Laurel Drive	4,040	22.6	C	3,420	19.1	C
Laurel Drive to N. Main Street/SR 183	3,930	22.0	C	3,150	17.6	B
N. Main Street/SR 183 to E. Market Street	3,330	18.4	C	2,530	14.2	C
SR 68 John Street to S. Sanborn Road	2,380	13.3	B	2,080	11.6	B
S. Sanborn Road to Abbott Street	2,620	14.6	B	1,790	10.0	A

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

TABLE 3.10-28: PM CUMULATIVE PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN HIGHWAY MAINLINE OPERATION ANALYSIS

Freeway Mainline Segments	Southbound			Northbound		
	Volume	Density[1]	LOS	Volume	Density[1]	LOS
San Juan Road to Crazy Horse Canyon Road	**4,640**	**54.0**	**F**	**3,840**	**36.0**	**E**
Crazy Horse Canyon Road to San Miguel Canyon Road	**3,780**	**35.0**	**E**	3,480	30.8	D
San Miguel Canyon Road to SR 156	**5,240**	**81.9**	**F**	**4,600**	**52.7**	**F**
SR 156 to Sala Road	**4,760**	**58.0**	**F**	3,650	33.1	D
Sala Road to Boronda Road	4,470	25.3	C	3,480	19.5	C
Boronda Road to Laurel Drive	4,660	26.6	D	4,050	22.7	C
Laurel Drive to N. Main Street/SR 183	4,390	24.8	C	4,190	23.5	C
N. Main Street/SR 183 to E. Market Street	3,730	20.9	C	3,980	22.3	C
SR 68 John Street to S. Sanborn Road	3,040	17.0	B	2,730	15.3	B
S. Sanborn Road to Abbott Street	2,380	13.3	B	3,260	18.2	C

[1] *Density Reported in Passenger Cars per Mile per Lane*
Source: Fehr & Peers, 2018

Ramp Junctions

Capacity analyses for ramp junctions were analyzed at two interchanges along U.S. 101 in Salinas. The results of this analysis for Cumulative Plus Project scenario during the morning and evening peak period are shown in Table 3.10-29 and Table 3.10-30, respectively. All ramp junctions perform at or above the minimum standards set by the County CMP.

TABLE 3.10-29: AM CUMULATIVE PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	24.8	C	Loop On-Ramp	14.2	B
	On-Ramp	22.3	C	Off-Ramp	26.8	C
West Laurel Drive	Off-Ramp	29.2	D	On-Ramp	21.3	C
	On-Ramp	25.5.	C	Loop On-Ramp	18.4	B
				Off-Ramp	24.3	C

Source: Fehr & Peers, 2018

TABLE 3.10-30: PM CUMULATIVE PLUS PROJECT AND CENTRAL AREA SPECIFIC PLAN RAMP JUNCTION MERGE AND DIVERGE ANALYSIS

Location	Southbound			Northbound		
	Ramp Type	DR (pc/mi/ln)	LOS	Ramp Type	DR (pc/mi/ln)	LOS
Boronda Road	Loop On-Ramp	27.0	C	Loop On-Ramp	14.8	B
	On-Ramp	26.0	C	Off-Ramp	32.0	D
West Laurel Drive	Off-Ramp	32.6	D	On-Ramp	24.4	C
	On-Ramp	24.7	C	Loop On-Ramp	22.5	C
				Off-Ramp	30.9	D

Source: Fehr & Peers, 2018

Impact 3.10-4: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans (Cumulatively Considerable and Significant and Unavoidable)

Implementation of the Specific Plan would result in unacceptable operation at twenty-two of the study intersections, and four of the freeway segments, under the cumulative Plus Project with Central Area Specific Plan scenario. This would be a ***potentially significant*** impact.

The locations that would operate with unacceptable LOS under the cumulative plus project with Central Area Specific Plan scenario include the following intersections:

- U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1): LOS F during the PM peak hour
- U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2): LOS F during the PM peak hour
- Crazy Horse Canyon Road/San Juan Grade Road (#5): LOS F during the PM peak hour
- Hebert Road/San Juan Grade Road (#6): LOS E during the PM peak hour
- Old Stage Road/Herbert Road (#7): LOS E during PM peak hour
- Natividad Road/Rogge Road (#12): LOS F during the PM peak hour
- Natividad Road/Russell Road (#13): LOS F during both peak hours
- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during the PM peak hour
- Natividad Road/Boronda Road (#22): LOS F during PM peak hour
- North Main Street/West Laurel Drive (#32): LOS F during the PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- Constitution Boulevard/East Laurel Drive (#34): LOS F during both peak hours
- North Sanborn Road/Boronda Road (#35): LOS F during PM peak hour
- Old Stage Road/Williams Road/Private Road (#36): LOS F during both peak hours
- North Main Street/East Bernal Drive (#37): LOS E during both peak hours
- Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- Williams Road/East Boronda Road (#40): LOS F During PM peak hour
- East Front Street/Sherwood Drive/Market Street (#51): LOS E during PM peak hour
- South Davis Road/Blanco Road (#53): LOS F during both peak hours
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours
- South Main Street/West Blanco Road/East Blanco Road (#56): LOS E during PM peak hour

In addition, the following freeway segments would operate with unacceptable LOS under the cumulative plus project with Central Area Specific Plan scenario:

- San Juan Road to Crazy Horse Canyon Road:
    - Southbound: LOS F during the PM peak hour
    - Northbound: San Juan Road to Crazy Horse Canyon Road (northbound): LOS E during both peak hours
- Crazy Horse Canyon Road to San Miguel Canyon Road: (southbound) LOS E during the PM peak hour
- San Miguel Canyon Road to SR 156:
    - Northbound: LOS F during both peak hours
    - Southbound: LOS E during AM peak hour and LOS F during PM peak hour

- SR 156 to Sala Road (southbound): LOS F during the PM peak hour

All ramp junctions perform at or above the minimum standards set by the County CMP under this scenario.

With implementation of the mitigation measures included below, operation at all twenty-two of the affected intersections and the each of the freeway segments would be improved:

- **U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1)**: Implement previously identified Mitigation Measure 3.10-15: install a traffic signal at this intersection. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2)**: Implement previously identified Mitigation Measure 3.10-16: install a traffic signal at this intersection. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Crazy Horse Canyon Road/San Juan Grade Road (#5)**: Implement previously identified Mitigation Measure 3.10-17: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Hebert Road/San Juan Grade Road (#6):** No feasible mitigation is available. The cumulative impact would be considered significant and unavoidable.

- **Old Stage Road/Hebert Road (#7):** Mitigation Measure 3.10-29: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Natividad Road/Rogge Road (#12)**: Implement previously identified Mitigation Measure 3.10-18: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Natividad Road/Russell Road (#13)**: Implement previously identified Mitigation Measure 3.10-19: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **San Juan Grade Road/Van Buren Avenue (#14)**: Implement previously identified Mitigation Measure 3.10-1. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **North Main Street/East Boronda Road (#17)**: Implement previously identified Mitigation Measure 3.10-20: Install southbound and westbound left turn lanes. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Natividad Road/Boronda Road (#22):** No further physical improvements are possible at this location. This cumulative impact is considered significant and unavoidable.

- **North Main Street & West Laurel Drive (#32):** Implement the previously identified Mitigation Measure 3.10-4 **-** Optimize existing signal timings. With the implementation of the identified mitigation measure, the impact would be less than significant.

- **Natividad Road/East Laurel Drive (#33)**: Mitigation Measure 3.10-30: Convert the existing eastbound right turn lane to a shared through-right turn lane. In addition, implement previously identified Mitigation Measure 3.10-5, which requires funding for the installation of northbound and southbound through lanes. However, even with implementation of these mitigation measures, this cumulative impact would be significant and unavoidable.

- **Constitution Boulevard/East Laurel Drive (#34)**: Mitigation Measure 3.10-31: Install an eastbound left turn lane. In addition, implement Mitigation Measure 3.10-21: Install southbound left turn lane. However, this cumulative impact is considered significant and unavoidable.

- **North Sanborn Road/Boronda Road (#35):** Mitigation Measure 3.10-32: Install a westbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **Old Stage Road/Williams Road/Private Road (#36)**: Implement previously identified Mitigation Measure 3.10-22: Install traffic signal. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **North Main Street/East Bernal Drive (#37)**: Implement previously identified Mitigation Measure 3.10-23: Install a northbound through lane, add in a northbound right turn overlap phase, and convert the westbound through lane to a westbound shared through-left turn lane. However, even with this mitigation, this cumulative impact is considered significant and unavoidable.

- **Sherwood Drive/Natividad Road & East Bernal Drive/La Posada Way (#38)**: Implement previously identified Mitigation Measure 3.10-24. Install northbound and southbound through lanes. However, even with this mitigation, this cumulative impact is considered significant and unavoidable.

- **Williams Road/East Boronda Road (#40)**: Mitigation Measure 3.10-33: Install an eastbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **East Front Street/Sherwood Drive/Market Street (#51)**: Mitigation Measure 3.10-34: Install a southbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **South Davis Road/Blanco Road (#53)**: Implement Mitigation previously identified Measure 3.10-25. Install a westbound left turn lane. However, even with this mitigation, this cumulative impact is considered significant and unavoidable.

- **Salinas Street/North Main Street/West Market Street/East Market Street (#55)**: Implement previously identified Mitigation Measure 3.10-26. Install an eastbound left turn lane and a southbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **South Main Street/West Blanco Road/East Blanco Road (#56)**: Implement previously identified Mitigation Measure 3.10-27. Install a northbound left turn lane. With the implementation of the identified mitigation measure, the cumulative impact would be less than significant.

- **U.S. 101 Mainline Segments:** Implement the previously identified Mitigation Measure 3.10-9. Contribution to the TAMC RDIF Program and payment of the City of Salinas's Traffic Impact Fees. The proposed mitigation for this impact is the project's required contribution to the TAMC RDIF Program and the City of Salinas's TIF Program. These programs include improvements to U.S. 101 that would improve mainline and ramp junction operations, which would mitigate this project impact.

CONCLUSION

Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans. The proposed project under the cumulative Plus Central Area Specific Plan scenario would require the implementation of the following mitigation measures, as well as previously identified Mitigation Measures 3.10-1, 3.10-5, 3.10-9, and 3.10-15 through 3.10-17, which are provided within the Traffic Impact Assessment developed by Fehr & Peers. However, even with implementation of these mitigation measures, the project would have a ***cumulatively considerable*** and ***significant and unavoidable*** impact under this scenario.

MITIGATION MEASURES

Mitigation Measure 3.10-29*: Prior to the approval of final improvement plans for each tentative map, each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a traffic signal at intersection of Old Stage Road/Hebert Road, in proportion to the area planned for development by such project applicant. Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Mitigation Measure 3.10-30*: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of northbound and southbound through lanes on Natividad Road and for the conversion of the existing eastbound right turn lane on East*

Laurel Drive to a shared through-right turn lane, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.

***Mitigation Measure 3.10-31**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of eastbound and southbound left turn lanes at Constitution Boulevard/East Laurel Drive, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-32**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a westbound left turn lane at the intersection of North Sanborn Road/Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-33**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of an eastbound left turn lane at Williams Road/East Boronda Road, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

***Mitigation Measure 3.10-34**: Each project applicant for development within the Specific Plan Area shall provide its fair-share contribution for the installation of a southbound left turn lane at the intersection of East Front Street/Sherwood Drive/Market Street, in proportion to the area planned for development by such project applicant, in accordance with City policies (payable prior to issuance of Certificate of Occupancy for residential and prior to building permit issuance for non-residential development). Total fees shall be determined by the City of Salinas. The final improvement plans shall note this improvement and the fair-share funding requirement.*

Impact 3.10-5: Implementation of the proposed Specific Plan would not result in changes to air traffic patterns (No Impact)

The nearest air facility to the Specific Plan boundaries is Salinas Municipal Airport, located approximately four miles to the southeast. Additionally, Marina Municipal Airport is located

approximately six miles to the southwest. The Specific Plan Area contains no existing or planned airport facilities. The proposed land use changes to and development of the Specific Plan Area are expected to have no effect on the Salinas Municipal Airport or Marina Municipal Airport approach or departure zones, or any other airport approach or departure zones.

Conclusion: Implementation of the proposed Specific Plan would not result in changes to air traffic patterns. Therefore, development attributable to the Specific Plan would be expected to have ***no impact*** to air traffic or air traffic patterns.

Impact 3.10-6: Implementation of the proposed Specific Plan would not substantially increase hazards due to a design feature (Less than Significant)

The Specific Plan Area is within the jurisdiction of the City of Salinas and is subject to all design standards which minimize hazards due to design features. The proposed land use changes that are estimated to add traffic to current and proposed streets would be carefully evaluated through the development review process. If needed, individual projects would be conditioned to construct or provide funding for improvements that minimize or eliminate potential hazards. Typical improvements include shoulder widening, adding turn pockets, adding sidewalks or crosswalks, realigning sharp curves, prohibiting certain turning movements, and signalizing intersections, among other options. Newly constructed and upgraded roadways needed to accommodate new development would be designed according to applicable State and local design standards.

Conclusion: Implementation of the proposed Specific Plan would not substantially increase hazards due to a design feature. Development within the Specific Plan Area would include new streets, access points, paths, and other circulation improvements that would be reviewed and checked for compliance with design and safety standards as part of the entitlement process conducted by the City of Salinas. Therefore, this impact would be ***less than significant***.

Impact 3.10-7: Implementation of the proposed Specific Plan would not result in impacts related to emergency access (Less than Significant)

Buildout of the proposed Specific Plan would result in increased development densities and land use intensities within the Specific Plan Area. As a result of buildout of the West Area Specific Plan, which includes the development of an internal transportation network within the Plan Area, the volume of users travelling within the Specific Plan Area is expected to increase. Emergency access along proposed and existing roadways must be accommodated in conjunction within the expected population and employment growth. Plans submitted for individual developments to be constructed in the Specific Plan Area would be reviewed for compliance with emergency access requirements by public safety officials during the City's entitlement process. Implementation of the proposed Specific Plan would not result in impacts related to emergency access. Given these conditions, any impacts to emergency access are anticipated to be ***less than significant***.

Impact 3.10-8: Implementation of the proposed Specific Plan would not conflict with adopted multi-modal circulation policies, plans, or programs, and would not decrease the performance or safety of public transit, bicycle, or pedestrian facilities (Less than Significant)

Impacts to Pedestrians and Bicyclists: Overall, existing plans and policies are supportive of multi-modal activity including bicycling and walking within the City of Salinas. City policies related to biking and walking are defined in the existing General Plan Circulation Element through Goal C-4 and Goal C-5. Together, these goals set citywide policies that provide for safe and accessible bicycle and pedestrian facilities. Additionally, the 2002 *Salinas Bikeways Plan* and 2004 *Salinas Pedestrian Plan* provide prioritized lists of projects and programs in service of the above goals. In accordance with the standards of significance, the West Area Specific Plan would not have significant impacts on the bicycle and pedestrian network because the Specific Plan does not interfere with existing plans or policies related to biking and/or walking.

As estimated by Fehr & Peers (2018), the proposed project is expected to generate approximately 2,400 daily walking and biking trips; 300 of which are anticipated in the morning peak hour and 260 of which are anticipated in the evening peak hour. The proposed project includes specifications to include new bicycle and pedestrian facilities that will provide access to the site.

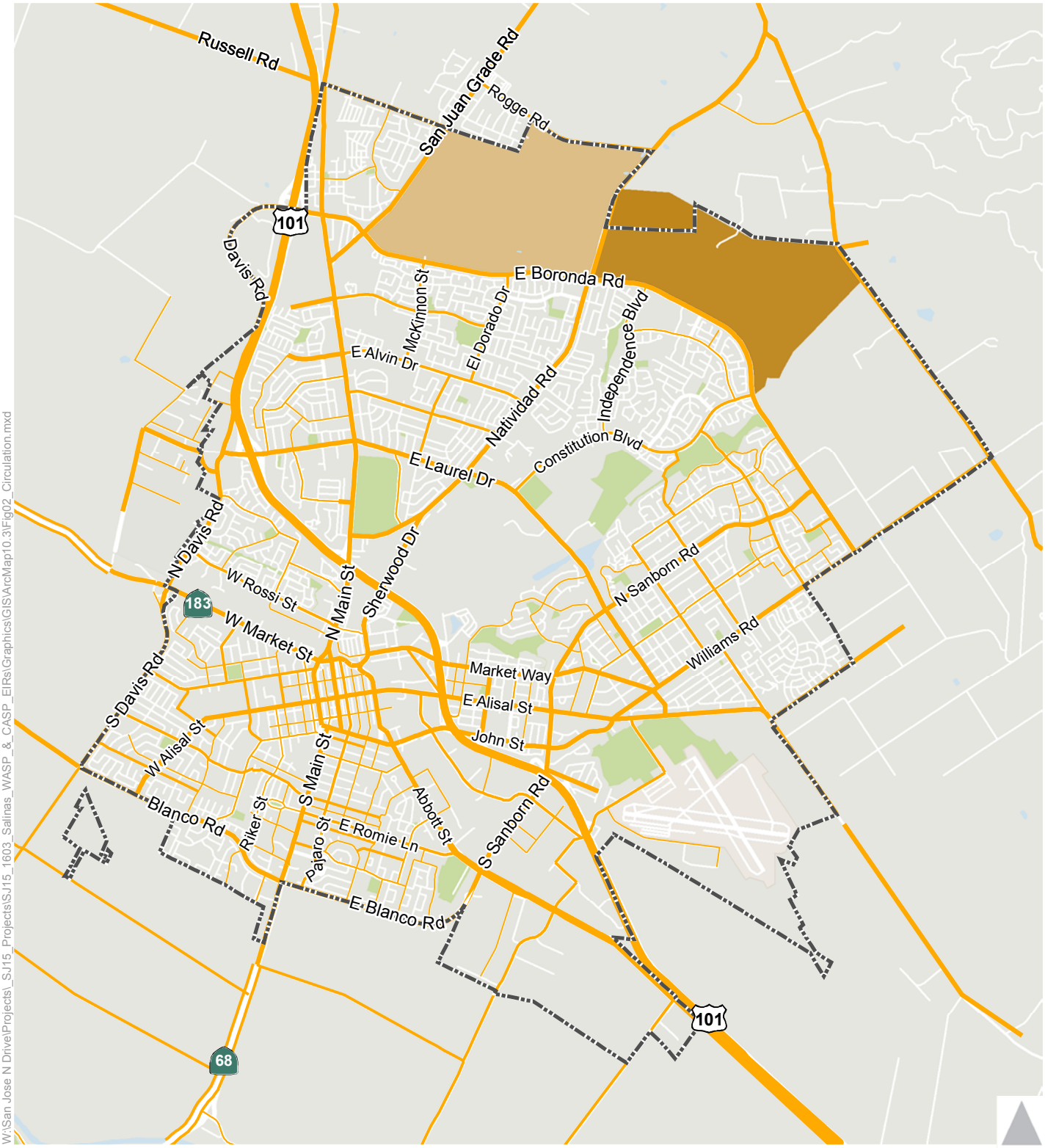
Implementation of the Specific Plan would be consistent with, and would expand upon, the pedestrian and bicycle network identified in the 2002 *Salinas Bikeways Plan*. The Specific Plan would improve the existing bicycle and pedestrian circulation infrastructure within the Specific Plan Area, as well as adjacent areas in the City of Salinas. Currently, a Class II bicycle facility is proposed for San Juan Grade Road between East Boronda Road and Cornwall Street, as provided within the 2002 *Salinas Bikeways Plan*. The extent of this proposed facility is approximately coterminous with the western boundary of the Plan Area. In addition to the retail shops and residences planned as part of the West Area Specific Plan, a high school is also currently under construction on Rogge Road. The site will abut the future extension of Russell Road but does not have vehicular access to it, which intersects the proposed Class II bicycle facility. The school site is supposed to provide student access from Russell Road to the High School facility. Therefore, San Juan Grade Road would serve as an important connection between the amenities within the Plan Area and the rest of the City, which is already well-served by bicycle facilities.

San Juan Grade Road is planned with a shared-use path on one side for bicycles and pedestrians. Ultimately, the planned pedestrian and bicycle circulation networks, as well as policies pertaining to pedestrian and bicycle circulation, encourage active transportation. Impacts related to pedestrians and bicyclists would be ***less than significant***.

Impacts to Public Transit: Implementation of the proposed Specific Plan is expected to increase population and employment within the Specific Plan Area, as well as the City of Salinas. According to Policy C-3.1 and Policy C-3.2 of the current Salinas General Plan, the City shall support Monterey-

Salinas Transit (MST) in developing frequent and effective public transportation service, including to and from new development areas. The West Area Specific Plan is estimated to generate approximately 1,000 new transit trips on a daily basis, as well as 140 trips in the morning peak hour and 150 trips in the evening peak hour (Fehr & Peers, 2018). These new transit trips alone are not expected to overburden existing transit service in the area. Additionally, this project does not conflict with an existing transit-related policy or plan in the City.

Conclusion: Implementation of the proposed Specific Plan would not conflict with adopted multi-modal circulation policies, plans, or programs, and would not decrease the performance or safety of public transit, bicycle, or pedestrian facilities. Impacts to pedestrians and bicycles and public transit would be ***less than significant*** and no mitigation is required.



Source: City of Salinas

Circulation System

- Freeway/New Interchange
- At-Grade Rural Highway
- Major Arterial
- Minor Arterial
- Collector
- City Limits
- West Area Specific Plan (WASP)
- Central Area Specific Plan (CASP)

Figure 3.10-1

Salinas Circulation Network

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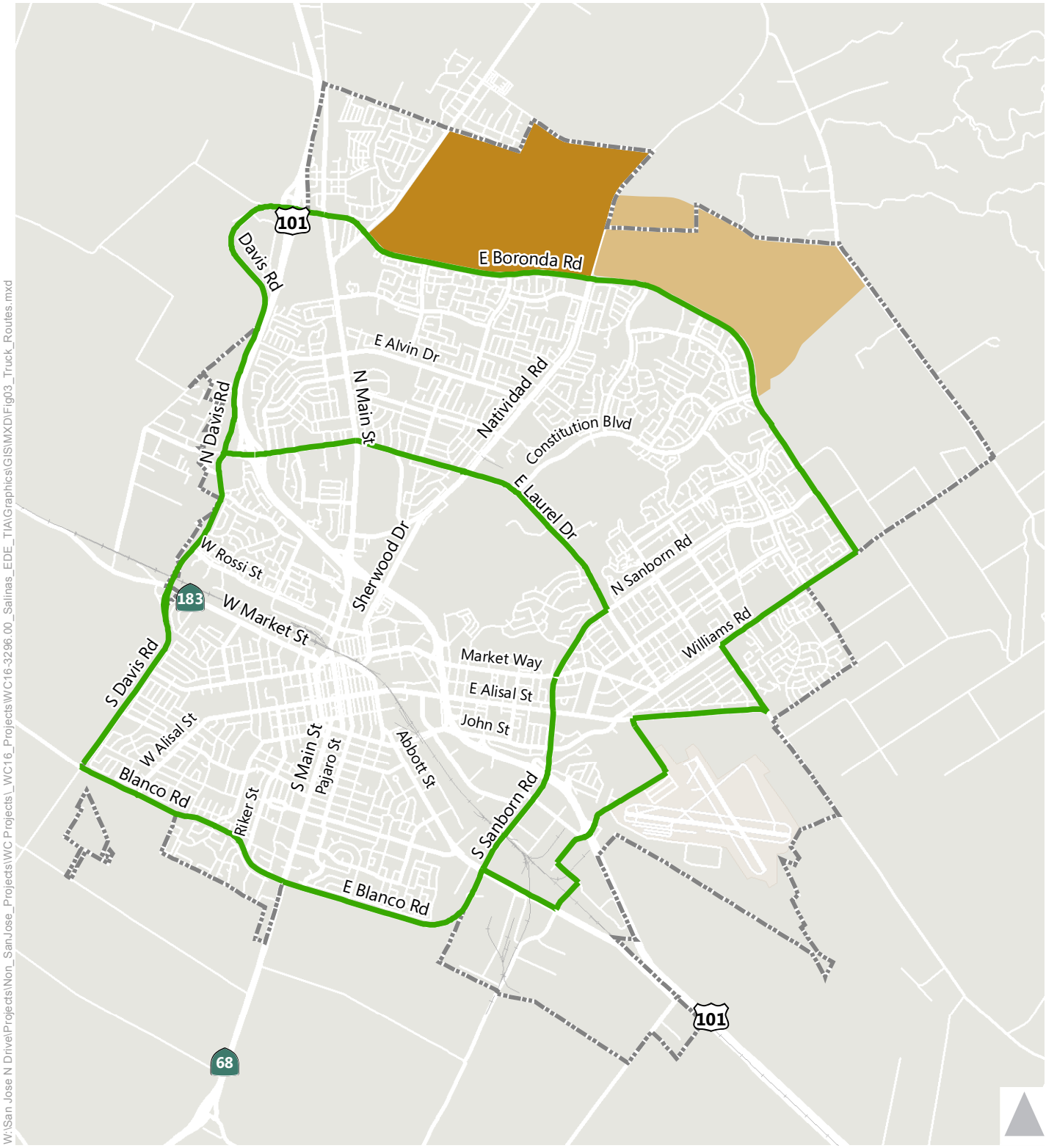

Source: City of Salinas

Truck Routes

Existing Truck Routes

City Limits

West Area Specific Plan (WASP)

Central Area Specific Plan (CASP)

Figure 3.10-2

City of Salinas Truck Routes

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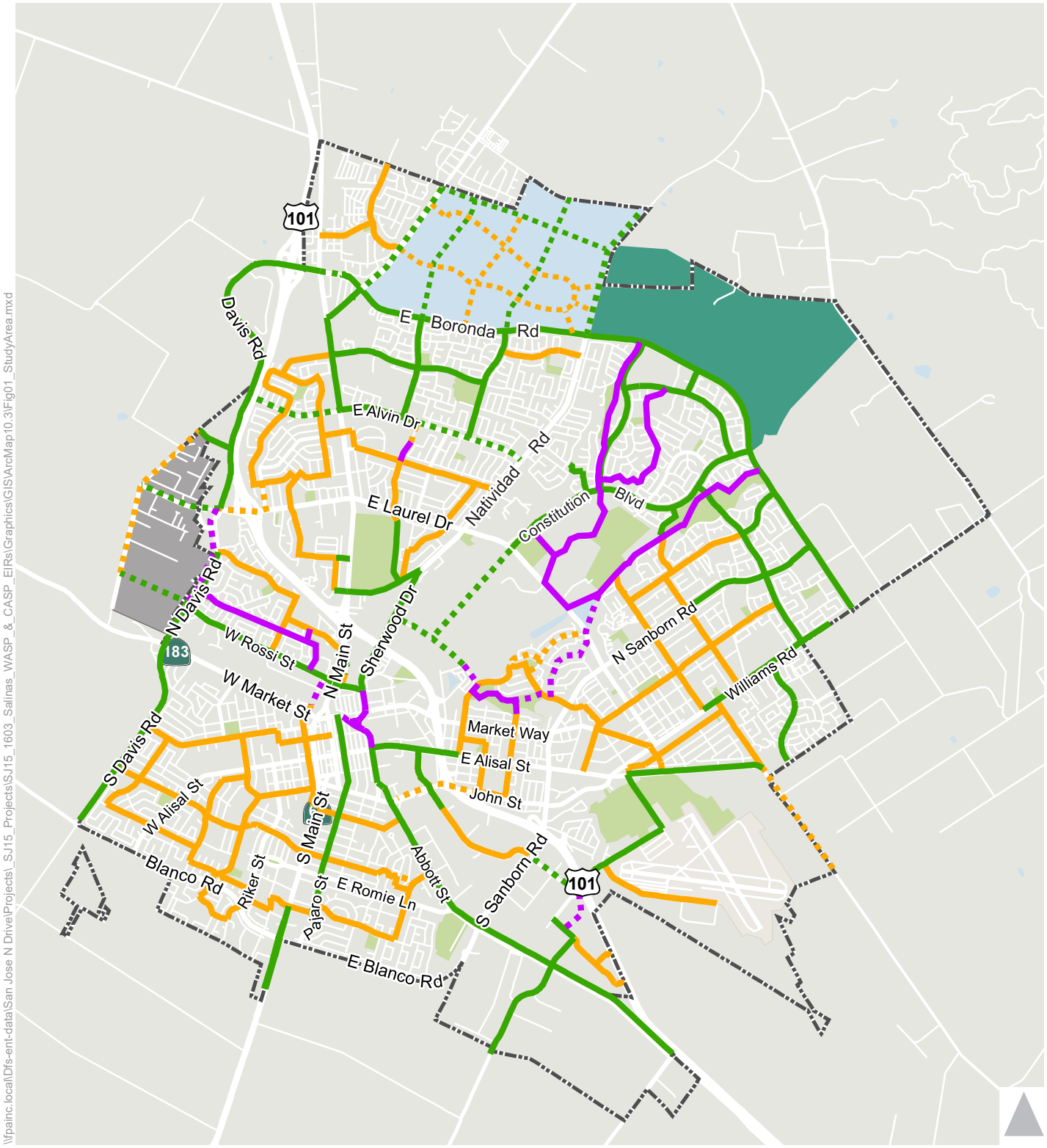

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Source: City of Salinas

Bike Plan

- Class I: Path (Existing)
- Class II: Lane (Existing)
- Class III: Route (Existing)
- City Limits
- Class I: Path (Proposed)
- Class II: Lane (Proposed)
- Class III: Route (Proposed)
- West Area Specific Plan (WASP)
- Central Area Specific Plan (CASP)

Figure 3.10-3

Existing and Planned Bicycle Facilities

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Source: Monterey-Salinas Transit

Legend

- 20 Salinas - Monterey *via Marina*
- 21 Pebble Beach - Salinas Express
- 23 Salinas - King City
- 25 CSUMB - Salinas
- 28 Watsonville - Salinas *via Castroville*
- 29 Watsonville - Salinas *via Prunedale*
- 41 Northridge - Salinas *via East Alisal*
- 42 Westridge - Spreckles *via East Salinas*
- 43 South Salinas - Salinas *via SVMH*
- 44 Northridge - Salinas *via Westridge*
- 45 Northridge - Salinas *via East Market*
- 46 Natividad - Salinas
- 47 Hartnell - Alisal Campus
- 48 Salinas - Salinas Airport Business Center
- 49 Salinas - Santa Rita *via Northridge*
- 56 Monterey - Salinas *via Hwy 68*
- 61 Salinas - VA - DOD Clinic
- 72 Presidio - N. Salinas Express
- 82 Fort Hunter Liggett - Salinas Express
- 85 Fort Hunter Liggett - Templeton
- 86 King City - San Jose *via San Jose Airport*
- 95 Northridge - Williams Ranch

Transit Center

Select Trips (See Riders Guide)

Direction of Route

Route Terminus — 41 Northridge

Multiple routes serve this section

Place of Interest

School

Public Place

Airport

Shopping Mall

Park or Golf Course

Major Terminus

Salinas Transit Center: 20 21 23 25 28 29 41 43 44 45 46 47 48 49 56 61 82 86

Figure 3.10-4

Existing Transit Service

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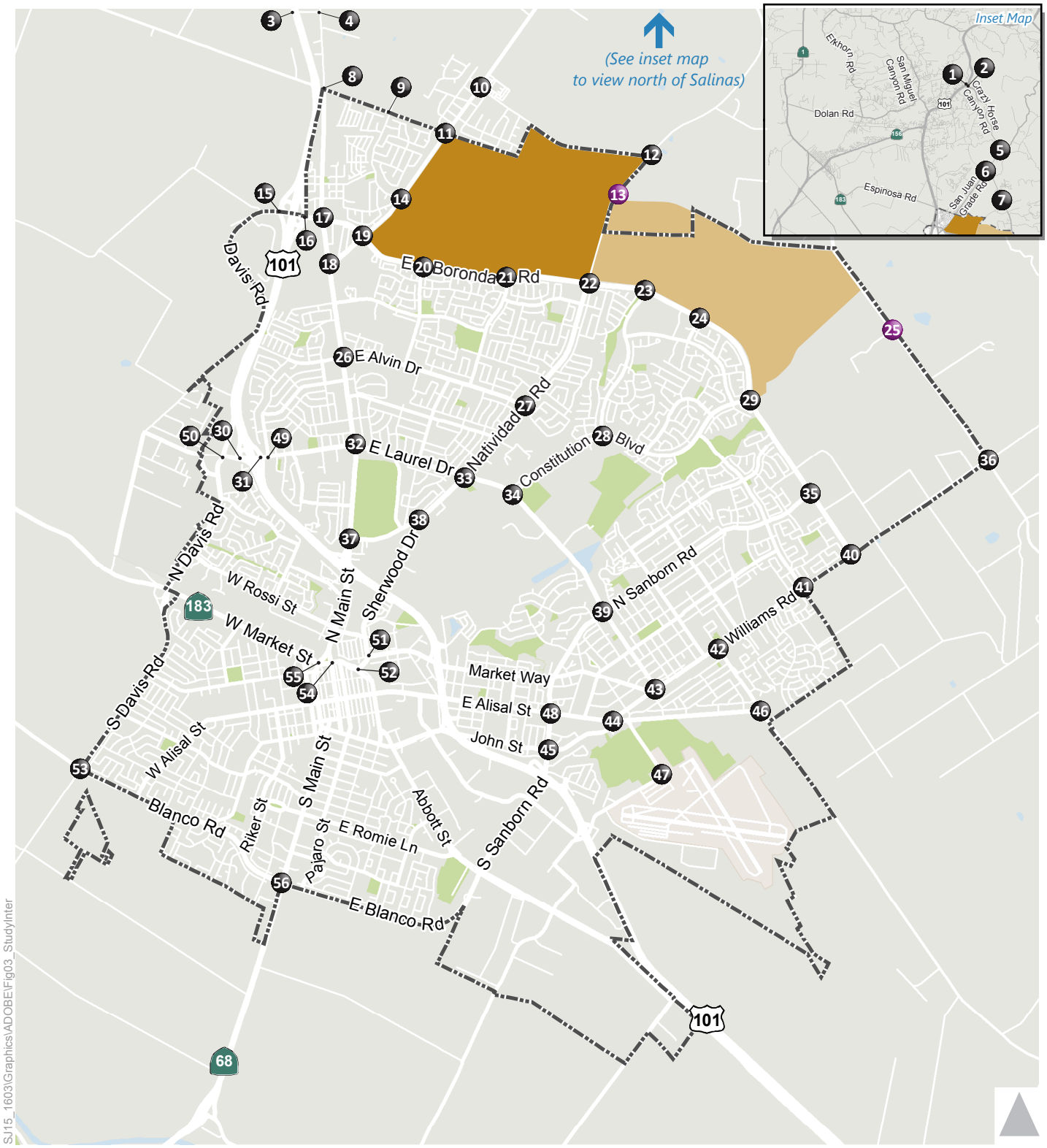

Source: City of Salinas

Legend

- Study Intersection
- Future Study Intersection
- West Area Specific Plan (WASP)
- Central Area Specific Plan (CASP)
- City Limits

Figure 3.10-5

Study Intersections

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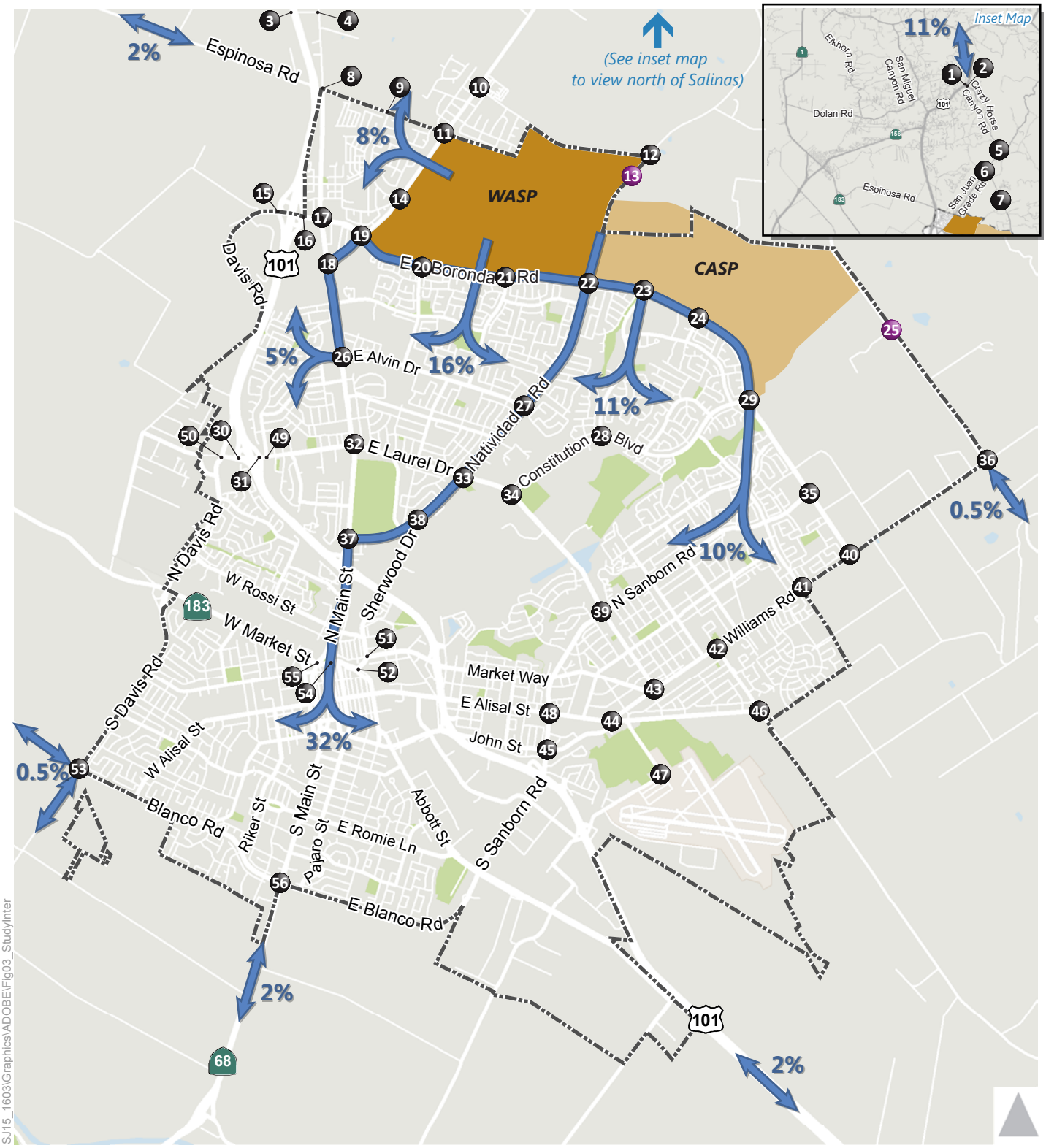

Source: City of Salinas

Legend

Study Intersection | Future Study Intersection | XX% Trip Distribution Percentage

West Area Specific Plan (WASP) | Central Area Specific Plan (CASP) | City Limits

Figure 3.10-6

Project Trip Distribution

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This section describes the regulatory setting, impacts associated with wastewater services, water services, storm drainage, and solid waste disposal that are likely to result from project implementation, and measures to reduce potential impacts to wastewater, water supplies, storm drainage, and solid waste facilities.

It should be noted that the Monterey Regional Water Pollution Control Agency (MRWPCA) recently changed its name to Monterey One Water (M1W). This section is based in part on the following documents, reports and studies: CalRecycle *Solid Waste Information System (CalRecycle, 2015),* CalRecycle *Jurisdiction Diversion/Disposal Rate Summary (CalRecycle, 2019), Sewer System Management Plan: Sanitary Sewer Collection System (City of Salinas, 2014), City of Salinas Sanitary Sewer System Master Plan (City of Salinas, 2011), Monterey Regional Water Pollution Control Agency Sewer System Management Plan (Monterey One Water, 2013), City of Salinas 2010 Municipal Service and Sphere of Influence Review (City of Salinas, 2010)*, *California Water Service Company 2010 Urban Water Management Plan (Cal Water, 2011)*, *the Salinas District Water Conservation Master Plan*, *West Area Specific Plan Salinas California SB610 Water Supply Assessment (Cal Water, 2015)*, *California Water Service Company Public Draft 2015 Urban Water Management Plan (Cal Water, 2016)*, *Hydrology and Water Quality Technical Study for West Area Specific Plan EIR (Balance Hydrologics, 2016)*, and correspondence with Jennifer Gonzalez, Engineering Manager for Monterey One Water (M1W) Regional Treatment Plant (Treatment Plant or Plant).

The documents listed above are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at the offices of the City of Salinas Community Development Department at 65 West Alisal Street, Salinas, California 93901.

Comments were received during the public review period for the Notice of Preparation (NOP) regarding stormwater from the Northern Salinas Valley Mosquito Abatement District, in reference to State Guidelines as they pertain to Mosquito Best Management Practices, and from the Monterey County Resource Management Agency, regarding stormwater runoff during flooding. These comments are included in **Appendix A** of this EIR. No other comments were received during the public review period for the NOP.

3.11.1 WASTEWATER SERVICES

EXISTING SETTING

M1W provides regional wastewater conveyance, treatment, disposal, and wastewater recycling services to customers in northern Monterey County including the City of Salinas. M1W serves the City with the Salinas Pump Station and the Salinas interceptor. Wastewater from the City of Salinas is treated at M1W Regional Treatment Plant (M1W Treatment Plant). In aggregate, approximately 51 percent of the total flow to the Treatment Plant is derived from the City of Salinas (M1W, 2013).

Currently, there are no collection lines located within the Plan Area. The City of Salinas operates and maintains sewer collection facilities and maintenance within the City. The City's Wastewater Division of the Public Works Department under the direction of the Public Works Director is responsible for operation and maintenance of the City's sanitary sewer collection system. The City's Wastewater

Manager is the lead person to plan and implement collection operations and maintenance. As of 2018, City staffing for operation and maintenance of the sanitary sewer system includes 10.0 full time equivalent (FTE) employees. Additionally, as of 2019, the Wastewater Division had 9.0 FTE additional staff that is funded through storm sewer, industrial waste or street sweeping programs (City of Salinas, 2019).

Wastewater Conveyance

The existing wastewater collection system is owned and operated by the City of Salinas. The City maintains approximately 270 miles of sanitary sewer collection system pipeline and 11 sanitary sewer lift stations. Flow in the City system is primarily by gravity, with low-head pump stations located at low spots due to the City's flat topography.

Sanitary wastewater produced in the City is conveyed through the City's conveyance facilities to the former City treatment plant site, known as "TP1". The plant closed when M1W Treatment Plant began service. From that location it is pumped via M1W's Salinas Pump Station and Salinas Interceptor pipeline to M1W treatment plant in Marina. The primary components of the City's collection system include 4 trunk lines, 11 pump stations, and a system of smaller collection facilities (sewer mains) that convey wastewater from individual homes, businesses, and other developed uses to the trunk lines and pump stations.

The City has completed several sewer projects over the past decade. These include the replacement of the Rossi/Bridge Street sewer trunk line, the replacement of 1,600 feet of sewer main on Kern Street, the rehabilitation of deteriorated manhole structures on the Romie Lane - South Main Street trunk line, the installation of backup power generators to three additional sanitary sewer lift stations, and the installation of additional flow meters (City of Salinas, 2014).

Due to the potential for sanitary sewer overflows, pollutants of concern include raw sewage, bacteria and other chemical waste illegally placed in the waste stream. Due to concerns for public health and potential environmental impacts, the City of Salinas has given the sanitary sewer collection system a High Priority status. In response to this status, the City maintains a comprehensive maintenance schedule for collection system pipes and for sanitary sewer lift stations. The City has also developed a written spill response plan that is a guide for sanitary sewer and other hazardous spills. Spill responses depending on severity and notification procedures are a collaborative effort that may involve response by the Public Works Department in conjunction with the Salinas Fire Department, Monterey County Environmental Health and other State and local agencies.

The City's Sanitary Sewer Maintenance and Management history addresses and reduces the potential for sanitary sewer overflows. According to the City's 2014 *Sewer System Management Plan (SSMP)*, the City's 270 miles of sanitary sewer pipeline over the several years prior to the plan's publication has experienced less than five overflows each year. The most recent data available demonstrates that there were four sanitary sewer overflows in the City of Salinas in the 12 month period from 2/18/2018 through 2/18/2019 (California Environmental Protection Agency, 2019). Effective spill response and containment has kept overflow quantities low. The City maintains

sanitary sewer overflow records in accordance with State of California Water Resources Control Board, WDR Order 2006-0003-DWQ.

The sewer collection system for the Plan Area will be connected to the existing 24-inch sewer trunk line on McKinnon Street at the intersection with East Boronda Road. However, the elevation at the connection point on McKinnon Street and the lowest point of the northwest area of the Plan Area are very similar, making it difficult to connect with a gravity system. Therefore, the proposed sewer collection system for the northwest area of the Plan Area may need to be connected to the existing 10-inch sewer system on Van Buren Avenue near San Juan Grade Road, which is tributary to the Santa Rita Pump Station. Connection to this line may require further analysis to the affected sewer lines, and the Santa Rita Pump Station. The proposed sewer collection system for the remainder of the Plan Area would connect to the aforementioned existing 24-inch sewer trunk line on McKinnon Street. The City would provide and maintain sewer collection once the infrastructure is installed and development is established. The proposed sanitary sewer collection system would convey flow to the City's existing trunk lines by gravity without the need of any sewer pump stations, except for the northwest Plan Area, which may need to connect to the 10-inch Van Buren line which is tributary to the Santa Rita Pump Station.

All sanitary wastewater collected by the City's system flows to the M1W Salinas Pump Station, located at the southwestern boundary of the City. M1W is a regional authority that owns and operates the regional wastewater treatment facility serving the City and other member agencies in the Monterey vicinity. The M1W Salinas Pump Station conveys sanitary wastewater discharges to the regional treatment facility via a M1W force main.

Wastewater Treatment

The M1W Regional Treatment Plant is located two miles north of the City of Marina in northern unincorporated Monterey County. The Plant began operation in 1990, replacing six local wastewater treatment facilities. M1W Treatment Plant currently serves over 252,000 people. The Waste Discharge Requirements (WDRs) Order No. R3-2019-0017 allows the M1W Regional Treatment Plant to accept up to 29.6 million gallons per day (MGD) of average dry weather flow (ADWF) and 75.6 MGD of peak wet weather flow (RWQCB Central Coast, 2018). The Plant treated approximately 21 MGD in 2014; however, wastewater conveyance has decreased due to conservation efforts and in 2016 the Plant treated approximately 16 MGD, of which the City of Salinas contributed 12 MGD[1]. M1W Regional Treatment Plant provides regional wastewater treatment, disposal, and reclamation facilities for the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the Seaside County Sanitation District; the Castroville, Moss Landing, and Boronda Community Services Districts; and Fort Ord.

WASTEWATER QUALITY

M1W's Waste Discharge Requirement (WDR) specifies that effluent from M1W Regional Treatment Plant must not exceed the limits presented in Table 3.11-1 (WDR Recycled Effluent Discharge

[1] Email correspondence with Jennifer Gonzalez, M1W Treatment Plant Engineer, at 2:15pm on 2/25/2016.

Limitations), as measured at Monitoring Location EFF-001 (*Waste Discharge Requirements for the Monterey Regional Water Pollution Control Agency Regional Treatment Plant* Order No. R3-2018-0017, NPDES No. CA0048551).

TABLE 3.11-1: WDR RECYCLED EFFLUENT DISCHARGE LIMITATIONS

CONSTITUENT	*UNITS*	*MONTHLY AVERAGE*	*DAILY MAXIMUM*
$CBOD_5$	mg/L	25	85
TSS	mg/L	30	90
Settleable Solids	mL/L/hr	1.0	3.0
Turbidity	NTU	75	230
Oil & Grease	Mg/L	25	75
Total coliform bacteria	MPN/100 mL	1,000	--
pH[(1)]	Average Daily: 6.0 < pH < 9		

[(1)] No individual excursions from the range of pH values shall exceed 60 minutes.

SOURCE: CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD, ORDER NO. R3-2018-0017, NPDES NO. CA0048551

Additionally, the following effluent limitations for toxic pollutants are presented below in Table 3.11-2: Effluent Limitations for the Protection of Marine Aquatic Life and Table 3.11-3: Effluent Limitations for the Protection of Human Health.

TABLE 3.11-2: EFFLUENT LIMITATIONS FOR THE PROTECTION OF MARINE AQUATIC LIFE

POLLUTANT	*UNITS*	*6-MONTH MEDIAN*	*DAILY MAXIMUM*
Cadmium	lb/day	36	140
Chromium (Hexavalent)	lb/day	72	290
Lead	lb/day	72	290
Selenium	lb/day	540	2,200
Silver	lb/day	20	95
Cyanide	lb/day	36	140
Total Residual Chlorine	lb/day	72	290
Acute Toxicity	TUa	--	4.7
Chronic Toxicity	TUc	--	150
Phenolic Compounds (non-chlorinated)	lb/day	1,100	4,300
Endosulfan	lb/day	0.32	0.65
Endrin	lb/day	0.072	0.14
HCH	lb/day	0.14	0.29
Radiactivity	Not to exceed limits specified in California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Section 64443.		

SOURCE: CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD, ORDER NO. R3-2018-0017, NPDES NO. CA0048551

TABLE 3.11-3: EFFLUENT LIMITATIONS FOR THE PROTECTION OF HUMAN HEALTH

POLLUTANT	*UNITS*	*30-DAY AVERAGE DAILY MAXIMUM*
Non-Carcinogens		
Acrolein	lb/day	7,900
Antimony	lb/day	43,000
Bis(2-Chloroethoxy)Methane	lb/day	160
Bis(2-Chloroisopropyl)Ether	lb/day	43,000
Chlorobenzene	lb/day	21,000
Di-n-Butyl Phthalate	lb/day	130,000
Dichlorobenzens	lb/day	180,000
Diethyl Phthalate	lb/day	1,200,000

POLLUTANT	*UNITS*	*30-DAY AVERAGE DAILY MAXIMUM*
Dimethyl Phthalate	lb/day	30,000,000
2-Methyl-4,6-Dinitrophenol	lb/day	7,900
2-4 Dinitrophenol	lb/day	140
Ethylbenzene	lb/day	150,000
Fluoranthene	lb/day	540
Hexachlorocyclopentadiene	lb/day	2,100
Nitrobenzene	lb/day	180
Thallium	lb/day	72
Toluene	lb/day	3,100,000
Tributylin	lb/day	0.050
1,1,1-Trichloroethane	lb/day	19,000,000
Carcinogens		
Acrylonitrile	lb/day	3.6
Aldrin	lb/day	0.00079
Benzene	lb/day	210
Benzidine	lb/day	0.0025
Beryllium	lb/day	1.2
Bis(2-Chloroehtyl)Ether	lb/day	1.6
Bis(2-Ethylhexyl)Phthalate	lb/day	130
Carbon Tetrachloride	lb/day	32
Chlordane	lb/day	0.00083
Chlorodibromomethane	lb/day	310
Chloroform	lb/day	4,700
1,4 Dichlorobenzene	lb/day	650
3,3'-Dichlorobenzidine	lb/day	0.29
1,2-Dichloroethane	lb/day	1,000
1,1-Dichloroehtylene	lb/day	32
Dichlorobromomethane	lb/day	220
Dichloromethane (Methylene Choride)	lb/day	16,000
1,3-Dichloropropene	lb/day	320
Dieldrin	lb/day	0.0014
2,4-Dinitrotoluene	lb/day	94
1,2-Diphenylhydrazine	lb/day	5.8
Halomethanes	lb/day	4,700
Heptachlor	lb/day	0.0018
Heptachlor Epoxide	lb/day	0.00072
Hexachlorobenzene	lb/day	0.0076
Hexachlorobutadiene	lb/day	500
Hexachloroethane	lb/day	90
Isophorone	lb/day	26,000
N-Nitrosodimethylamine	lb/day	260
N-Nitrosodi-n-Propylamine	lb/day	14
N-Nitrosodiphenylamine	lb/day	90
PAHs (total)	lb/day	0.32
PCBs	lb/day	0.00068
TCDD Equivalents	lb/day	1.4E-07
1,1,2,2-Tetrachloroethane	lb/day	83
Tetrachloroethylene	lb/day	72
Toxaphene	lb/day	0.0076
Trichloroethylene	lb/day	970
1,1,2-Trichloroethane	lb/day	340
2,4,6-Trichlorophenol	lb/day	10
Vinyl Chloride	lb/day	1,300

SOURCE: CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD, ORDER NO. R3-2018-0017, NPDES NO. CA0048551

The Central Coast RWQCB regulates M1W Regional Treatment Plant and use of recycled water through Board Order Number R3-2018-0017. The Order requires that M1W comply with applicable State and local requirements regarding the production and use of recycled wastewater, including requirements of California Water Code (CWC) sections 13500 – 13577 (Water Reclamation) and Department of Public Health regulations at title 22, sections 60301 – 60357 of the California Code of Regulations (Water Recycling Criteria).

Future Demand

The City of Salinas Sanitary Sewer Master Plan (2011) projects new development would increase the total wastewater discharge to an average dry weather flow up to a maximum of approximately 22.1 MGD at full build-out of the entire City Sphere of Influence. Wastewater generated by the proposed project is estimated to be approximately 1.0 MGD, as described in Table 3.11-4, below.

TABLE 3.11-4: PROPOSED PROJECT SEWER GENERATION ESTIMATE[1]

USE	*CALCULATION*[1]	*ACRE FEET PER YEAR*	*AVERAGE GPD*[4]
Retail/Services	214.4 AFY @ 90%[2]	193.0	172,321
Residential	1,562.3 AFY @ 50%[3]	781.2	697,464
Schools	356.5 AFY @ 50%[3]	178.3	159,188
TOTAL		**1,152.5**	**1,028,973**

[1] Calculations in this table are derived from water demand estimates from the Final Supplement for the Salinas General Plan Program EIR, Appendix E, Water Supply Assessment – Cal Water.
[2] A typical estimate for retail/services sewer demand is 90% of water demand
[3] A typical estimate for residential and school sewer demand is 50% of water demand. Approximately 50% of residential and school water is used for landscape irrigation.
[4] Gallons per day

Table 3.11-5 provides a summary of the City's Sewer Capital Improvement needs recommended sewer improvements by category under the SSMP, 2011 to be included in future Capital Improvement Program (CIP).

TABLE 3.11-5: SUMMARY OF RECOMMENDED SANITARY SEWER IMPROVEMENTS

TYPE	*QUANTITY*	*UNIT*	*CAPITAL COST (2010 $ MILLION)*
Capacity Improvements			
Gravity Sewers	37,400	Feet	$23.1
Force Mains	1,260	Feet	$0.5
Pump Station Upgrades	185	Horsepower	$2.2
Subtotal			*$25.8*
Rehabilitation/Replacement Improvements			
Sewers	2,290	Feet	$0.3
Emergency Bypasses at Pump	7	Each	$2.5
Subtotal			$2.8
GRAND TOTAL		**1,152.5**	**$28.6**

SOURCE: CITY OF SALINAS SANITARY SEWER SYSTEM MASTER PLAN, 2011.

The M1W Regional Treatment Plant treated approximately 21 MGD in 2014, and due to recent conservation efforts, currently treats approximately 16 MGD in dry weather (M1W Treatment Plant Engineer Jennifer Gonzalez, 2016). Over the past 25 years, since the Regional Treatment Plant began

operation, flow rates to the Plant have continued to decrease due to water conservation, drought, and other factors. The M1W Treatment Plant has plans to increase solid handling capability. The Treatment Plant currently has two screwpresses online, and it is anticipated that the Plant will include a third sometime in the next 10 years (M1W Treatment Plant Engineer Jennifer Gonzalez, 2016).

REGULATORY SETTING - WASTEWATER

Clean Water Act (CWA) / National Pollutant Discharge Elimination System (NPDES) Permits

The CWA is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program which makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority, in this case the Central Coast Regional Water Quality Control Board. NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, stormwater associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

Permit requirements for treatment are expressed as end-of-pipe conditions. This set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand (BOD), (2) total suspended solids (TSS), and (3) pH acid/base balance. These levels can be achieved by well-operated sewage plants employing "secondary" treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment in the form of "activated sludge."

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into the sanitary sewer system for treatment. Although not regulated under NPDES, "indirect" discharges are covered by another CWA program called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering surface water.

The City's current NPDES Permit, which regulates the wastewater effluent quantity and quality upon discharge was issued by the Central Coast Regional Water Quality Control Board and is Order R3-2018-0017; NPDES No. CA0048551.

City of Salinas General Plan

The Salinas General Plan establishes the following policies and requirements relative to wastewater in the General Plan:

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

LAND USE ELEMENT

Policy LU-7.2: Review development proposals to ensure that adequate sewer collection and treatment facilities are available to meet the needs of the development without negatively impacting the existing community.

Policy LU-7.3: Maintain the existing sewer system to provide a high level of service to existing neighborhoods.

City of Salinas General Plan EIR

The following mitigation measures were established in the City of Salinas General Plan EIR to reduce impacts to wastewater:

> **Mitigation Measure HW12.** The City will implement Implementation Program COS6 on an ongoing basis. Implementation Program COS6 requires the City, in cooperation with the state, regional, and local water agencies and suppliers, to participate in programs that seek to limit the spread of seawater intrusion into the groundwater basins through the recycling of wastewater. Specifically, the City shall support the expansion of the use of recycled water for urban and agricultural irrigation and cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.
>
> **Mitigation Measure PSU5.** Requires developers and the City to install essentially leak-free sewer piping in new developments and in City collection system projects that will prevent inflow/infiltration (I/I) from entering the system. City shall also conduct smoke testing, inspection, and improvements to the existing sanitary sewer system to help prevent I/I.

Utility Master Plans

The City of Salinas maintains a variety of Master Plan documents that guide the design, development, and maintenance of the utilities within the city limits. These include the *Sewer System Management Plan* (2014), *City of Salinas Sanitary Sewer System Master Plan* (2011), *City of Salinas 2010 Municipal Service and Sphere of Influence Review, City of Salinas Stormwater Management Plan* (2013), the *City of Salinas Stormwater Development Standards for New and Redevelopment Projects* (2013), *California Water Service Company 2010 Urban Water Management Plan for the Salinas District* (2011), and the *2015 Urban Water Management Plan for the Salinas District* (2016).

These documents are available for review during normal business hours (Monday through Friday 8 a.m. to 5 p.m.) at the offices of the City of Salinas Public Works Department at 200 Lincoln Avenue, Salinas, California 93901.

THRESHOLDS OF SIGNIFICANCE - WASTEWATER

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it will:

1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

2. Require or result in the construction of new wastewater treatment and/or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

3. Result in a determination by the wastewater treatment and/or collection provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: The proposed project has the potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (Less than Significant)

Wastewater generated within the Plan Area would be conveyed by the City of Salinas wastewater conveyance system to M1W Regional Treatment Plant. M1W, a regional agency, owns and operates M1W Treatment Plant. The wastewater treatment system treats domestic wastewater from residential and commercial sources. Waste Discharge Requirements (WDRs) Order No. R3-2018-0017 provides waste discharge requirements for M1W Treatment Plant, and a supply capacity of up to 29.6 MGD.

The Waste Discharge Requirements (WDRs) Order No. R3-2018-0017 includes: Discharge Prohibitions, Discharge Specifications, Effluent Limitations, Land Discharge Specifications, Reclamation Specifications, Surface Water Limitations, and Groundwater Limitations. This Order was adopted on May 22, 2014. M1W Treatment Plant is currently in compliance with the WDR requirements of Order No. R3-2018-0017, NPDES No. CA0048551. Implementation of West Area Specific Plan would be covered under the existing capacity (as discussed below with respect to Impact 3.11-2) and would not exceed the wastewater discharge requirements in this Order.

CONCLUSION

The proposed project would not exceed wastewater treatment requirements of the applicable RWQCB. Implementation of West Area Specific Plan would have a ***less than significant*** impact relative to this topic.

Impact 3.11-2: The proposed project has the potential to result in a determination by the wastewater treatment and/or collection provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (Less than Significant)

Project Wastewater Generation

The City of Salinas Sanitary Sewer Master Plan projects new development would increase the total wastewater discharge to an average dry weather flow to a maximum of approximately 22.1 MGD at full build-out of the entire City Sphere of Influence. The estimated wastewater discharge for full buildout of the proposed project would be approximately 1.0 MGD.

Collection System

The West Area Specific Plan would require wastewater collection and treatment services. The existing wastewater collection system is owned and operated by the City of Salinas. The City maintains approximately 270 miles of sanitary sewer collection system pipeline and 11 Sanitary Sewer Lift Stations. Flow in the City system is primarily by gravity, with low-head pump stations located at low spots due to the City's flat topography.

Sanitary wastewater produced in the City is conveyed through the City's conveyance facilities to the former City treatment plant site, known as "TP1". The plant closed when M1W Treatment Plant began service. From that location it is pumped via M1W's Salinas Pump Station and Salinas Interceptor pipeline to the M1W Treatment Plant in Marina. The primary components of the City's collection system include four trunk lines, 11 pump stations, and a system of smaller collection facilities that convey wastewater from individual homes, businesses, and other developed uses to the trunk lines and pump stations.

The sewer collection system for the Plan Area will be connected to the existing 24-inch sewer trunk line on McKinnon Street at the intersection with East Boronda Road. However, the elevation at the connection point on McKinnon Street and the lowest point of the northwest area of the Plan Area are very similar, making it difficult to connect the proposed gravity flow sewer collection system for the northwest area to the existing 24-inch sewer system on McKinnon Street. Therefore, the proposed sewer collection system for the northwest area of the Plan Area may need to be connected to the existing 10-inch sewer system on Van Buren Avenue near San Juan Grade Road, which is tributary to the Santa Rita Pump Station. Connection to this line will require further analysis to the affected sewer lines, and the Santa Rita Pump Station. The Santa Rita pump station then sends flows south via gravity conveyance. The proposed sewer collection system for the remainder of the Plan Area would connect to the aforementioned existing 24-inch sewer trunk line on McKinnon Street. See Figure 3.11-1 for a map of the preliminary West Area Specific Plan sanitary sewer system plan.

The City would maintain the sewer collection system once constructed. All the proposed sanitary sewer collection systems would convey flow to the City's existing sewers by gravity without the need of any sewer pump station, except for the northwest Plan Area, which may need to connect to the 10-inch Van Buren line which is tributary to the Santa Rita Pump Station.

Treatment System

The M1W Treatment Plant provides regional wastewater treatment, disposal, and reclamation facilities for the cities of Monterey, Pacific Grove, Del Rey Oaks, Sand City, Marina, and Salinas; the Seaside County Sanitation District; the Castroville, Moss Landing and Boronda Community Services Districts; and Fort Ord.

All sanitary wastewater collected by the City's system flows to the M1W Salinas Pump Station, located at the southwestern boundary of the City. The M1W Salinas Pump Station conveys sanitary wastewater discharges to the regional treatment facility via a M1W force main.

The Regional Treatment Plant, owned and operated by M1W, would serve the proposed project. The Waste Discharge Requirements (WDRs) Order No. R3-2018-0017 allows M1W Regional Treatment Plant to accept up to 29.6 MGD. The M1W Treatment Plan has a design capacity for up to 29.6 MGD.

CONCLUSION

The West Area Specific Plan would increase the amount of wastewater requiring treatment. The wastewater would be treated at M1W Treatment Plant. The Waste Discharge Requirements (WDRs) Order No. R3-2018-0017 allows M1W Treatment Plant to accept up to 29.6 MGD. Given a current demand of approximately 16 MGD (as provided by M1W Treatment Plant Engineer Jennifer Gonzalez), the M1W Treatment Plant currently has an additional capacity of approximately 11 MGD; given 1.0 MGD generated by the project, there is sufficient plant capacity. This is a ***less than significant*** impact.

Impact 3.11-3: The proposed project has the potential to require or result in the construction of new wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (Less than Significant)

The West Area Specific Plan project does not trigger a need to expand the M1W Treatment Plant. The West Area Specific Plan wastewater collection system will be connected to the existing 24-inch sewer trunk line on McKinnon Street at the intersection with East Boronda Road. The proposed sewer collection system for the northwest area of the Plan Area may need to be connected to the existing 10-inch sewer system on Van Buren Avenue near San Juan Grade Road, which is tributary to the Santa Rita Pump Station. Connection to this line will require further analysis to the affected sewer lines, and the Santa Rita Pump Station. The proposed sewer collection system for the remainder of the Plan Area would connect to the aforementioned existing 24-inch sewer trunk line on McKinnon Street. There would be a network of sewer collection infrastructure installed throughout the Plan Area to serve the West Area Specific Plan.

CONCLUSION

The potential for environmental impacts associated with the installation of the wastewater collection system, and all construction activities within the Plan Area, are addressed throughout this EIR. In some cases, the direct and indirect impacts are potentially significant and warrant mitigation

measures, while in other cases there are significant and unavoidable impacts. The installation of the wastewater collection system for the West Area Specific Plan project does not cause any impacts above what is already analyzed and disclosed for each environmental topic in this EIR. This is a ***less than significant*** impact relative to this environmental question.

Impact 3.11-4: Cumulative impact on wastewater utilities (Less than Significant and Less than Cumulatively Considerable)

The geographic boundary for cumulative wastewater impacts is development within the wastewater collection and treatment service area of M1W. The M1W service area includes: the cities of Pacific Grove, Monterey, Seaside, Del Rey Oaks, Marina, Salinas, and Castroville; Moss Landing (within unincorporated Monterey County); and farmlands in the Castroville area that received recycled water produced by M1W. This geographic boundary was chosen because it contains the area that has the potential to cause a cumulative wastewater impact to M1W facilities (including the M1W Treatment Plant) and/or City of Salinas sewer facilities.

The proposed project would not exceed the RWQCB wastewater treatment requirements or cause a significant impact related to the construction of new wastewater treatment or collection facilities or expansion of existing facilities. There is sufficient capacity at the M1W Regional Treatment Plant to serve the proposed project.

The City requires each project applicant to secure adequate wastewater treatment capacity. The project applicant(s) are required to provide the City with documentation of a will-serve or other commitment from M1W at the time of development. Additionally, the project applicant(s) will be required to install/connect and/or fund the necessary collection/transmission infrastructure to ensure the appropriate treatment of all wastewater.

The amount of wastewater that the M1W Treatment Plant receives and treats has been decreasing over time. It is projected that wastewater flows to the M1W Treatment Plan will continue to decrease until approximately the year 2030, when wastewater flows are projected to between 17.1 and 19.2 MGD. Wastewater flows are projected to increase after 2030 and may range between 22.7 and 24.3 MGD by the year 2055, or 77 percent to 82 percent of regional treatment plant design capacity (Brezack & Associates Planning, 2014). Wastewater demand for the buildout of the most recent version of the Economic Development Element is estimated to add approximately 0.65 MGD to this total[2], which would increase the total cumulative demand at the Regional Treatment Plant to approximately 25.0 MGD by 2055, under the worst case scenario modelled. The M1W plant is designed and constructed to handle 29.6 MGD; which is more than 4 MGD than the project 2055 demand, under the worst case scenario modelled. The 1.0 MGD expected to be generated by full buildout of the proposed project would thereby leave approximately 3.6 MGD available in 2055, under the worst case scenario modelled. Moreover, it is more than likely that this represents an overestimate of cumulative wastewater demand, given that this estimate utilizes the higher end of the range of projected wastewater at the M1W Regional Treatment Plant in the future. Additionally,

[2] As provided within the Draft Salinas Economic Development Program EIR

buildout of the Specific Plan is expected to occur over an approximately 20 to 30 year timeframe; therefore buildout is expected to occur no later than approximately 2048 (at latest). Therefore, using the year 2055 as the analysis year serves as a conservative date for buildout of the proposed project. Therefore, this would result in *a **less than significant cumulative** impact* and ***less than cumulatively considerable*** incremental impact on wastewater utilities.

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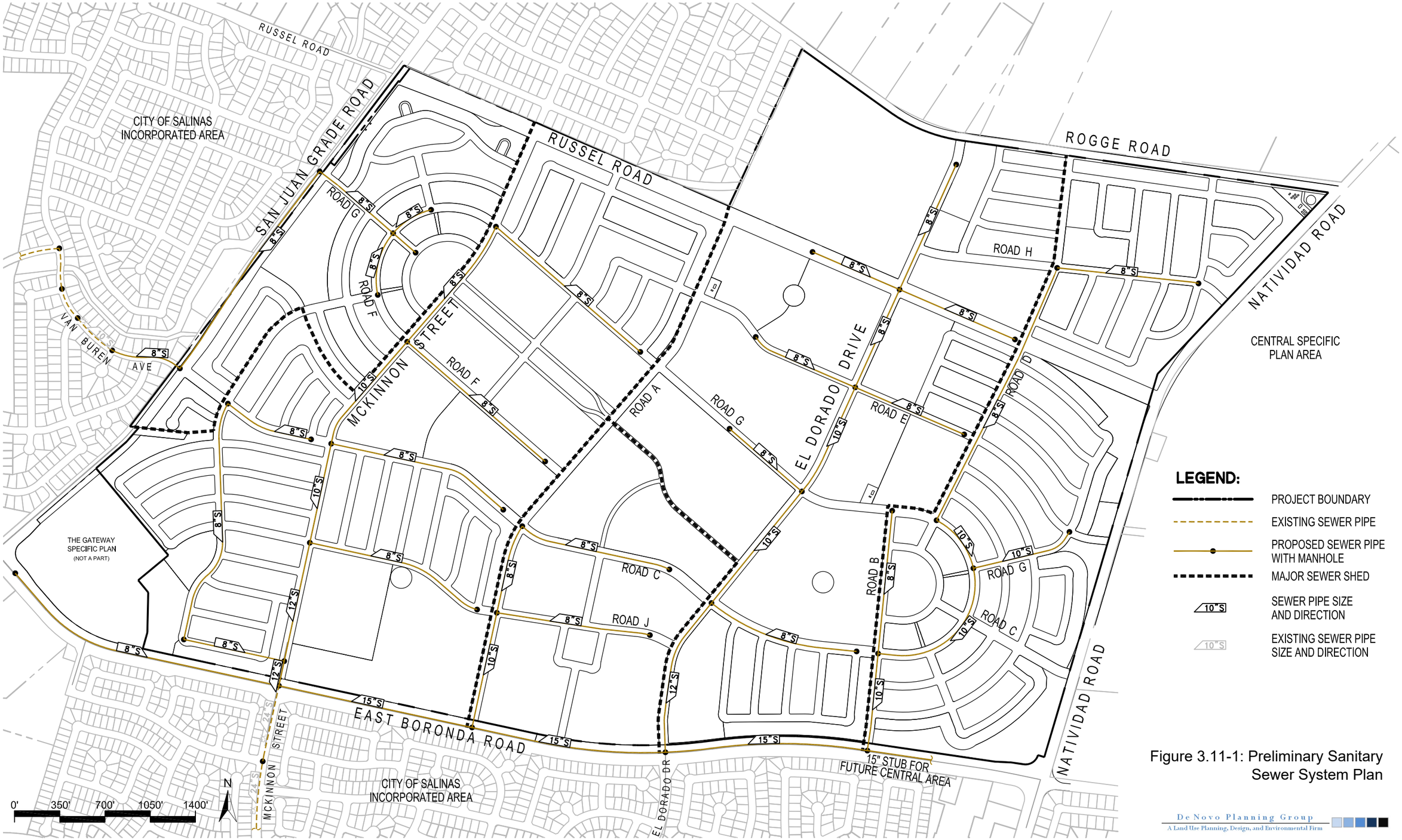

Figure 3.11-1: Preliminary Sanitary Sewer System Plan

Source: AECOM, Wood Rodgers, City of Salinas Figure 14 Preliminary Sanitary Sewer System Plan

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3.11.2 WATER SUPPLIES
EXISTING SETTING

Water Purveyor

The Plan Area was annexed into the City of Salinas on September 8, 2008. The Salinas District of California Water Service ("Cal Water Salinas District" or "Cal Water") provides potable water service to most of the City of Salinas. The California Public Utilities Commission (CPUC) has approved the extension of services to the project.

Water Service Area

The Cal Water Salinas District water service area includes most of the City of Salinas, excluding a large portion of the northeastern portion of the City, which is serviced by Alisal Water Corporation (ALCO). The Cal Water Salinas District serves residents and businesses of the City of Salinas and those of the unincorporated communities of Bolsa Knolls, Las Lomas, Oak Hills, Country Meadows, Salinas Hills, Buena Vista and Indian Springs.

A single distribution system provides service to the City of Salinas and Bolsa Knolls. Smaller hydraulically isolated distribution systems provide service to the other communities. Approximately 81% of incorporated Salinas customers are provided water by the Cal Water Salinas District. The water supply for the customers of the Cal Water Salinas District is reliant on groundwater wells as the sole water source.

A project-specific Water Supply Assessment (WSA) has been prepared to evaluate the City's current and future water demands (including those of the Plan Area) against water supplies to ensure that adequate water is, or will be, available to accommodate the West Area Specific Plan. In a September 2015 letter to Cal Water, the City of Salinas requested that Cal Water (as the designated water service provider for the West Area Specific Plan) prepare the WSA. This WSA was prepared in December 2015 (see *West Area Specific Plan Salinas California SB610 Water Supply Assessment*). This report feeds into the update to the Cal Water Salinas District Urban Water Management Plan (UWMP), in its 2015 Update (the most recent available). The studies conclude that adequate water supplies are available to serve the West Area Specific Plan.

Historical and Future Water Demand

The following information is based on the *West Area Specific Plan Salinas California SB610 Water Supply Assessment* (Cal Water, 2015).

PROPOSED PROJECT WATER DEMAND

Cal Water developed water use data by user class to estimate water demand for various proposed developments. However, due to implementation of more aggressive water conservation practices and requirements, historic water use factors are higher than projected water use factors for new developments in 2015 and beyond. Accordingly, the method used is to estimate water demand of new developments based on newer water conservation requirements for toilets, showers,

dishwashers, washing machines, and changes in outdoor landscaping and irrigation systems and rates by applying a conservation factor to historic water use rates. All new buildings and irrigated areas systems in the West Area Specific Plan are to comply with City of Salinas Codes (including the City's Water Efficient Landscape ordinance), the City's General Plan EIR Mitigation Monitoring and Reporting Program, and the California Plumbing and California Green Building Codes, which mandate installation of water conservation plumbing fixtures and fittings. Existing water use in the Salinas District is based on higher historic water use rate data (gpd/ft^2).

Single Family and Multi Family Residential

Based on U.S. Census Bureau data for 2010, Cal Water determined that the average number of persons per dwelling unit in the Salinas District was 3.156. It is noted that the Salinas District has a lower average number of persons per household than the City of Salinas as a whole, which is 3.66, pursuant to the U.S. 2010 Census Bureau. The average water use in the Salinas District for residential only (single and multi-family dwelling units combined) for 2012 and 2013 was 74 gallons per capita per day (gpcd). Average per capita water use in 2014 dropped to 66 gpcd, reflecting increased conservation by Salinas District residents due to the fourth year of a statewide drought. Estimated residential water demand at proposed project buildout is expected to be 940,333 gpd or 1,054.1 Acre-feet/year (AFY).

Retail

Of the total approximately 480,000 square feet of retail activities proposed in the West Area Specific Plan (a subset of the approximately 571,500 square feet of commercial/mixed use building area), it is assumed that about 50% will consist of dry goods shops, 25% office, and 25% restaurants and food markets. This results in an estimated average water use rate of 0.3425 gpd/square foot. For retail activities, a conservative 25% water conservation savings is used for the Plan Area. Estimated retail demand would be 123,300 gpd or 138.2 AFY.

Schools

For the proposed five schools, a representative water use factor was developed by using actual McKinnon Elementary School water use data. The school covers approximately 10.98 acres. For a 3-year period (2011 through 2013), the average annual water use factor was 1,084 gallons/day/acre. In 2014, in the 4th year of statewide drought, the water use factor decreased to 892 gallons/day/acre or a 17.7% reduction. The four new schools are expected to implement water savings fixtures and irrigation practices; therefore, an average of these two rates, or 988 gallons/day/acre is used here. Estimated annual average daily school water demand would be 89,641 gallons/day or 100.5 AFY.

Parks

Total park area was estimated in the Water Supply Assessment at 49.76 acres. The City estimates 80% of the area will be drought tolerant turf and 10% drought tolerant plants. The remaining 10% will not be landscaped. Therefore, approximately 44.8 acres will be irrigated. Typical irrigation rates for parks are 2.0 to 2.5 AFY/acre. Using an average of 2.25 AFY/acre and assuming a 20% reduction in irrigation rate in the West Area Specific Plan parks results in a rate of 1.8 AFY/acre. Using this rate yields an annual demand of 80.6 AFY.

Overall Future Demand

Total Estimated Average Annual Daily Water Demand for the West Area Specific Plan at buildout: 1,054.1 + 138.2 + 100.5 + 80.6 = approximately 1,373 AFY or 1,226,092 gallons/day. A summary of the proposed project's water demand in AFY is shown in Table 3.11-6.

TABLE 3.11-6: WATER DEMAND ESTIMATE (AFY)

USE	*CALCULATION(1)*	*ACRE FEET PER YEAR*
Retail/Services	480,000 s.f. x 0.75 @ 0.3425 gal/s.f./day = 123,300 gpd	138.2
Residential	4,340 du x 3.66 persons/du x 59.2 gpcd = 940,333 gpd	1,054.1
Schools	90.73 acres @ 988 gal/acre/day = 89,641 gpd	100.5
Parks	44.8 irrigated acres @ 1.8 AFY/acre	80.6
TOTAL		**1,373.4**

SOURCE CAL WATER, 2015, PGS. 6-7

NOTE: THE TOTAL ESTIMATED AVERAGE ANNUAL WATER DEMAND ESTIMATE (1,373.4 AFY) DIFFERS SLIGHTLY FROM WHAT IS PROVIDED IN THE CAL WATER SB 610 WATER SUPPLY ASSESSMENT (WSA) (1,368 AFY), DUE TO A WSA CALCULATION ERROR.

Existing Water Demand in the Plan Area

An estimated 90% of the land in the Plan Area or 720 acres is presently used for irrigated cultivation of crops – lettuce and various vegetables (strawberries, broccoli, cauliflower, and alfalfa). Between two and three crops are grown annually. General cropping practice is to rotate crops. While as many as three crops can be produced in a year, normal practice is to grow two crops. Irrigation is by sprinkler or drip systems, which are supplied by groundwater pumped from agricultural wells in the area.

Groundwater recharge from irrigated agricultural land is a function of many variables including weather, hydrologic conditions, irrigation practices, crops, soil types, soil conditions, etc. One approach to determining recharge is to collect data and make estimates of monthly irrigation, monthly precipitation, runoff, plant evapotranspiration, evaporation, initial soil moisture and the soil's available water holding capacity. (Recharge is the net of irrigation and precipitation minus water losses associated with other factors).

Cal Water (2015) estimates that current recharge to the groundwater is:

- Strawberries: 1.9 ft./acre/crop
- Broccoli, cauliflower, alfalfa: 4.04 ft./acre/crop

As previously mentioned, general farming practice is to rotate crops. If strawberries, broccoli and cauliflower are the crops being cultivated over the course of 1 year, with ½ of the required irrigation water for strawberries and the other ½ for broccoli and cauliflower or alfalfa, the overall average irrigation rate for existing irrigated acres in the Plan Area is estimated at:

0.5 (1.9) + 0.5(4.04) = 2.97 or 3.0 acre-feet/acre/year or 3.0 ft./year

Estimated groundwater pumping for existing irrigated agricultural use in the Plan Area is:

2 x 3.0 ft./year x 720 acres = 4,320 AFY

The estimated 4,320 AFY ground water pumping for existing agricultural use in the West Area Specific Plan is 2,947 AFY more than the total buildout estimated demand for the West Area Specific Plan, which is 1,373 AFY. Therefore, the total buildout estimated water demand for the West Area Specific Plan is projected to be less water than current irrigated agricultural uses.

The estimated amount of recharge from existing irrigated agriculture use is:

0.3 x 4,320 AFY = 1,296 AFY

Estimated net consumptive water use by existing irrigated agriculture use in the Plan Area is 3,024 AFY; still substantially less than project build out (Cal Water, 2015).

Cal Water data for the period from 2010 through 2013 (4 years) shows that the average indoor water use in single family homes was 67% of total water use. It was 88% for 2014 due to the 4th year of drought and increased water conservation by Salinas District residents. For multi-family dwelling units for 2010 – 2013, average indoor use was 78% of total use. It was 87% for 2014 for the reasons cited. For the West Area Specific Plan, 26.5% of the dwelling units will be multi-family. The estimated average indoor water use of the West Area Specific Plan is: 0.265 x 78% + 0.735 x 67% = ~ 70%.

Assuming similar average percentages of indoor water use for the other use categories results in a total estimated outdoor annual water demand for the Plan Area at build-out of 0.30 x 1,373 = 412 AFY.

If 20% of outdoor use infiltrates below the plant root zone and recharges groundwater, then 0.20 x 412 = 82 AFY or 6% of estimated average annual demand is estimated to recharge to the groundwater system.

The estimated amount of indoor water use that will become sanitary wastewater is 0.70 x 1,373 = 961 AFY.

Sanitary wastewater is conveyed to the Monterey One Water (M1W) for tertiary treatment in compliance with California State Title 22 requirements. Approximately, 60% of treated effluent is used for agricultural crop irrigation through the Castroville Seawater Intrusion Project/purple pipe program.

The City of Salinas contributes approximately 60% of wastewater flows to the Regional Treatment Plant. Therefore, wastewater from the City of Salinas supplies approximately 36% of recycled water used for crop irrigation (0.6 x 0.6 = 0.36). Treated sanitary wastewater (recycled water) from the Plan Area that will be used for agricultural irrigation is: 0.36 x 961 = 346 AFY. This recycled water is groundwater not pumped for agricultural irrigation assuming irrigators use a set amount of water annually for irrigation.

Net Project Water Demand

On the basis of this analysis, the estimated total amount of West Area Specific Plan consumptive water use at buildout would be 1,373 - 82 - 346 = 945 AFY.

The estimated total amount of water consumptively used in the Plan Area for irrigating crops is 3,024 AFY.

Therefore, conversion of the Plan Area from agricultural to urban land use could result in an estimated reduction of consumptive groundwater use (or increase in groundwater storage) of: 3,024 - 945 = 2,078 AFY. This is a significant contribution in reducing overdraft in the Salinas Valley Ground Water basin.

CAL WATER SALINAS DISTRICT – WATER CONSERVATION

Cal Water has expanded its water conservation programs and developed new programs for the Salinas District as a result of State law and policies requiring further reductions in per capita daily water use. Enacted in 2009, SBx7-7 mandates a 20 percent reduction in per capita urban water use by year 2020. The CPUC requires implementation of conservation programs and rate structures to achieve reductions in per capita water use. The Memorandum of Understanding Regarding Urban Water Conservation in California (MOU), of which Cal Water has been a signatory since 1991, requires implementation of conservation programs. The Salinas District Water Conservation Master Plan, which addresses these requirements, is included as Appendix L in the Cal Water Salinas District 2015 UWMP.

The 2015 and 2020 district-specific targets for Salinas District are 131 and 116 gpcd, respectively. For the five years between 2010 and 2014, average annual daily per capita water use has varied as described in Table 3.11-7, below.

TABLE 3.11-7: CAL WATER SALINAS DISTRICT AVERAGE ANNUAL DAILY PER CAPITA WATER USE

YEAR	*ANNUAL AVERAGE WATER DEMAND (GPCD)*
2010	129
2011	137
2012	141
2013	142
2014	129

SOURCE: CAL WATER, 2015 (PG. 7)

The five-year average for the period 2010-2014 is 135.6 gpcd – 3.5% over the target value for 2015. According to the California SWRCB, water use in the Cal Water Salinas District decreased in 2015 as compared with 2014, thereby allowing the Salinas District to meet the SBx7-7 2015 target (SWRCB, 2017). Moreover, the Cal Water Salinas District 2015 UWMP states that, per capita water demand in 2015 was 106 gpcd, well below the SBx7-7 2015 target of 131 gpcd. Per capita water use needs to be 116 gpcd or below by 2020 to meet the 2020 target.

Water Supplies

The Salinas District water supply comes from pumped groundwater within District boundaries. It is extracted from aquifer segments of the Salinas Valley groundwater basin known as the Pressure Area and Eastside Area. The Salinas Valley groundwater basin, which is overdrafted, is unadjudicated. The California Water Resources Control Board (CWRCB) has initiated adjudication

proceedings in the event that Monterey County Water Resources Agency (MCWRA) is not able to effectively reduce the overdraft.

The Pressure Area is a region of gradually declining groundwater elevations and is characterized by three confined aquifer systems, overlain and separated by thick clay layers that act as aquicludes. These aquifers named for their relative depths are known as the “180 Foot", the “400 Foot”, and “900 Foot” aquifers. Cal Water pumps from all three aquifers.

The groundwater level in the Eastside Area is declining more rapidly than any other area in the Salinas Valley groundwater basin. The Eastside Area is comprised of unconfined, randomly scattered water bearing strata.

Since the surface elevation in the Salinas District ranges from 40 to 70 feet above sea level, the three aquifers of the Pressure Area are all below sea level. There is hydrologic continuity with the ocean and the three aquifers.

MCWRA has estimated that the annual non-drought overdraft of the Salinas Basin is about 45,300 AFY. Because of the hydrologic continuity between the ocean and the aquifers of the Pressure Area, seawater has been intruding into these aquifers at an estimated rate of 28,800 AF per year.

Groundwater pumping throughout the Salinas Valley has contributed to the overdraft of the groundwater basin. MCWRA numbers indicate that water levels have declined in all four of the basin’s areas. However, the minor declines in the Upper Valley and Forebay areas appear to be in response to drought conditions. Recharge in these areas from releases from the San Antonio and Nacimiento Reservoirs have historically stabilized groundwater levels in these two areas. Declines since 1987 are believed to be the result of reduced recharge supplies.

Seawater has advanced into the 180 Foot aquifer to within one mile of Cal Water’s closest well. When possible, Cal Water shifts groundwater pumping from the 180 Foot and Eastside aquifers to wells further south and in the 400 Foot aquifer of the Pressure Area.

Except for an annual variance of approximately 35 feet, average static groundwater levels in District wells since 1961 changes elevation during drought years. In 1976 and 1977, the running average level declined by 20 feet. Recovery occurred in 1982 and 1983 when storm runoff refilled local reservoirs increasing groundwater recharge. With extended drought conditions commencing in 1984, the running average elevation again began declining and by the summer of 1992 had dropped by 35 feet. Despite four years of drought between 2011 and 2015, average static groundwater levels remained relatively constant.

In 2015, a total of 28 wells supplied the Cal Water Salinas District. (Note: The City of Salinas service area is the largest service area in the Salinas District and is hydraulically separate from other service areas). As of 2015, the design capacity of these active operational wells was 27,880 gpm or 40 MGD or 44,843 AFY of water (Cal Water, 2015). In addition, Cal Water has constructed three new wells since 2015, for a total of 31 wells. Well capacities for the wells built since 2015 range from 500 gallons per minute (gpm) to 2,000 gpm. The three new wells are assumed to have an average design capacity of 1,200 gpm for a total of 3,600 gpm or 5.18 MGD, which is equivalent to 5,812 AFY (Cal

Water, 2015). In addition, the West Area Specific Plan provides for three new wells to be constructed as development progresses. The plan is to have the first well operational at the time initial development occurs. The assumption for the design capacity of the three new Plan Area wells is 1,200 gpm each. As such, the first West Area Specific Plan well would add 1,200 gpm capacity or 1,937 AFY. Thus, when the first well is completed, the total design capacity of wells serving the City of Salinas including the Plan Area was estimated to be: 44,843 + 5,812 + 1,937 = 52,592 AFY.[3]

The estimated average annual demand for the Salinas District as a whole was 15.9 MGD or 17,862 AFY (40% of design capacity). The Plan Area distribution system will be interconnected with the existing City of Salinas system so that water can be supplied from wells within the Plan Area and if needed during peak periods of demand from nearby wells within the existing service area.

When initial development and occupancy in the Plan Area has occurred, the estimated total design capacity of the City of Salinas well system including one new well in the Plan Area is: 27,780 + 3,600 + 1,200 = 32,580 gpm or 46.9 MGD. Maximum day demand is estimated to be 1.5 times the average day demand. At that time maximum day demand is estimated to be 22.47 MGD or 48% of well design capacity. With the addition of two more wells in the Plan Area in the period from year 2020 to year 2030 with a combined capacity of 2,400 gpm, the total City of Salinas plus West Area Specific Plan well design capacity would be 34,980 gpm or 50.37 MGD. The projected demand for year 2040 is 21,716 AFY or 19.4 MGD, which is 38.5% of design capacity. The estimated maximum day demand in year 2040 is 29.1 MGD. It is noted that a surplus of capacity is required for several reasons: maintenance requirements on older wells, break downs on wells requiring repairs that can take up to 6 months, changes in water quality such as nitrates, MTBE, uranium, iron and manganese, and changes in regulations, etc. that require a well to be taken out of operation until either a treatment system can be designed and constructed or a determination is made to retire it.

Cal Water has made and continues to make improvements to its distribution system by adding or upgrading its transmission pipelines, storage facilities and booster pump stations so that it is able to move water from sources outside a particular area in the event one or more wells are not operational. This provides supply assurance as well as operational flexibility.

Table 3.11-8 provides the groundwater pumping estimates for the City of Salinas between 2015 and 2040.

TABLE 3.11-8: GROUNDWATER PUMPING – CITY OF SALINAS AFY

SOURCE	*2015*	*2020*	*2025*	*2030*	*2035*	*2040*
Salinas Valley Groundwater Basin	14,659	16,651	17,531	18,459	19,439	20,474

SOURCE: CAL WATER, 2016 (PG. 57); CAL WATER, 2015 (PG. 7)

Dry Year Water Supply Availability and Reliability

The following information was provided by the *West Area Specific Plan Salinas California SB610 Water Supply Assessment* (Cal Water, 2015).

[3] As provided by the SB 610 Water Supply Assessment, developed by Cal Water (2016).

SB 610 requires an assessment as to whether the proposed water supply for the Salinas District including the West Area Specific Plan service area will meet projected water demand for the next 20 years during: 1) a normal dry year; 2) a single dry year; and 3) multiple dry water years.

Average annual rainfall for the Salinas District is 14.6 inches. One of the driest recorded years occurred in 1999 when the rainfall was 79.5% of average (11.6 inches). This is taken as the single dry year. The three multiple dry-water years used in the UWMP were based on the consecutive lowest annual recorded rainfall totals which occurred in 2002, 2003, and 2004. Reduced rainfall in Salinas during this period coincides with similar reductions experienced elsewhere in California.

For single dry years (1999) and multiple dry years (2002, 2003, and 2004) there are changes in average water use with respect to what might be considered a "normal" hydrologic year. For example, the average water use for the two years with above normal rainfall (2000 and 2001), was 655 gpd/service. For the three dry years (2002, 2003 and 2004), average use was 702 gpd/service or an average of 7.1% increase in water use.

While multiple dry years would result in a decline in ground water levels, the effect historically has not reduced the capacity of Cal Water's wells to meet service area demands. Ground water, as previously shown has recovered in wet years resulting in a relatively stable groundwater supply over decades.

Table 3.11-9 presents the current and projected supply capacity versus demand for a normal year, a single dry year, and multiple dry hydrological years.

TABLE 3.11-9: SUPPLY CAPACITY VERSUS DEMAND FOR NORMAL, SINGLE DRY YEAR, AND MULTIPLE DRY YEAR

YEAR	NORMAL YEAR, AFY			SINGLE-DRY YEAR DROUGHT, AFY			MULTI-DRY YEAR DROUGHT(B), AFY		
	SUPPLY	DEMAND	DIFF.(A)	SUPPLY	DEMAND	DIFF.(A)	SUPPLY	DEMAND	DIFF.(B)
2015	44,843	17,862	26,981	44,843	17,862	26,981	40,359	19,112	21,247
2020	52,592	16,651	35,941	52,592	16,651	35,941	47,333	17,817	29,516
2025	52,592	17,531	35,061	52,592	17,531	35,061	47,333	18,758	28,575
2030	52,592	18,459	34,133	52,592	18,439	34,133	47,333	19,751	27,582
2035	52,592	19,439	33,153	52,592	19,439	33,153	47,333	20,800	26,533

NOTE: (A) DIFFERENCE BETWEEN SUPPLY AND DEMAND. (B) 3RD DRY YEAR.
SOURCE CAL WATER, 2015 (PGS. 36-37)

Single Dry Year

Based on preceding data and analysis, Cal Water estimates that the availability of its groundwater supplies will not be affected by a single dry year. As the data shows, single dry year demand will very likely be the same as a normal hydrologic year demand. While some customers may increase landscape irrigation due to reduced precipitation, others based on conservation mandates, per Cal Water, will reduce consumption.

Multiple Dry Years

Based on preceding data and analysis, Cal Water estimates that the availability of its groundwater supplies will not be significantly affected by a multiple dry year drought. The effect of pumping groundwater supplies that underlie the Salinas District at "normal" demand levels during multiple dry years is likely to result in localized declines in groundwater levels. As groundwater level data have shown, during ensuing wet periods, groundwater levels typically recover to normal levels,

provided overall (City of Salinas) area pumping rates remain the same or do not significantly increase.

Governor Brown issued an executive order on April 1, 2015 mandating urban water users achieve a 25% reduction in demand over at least the following year. A report in August 2015 by the CA Dept. of Water Resources indicated that the statewide average of water conservation savings by urban water utilities was over 35%.

Salinas District demand in year 2035 during a multiple dry year period might be expected to decrease by 15% of the 2035 normal demand or be equal to 0.85 x 19,439 = 16,523 AFY.

Nonetheless, it is conservatively assumed here that in the 3rd year of a multiple dry year period, demand will increase by 7% - not withstanding intensified water conservation efforts by Cal Water, MCWRA and other agencies. It is also conservatively assumed that a temporary decline in static groundwater levels will reduce overall yield of Cal Water's wells by 10%. Table 3.11-10 compares supply versus demand under these assumptions.

TABLE 3.11-10: 3RD DRY YEAR: SUPPLY CAPACITY VERSUS DEMAND (AFY)

YEAR	*SUPPLY*	*DEMAND*	*DIFFERENCE*
2015	40,359	19,112	21,247
2020	47,333	17,817	29,516
2025	47,333	18,758	28,575
2030	47,333	19,751	27,582
2035	47,333	20,800	26,533

SOURCE: CAL WATER, 2011 (PG. 37)

Even with no change in the estimated design supply capacity in 2035 (not including the two additional wells with an estimated additional capacity of 3,874 AFY to be constructed in the West Area Specific Plan service area by 2030), projected demand is only 43.9% of the design capacity supply in the 3rd year of a multi-year dry period (Cal Water, 2015).

It should also be noted that the Public Draft of the Cal Water Salinas District 2015 UWMP also describes that there would be sufficient supply to accommodate demand within the City for normal, single dry, and multiple dry year conditions (Cal Water, 2016).

Groundwater Basin Overdraft

Groundwater is currently the dominant source of water supply for agricultural and municipal water demands in the Salinas Valley. Agricultural water use represents approximately 90 percent of all water used in the Salinas Valley. Urban water use has been increasing. Increases in urban water use, particularly on non-irrigated lands in the northern portion of the Salinas Valley, will place additional pressure on groundwater pumping (Brown & Caldwell 2016, pp. 2-4 – 2-5). The Plan Area is located on irrigated agricultural land. Hence, water demand from the project with urban uses will replace water demand for irrigation.

Salinas is situated at the northern end of the Salinas Valley, a relatively narrow, elongated, fault down-dropped, sedimentary basin in the California Central Coast Range. The uplifted mountainous boundary consists of older granitic, metamorphic and marine sedimentary rocks of the Salinian tectonic block. Beneath the valley, a thick sequence of Tertiary marine sedimentary rocks is overlain by late Tertiary to Recent non-marine sedimentary deposits of fluvial and alluvial fan origin. The uppermost 1,000 feet, or more, of this non-marine sequence contains the fresh ground-water basin that is utilized for various water supply purposes.

Cal Water extracts groundwater from two hydraulically connected subbasins of the groundwater basin known as the Pressure Subarea and the East Side Subarea. Much of the water supply for Salinas is extracted from the Pressure Subarea. The Pressure Area is a region of gradually declining groundwater elevations and is characterized by three confined aquifer systems, overlain and separated by thick clay layers that act as aquicludes. These aquifers are named for their relative depths, and are known as the “180-foot", the “400-foot”, and “900-foot” aquifers, respectively. The groundwater level in the East Side Area is declining more rapidly than any other area in the groundwater basin. The East Side Area is comprised of unconfined, randomly scattered water bearing strata (Cal Water, 2015).

As described in Cal Water’s 2015 UWMP, the groundwater basin was in an overdraft condition at the time the UWMP was adopted. The State has designated the 180-foot and 400-foot aquifers as critically overdrafted. While the basin remains unadjudicated, the California Department of Water Resources has listed the groundwater basin as a high priority. The main concern of the overdraft is not water level, but rather seawater intrusion into these two aquifers. Seawater intrusion threatens the quality of water extracted from the aquifers.

The UWMP notes the annual non-drought overdraft of the groundwater basin is approximately 45,300 AFY. Because of the hydrologic continuity between the ocean and the aquifers of the Pressure Area, seawater has been intruding into these aquifers at a rate of approximately 28,800 AFY. During droughts, the annual overdraft can escalate to between 150,000 and 300,000 AFY per year.

Refined data on the imbalance of the groundwater basin can be found in the Brown & Caldwell’s 2015 State of the Salinas River Groundwater Basin. That report investigates conditions in “Zone 2C” of the groundwater basin. Zone 2C is comprised of seven of the subbasins within the groundwater basin. The report further focuses on the four water-producing subareas, including the Pressure Subarea and the East Side Subarea, that produce nearly all of the reported groundwater use within Zone 2C. The report states that the basin appears to be out of hydrologic balance. The average annual groundwater extraction for the four noted subareas that compose Zone 2C was about 523,000 AFY from 1959 to 2013. The average annual change in storage was about 17,000 to 24,000 AFY, including seawater intrusion. Based on the continued large storage declines in the East Side and Pressure Subareas (and resulting groundwater declines and seawater intrusion), the current distribution of groundwater extractions is not sustainable. Seawater intrusion can account for up to 18,000 AFY of the total storage loss of 24,000 AFY. It is stated that sustainable use of groundwater can only be achieved by aggressive and cooperative water resources planning to mitigate seawater intrusion and groundwater head declines (Brown & Caldwell 2015, p. ES-16). Brown & Caldwell note

three possible options for reducing seawater intrusion impacts. These include: 1) reducing pumping in the Pressure and East Side subareas; 2) shifting pumping to areas farther away from the coast as long as it is shifted to areas far enough inland; and 3) shifting pumping from the 180-foot and 400-foot aquifers to the deep 900-foot aquifer. Regarding the latter, it is uncertain whether this is a viable option given the lack of information about connectivity between the three aquifers and whether pumping in the 900-foot aquifer would lead to the onset of regional seawater intrusion (Brown & Caldwell 2015, pp. 6-3 – 6-4).

Intruding seawater has advanced into the 180-foot aquifer to within one mile of Cal Water's closest well. Cal Water has shifted production as much as possible out of the 180-foot and East Side aquifers and located it further south and more in the 400-foot aquifer of the Pressure area. Cal Water does not pump from the 900-foot aquifer. According to the latest historical seawater intrusion maps provided by MCWRA, although seawater intrusion has slowed considerably in recent years, seawater intrusion in the 180-foot aquifer advanced by approximately 49 acres between 2015 and 2017, the last year for which data is available (MCWRA, 2018). Additionally, seawater in the 400-foot aquifer advanced by approximately 812 acres over this time period (MCWRA, 2018).

Current/Planned Water Projects to Reduce Groundwater Overdraft

Seawater intrusion into the Salinas Valley Groundwater Basin has been a problem for many years. A solution was identified as early as 1946 when the State of California proposed a three-part remedy:

- Construct several large reservoirs to capture excess storm flow on the upper reaches of the Salinas River and its tributaries;
- Recharge groundwater in the Upper Valley and Forebay sub-areas of the Salinas Valley with the captured runoff; and
- Extract portions of the augmented groundwater and transmit it via a conveyance system to the East Side and Pressure sub-areas of the basin so that the water users in this northern-most region of the valley can reduce their use of groundwater.

The first two parts of this solution have been constructed and are in operation. Nacimiento and San Antonio reservoirs were built and are operated by Monterey County Water Resources Agency (MCWRA). The water that they capture is released in a controlled manner to recharge the aquifers in the Upper Valley and Forebay areas through the natural riverbeds. The final part of the solution as described above the extraction of portions of the augmented groundwater and transmit it via a conveyance system to the East Side and Pressure sub-areas of the basin, has not been implemented (Cal Water, 2016).

There are however, a number of additional projects that have been implemented, are currently being implemented, or are planned to reduce overdraft and reduce/halt seawater intrusion within the groundwater basin. Several of these are summarized below.

Castroville Seawater Intrusion Project. The Castroville Seawater Intrusion Project was completed in 1998. It generates recycled water for use by agricultural water users in the Castroville area during the irrigation season. By providing recycled water for agricultural use, the need for groundwater

pumping to meet agricultural demand is significantly reduced. This in turn results in reduced intensity and rate of seawater intrusion.

Salinas Valley Water Project. The MCWRA has utilized a collaborative effort with Salinas Valley interests to develop the Salinas Valley Water Project to address water resources management issues within the Salinas Valley. The project was approved in 2003. The Salinas Valley Water Project provides for the long-term management and protection of groundwater resources in the basin by attempting to meet the following objectives: stopping seawater intrusion and providing adequate water supplies and flexibility to meet current and future (year 2030) needs. In addition, the project provides the surface water supply necessary to attain a hydrologically balanced groundwater basin in the Salinas Valley. The Salinas Valley Water Project includes Nacimiento Dam spillway modification and a rubber dam on the Salinas River near Marina, to allow diversion of river water for treatment and piping to nearby farms for irrigation. The project is also intended to improve flood control and Nacimiento Dam safety, recharge the aquifers and improve river flow for migration of the federally designated threatened Steelhead trout. Construction of the Nacimiento spillway modifications was completed in 2009 and Salinas River diversion facility began operation in April 2010.

Salinas Valley Groundwater Project Phase II. A conceptual design for Phase II of the Salinas Valley Water Project has been developed by MCWRA. Under this plan additional winter flood flows would be diverted from the Salinas River. These diversions, up to 135,000 AFY, could be directly used by urban customers. A technical memorandum was completed in 2013. Phase II incorporates two surface water diversion points and will be accompanied by conveyance and delivery facilities.

Pure Water Monterey Project. The approved Pure Water Monterey Groundwater Replenishment Project will serve northern Monterey County. The project will provide both purified recycled water for recharge of the Seaside Groundwater Basin that serves as drinking water supply, and recycled water to augment the existing Castroville Seawater Intrusion Project's crop irrigation supply. The project is jointly sponsored by the M1W and the Monterey Peninsula Water Management District, and also includes participation by the City of Salinas, the Marina Coast Water District, and the MCWRA. CEQA documentation has been completed for this project.

The project includes collection of a variety of new source waters and conveyance of that water to the M1W regional wastewater treatment plant (regional plant) for treatment and recycling. New source waters include: 1) water from the City of Salinas agricultural wash water system; 2) stormwater flows from the southern part of Salinas and the Lake El Estero facility in Monterey; 3) surface water and agricultural tile drain water that is captured in the Reclamation Ditch and Tembladero Slough; and 4) surface water and agricultural tile drain water that flows in the Blanco Drain. The project would enable California American Water Company to reduce its diversions from the Carmel River system by up to 3,500 acre-feet per year by injecting the same amount of purified recycled water into the Seaside Groundwater Basin. The project would also provide additional recycled water for agricultural irrigation in northern Salinas Valley through the Castroville Seawater Intrusion Project's agricultural irrigation system. It is anticipated that in normal and wet years approximately 4,500 to 4,750 acre-feet per year of additional recycled water supply could be created for agricultural irrigation purposes. In drought conditions, the project could provide up to 5,900 acre

feet per year for crop irrigation (Denise Duffy & Associates, 2016). It is this latter source of new agricultural water that would replace an equivalent volume that is now pumped from the groundwater basin and contributes to groundwater overdraft and seawater intrusion.

Other Water Supply Projects. The Cal Water UWMP includes discussion of new water supply projects from which Cal Water may be able to obtain water supply that would reduce its need to pump groundwater from the groundwater basin. These include Monterey Peninsula Water Supply Project (referenced in the UWMP as the former named Coastal Water Project) and the DeepWater Desal project in Moss Landing.

The Monterey Peninsula Water Supply Project is designed to supply supplemental water to consumers on the Monterey Peninsula. The primary purpose is to enable California American Water, the primary water purveyor for these customers, to reduce California American Water's diversion of water from the Carmel River as mandated by the State. Therefore, this project is not expected to have significant potential to reduce groundwater extraction within the Salinas Valley.

The DeepWater Desal project, proposed for a location in Moss Landing, is in the planning and environmental review stages. If approved, the project is projected to be operational in 2021. If the project proceeds as proposed, it could become a source of municipal water supply for the City of Salinas, thereby potentially reducing the volume of groundwater extracted to serve demand in the city.

REGULATORY SETTING – WATER SUPPLIES

Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610-10610.4) requires urban water suppliers such as Cal Water that provide water for municipal purposes to more than 3,000 customers, or more than 3,000 AFY of water, to prepare an Urban Water Management Plan (UWMP). UWMPs assist water supply agencies in water resource planning given existing and anticipated future demands and must include a water supply and demand assessment comparing total water supply available to the water supplier with the total projected water use over a 20-year period. The Act requires that the plans be updated every five years and submitted to the California Department of Water Resources. The purpose of the plans is to support long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands. UWMPs must also report progress on a 20% reduction in per-capita urban water consumption by 2020.

Senate Bill (SB) 610

Senate Bill (SB) 610 was adopted in 2001 and reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. SB 610 amended the statutes of the Urban Water Management Planning Act, as well as the California Water Code Section 10910 et seq. The foundation document for compliance with SB 610 is the Urban Water Management Plan (UWMP), which provides an important source of information

for cities and counties as they update their general plans. Likewise, planning documents such as general plans and specific plans form the basis for the demand information contained in an UWMP, as well as a Water Supply Assessment (WSA) required under SB 610.

Water Code Section 10910 (c)(4) states "If the city or county is required to comply with this part pursuant to subdivision (b), the water assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses."

Water supply planning under SB 610 requires reviewing and identifying adequate available water supplies necessary to meet the demand generated by a project, as well as the cumulative demand for the general region over the next 20 years, under a broad range of water conditions. This information is typically found in the current UWMP for the project area. SB 610 requires the identification of the public water supplier for a project. The City of Salinas has been identified in the WSA as the public water supplier to the West Area Specific Plan.

In addition, SB 610 requires the preparation of a WSA if a project meets the definition of a "Project" under Water Code Section 10912 (a). The code defines a "Project" as meeting any of the following criteria:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A commercial building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A hotel or motel with more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of these elements; or
- A project creating the equivalent demand of 500 residential units.

Alternately, if a public water system has less than 5,000 service connections, the definition of a "Project" includes any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of service connections for the public water system. Thus, the City has prepared a Water Supply Assessment (WSA) as required by these criteria under SB 610. The WSA is included in this EIR as **Appendix G** of this EIR.

A WSA must include analysis of the estimated water demands and proposed water sources for a new project. More specifically, the WSA must address whether existing supplies of domestic water

available to the development are adequate to serve the project, and will continue to be adequate over the next 20 years during normal, dry, and multiple-dry years, taking into account the public water system's existing and planned future uses, including agricultural and manufacturing uses. (Wat. Code, § 10910, subds. (c)(3), (c)(4).)

If the public water system concludes that existing supplies will be sufficient for all such demands, including the demand created by a proposed project, the public water system must demonstrate the availability of such water by providing the following as part of a WSA:

(A) Written contracts or other proof of entitlement to an identified water supply.

(B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.

(C) Federal, State, and local permits for construction of necessary infrastructure associated with delivering the water supply.

(D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

(Id., subd. (d)(2).)

If the WSA concludes that existing supplies will not be sufficient, the WSA must include a strategy for acquiring "additional supplies." (Wat. Code, § 10911, subd. (a).) Under such a scenario, the WSA should include information concerning the following:

(1) The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies.

(2) All federal, State, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.

(3) Based on the considerations set forth in paragraphs (1) and (2), the estimated timeframes within which the public water system, or the city and county. . . expects to be able to acquire additional water supplies.

(*Ibid*.)

A finding of insufficiency in a WSA does not require a city or county to deny or downsize a proposed development project. In preparing the environmental document for a project requiring a WSA, the city or county lead agency may include its own evaluation of the information contained in the WSA. (Wat. Code, § 10911, subd. (c).) At the time of project approval, the lead agency must then "determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses." (Ibid.) Even if, after the lead agency's own evaluation, it determines that there are not sufficient water supplies for the project, there is nothing to prevent the agency from approving the project, so long as the agency

"include[s] that determination in its findings for the project." (*Ibid*.; see also CEQA Guidelines, § 15155, subd. (e).)

In 2016, the Legislature amended SB 610 to require WSAs for projects anticipating groundwater usage to address whether any groundwater sustainability agency has adopted a groundwater sustainability plan pursuant to SGMA, and to include information from any such plan. (See Wat. Code, § 10910, subd. (f)(2)(C)(2).)

Senate Bill (SB) 221

SB 221 (Business and Professional Code Section 11010 and Government Code Section 65867.5, Section 66455.3, and 66473.7) amended State law to improve the link between information on water supply availability and certain land use decisions made by cities and counties.[4]

SB 221 establishes the relationship between a project WSA and the tentative and final subdivision map approvals under the Subdivision Map Act. Pursuant to California Government Code, the public water system must provide a written verification of sufficient water supply prior to the approval of a new subdivision.[5] SB 221 prohibits a local planning agency from approving a final subdivision map for a residential subdivision of more than 500 units unless the water supplier has issued a written verification that a sufficient water supply is available for the project, or the local agency finds that alternate water supplies are, or will be, available prior to the completion of the project. This outcome can be accomplished by imposing a tentative subdivision map condition precluding the approval of final subdivision map absent the required showing of water availability. Nor may a local agency approve a development agreement for a project that will result in than 500 residential units without the agreement expressly providing that required tentative maps will be subject to these water availability requirements.

A "sufficient water supply" under SB 221 is the total water supplies available to the water provider during normal, single dry, and multiple dry years within a 20-year projection that will meet the projected demand of the proposed subdivision, in addition to existing and planned future uses, including agricultural and industrial uses.[6] The water provider's verification must be based on substantial evidence such as water supply contracts, capital outlay programs, and regulatory permits and approvals regarding the water provider's right to and capability of delivering the project supply.

The Sustainable Groundwater Management Act

In California, there are two statutory schemes dealing with groundwater management. The first is the Groundwater Management Act, first introduced in 1992 as Assembly Bill (AB) 3030 and since

[4] California Business and Professions Code, Section 11010 and California Government Code, Section 66473.4.

[5] California Government Code, Section 66473.7.

[6] California Government Code, Section 66473.7.

modified by Senate Bill (SB) 1938 in 2002, and AB 359 in 2011. The second is the Sustainable Groundwater Management Act (SB 1168, SB 1319, and AB 1739) (SGMA), enacted in 2014.

The intent of the Groundwater Management Act is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing voluntary groundwater management plans. The Act enables, but does not require, water agencies to develop and implement groundwater management plans (GWMPs) to manage the groundwater resources in the jurisdiction of the participating parties.

Far more important and stringent is SGMA, which defines sustainable groundwater management as the "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results." The legislation defines "undesirable results" to be any of the following effects caused by groundwater conditions occurring throughout the basin:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply;
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality;
- Significant and unreasonable land subsidence; and
- Surface water depletions that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

The legislation provides for financial and enforcement tools to carry out effective local sustainable groundwater management through formation of groundwater sustainability agencies consisting of local public agencies, water companies regulated by the California Public Utilities Commission, and mutual water companies. The legislation requires that groundwater sustainability agencies within high- and medium priority basins under the California Statewide Groundwater Elevation Monitoring Program subject to critical conditions of overdraft prepare and submit groundwater sustainability plans for the basin by January 31, 2020, and requires groundwater sustainability agencies in all other groundwater basins designated as high- or medium priority basins to prepare and submit a groundwater sustainability plan by January 31, 2022. Following State approval, the basin would thereafter be managed under the groundwater sustainability plan. The legislation does not require adjudicated basins to develop groundwater sustainability plans, but they are required to report their water use.

The key intended outcomes and benefits of the Sustainable Groundwater Management Act are numerous, and include:

- Advancement in understanding and knowledge of the State's groundwater basins and their issues and challenges;

- Establishment of effective local governance to protect and manage groundwater basins;
- Management of regional water resources for regional self-sufficiency and drought resilience;
- Sustainable management of groundwater basins through the actions of Groundwater Sustainability Agencies, utilizing State assistance and intervention only when necessary;
- All groundwater basins in California are operated to maintain adequate protection to support the beneficial uses for the resource;
- Surface water and groundwater are managed as "a Single Resource" to sustain their interconnectivity, provide dry season base flow to interconnected streams, and support and promote long-term aquatic ecosystem health and vitality;
- A statewide framework for local groundwater management planning, including development of sustainable groundwater management best management practices and plans;
- Development of comprehensive and uniform water budgets, groundwater models, and engineering tools for effective management of groundwater basins;
- Improved coordination between land use and groundwater planning; and
- Enforcement actions as needed by the SWRCB to achieve region-by-region sustainable groundwater management in accordance with the 2014 legislation.

As ultimately approved, groundwater sustainability plans must include, among other things, (i) a "general discussion of historical and projected water demands and supplies," (ii) "[m]easurable objectives, as well as interim milestones in increments of five years, to achieve the sustainability goal in the basin within 20 years of the implementation of the plan, and (iii) a "description of how the plan helps meet each objective and how each objective is intended to achieve the sustainability goal for the basin for long-term beneficial uses of groundwater." (Wat. Code, § 10727.2, subds. (a)(3), (b)(1), and (b)(2).)

To assist in attaining the above outcomes, the California Department of Water Resources (DWR) will provide groundwater sustainability agencies with the technical and financial assistance necessary to sustainably manage their water resources. The benefits of these outcomes include:

- A reliable, safe and sustainable water supply to protect communities, farms, and the environment, and support a stable and growing economy; and
- Elimination of long-term groundwater overdraft, an increase in groundwater storage, avoidance or minimization of subsidence, enhancement of water flows in stream systems, and prevention of future groundwater quality degradation.

In short, SGMA is landmark legislation that, for the first time in the history of California, requires comprehensive groundwater management, with the mandatory goal of bringing all currently overdrafted basins into sustainable conditions by no later than 2040 or 2042, with five-year increments of progress starting in 2025 and 2027.

As part of its responsibilities to implement the SGMA, DWR has defined the 180-foot, the 400-foot, and the Paso Robles aquifers within the groundwater basin as high priority basins. Groundwater sustainability plans must be implemented for these aquifers by 2020. According to Cal Water, the other aquifers within the groundwater basin must have adopted plans by 2022.

In 2017, the Salinas Valley Basin Groundwater Sustainability Agency was formed to develop a comprehensive groundwater sustainability plan by 2020 to implement basin sustainability by 2040. This agency was formed in response to SGMA.

City of Salinas General Plan

The Salinas General Plan contains the following policies that are relevant to water supply for the proposed Project:

LAND USE ELEMENT

Policy LU-6.2: Actively work with Cal Water and Alco, as well as regional water suppliers and distributors, to ensure that high quality water is available for the community.

Policy LU-6.2: Review development proposals to ensure that adequate water supplies, treatment, and distribution capacity is available to meet the needs of the development without negatively impacting the existing community.

Policy LU-6.3: Participate in and support regional programs and projects that target the improvement and conservation of the region's groundwater and surface water supply.

Policy LU-6.4: Actively promote water conservation by City residents, businesses and surrounding agricultural producers.

Policy LU-6.5: Review projects subject, such as residential projects with 500 or more units, for compliance with Sections 10910-10915 of the California Water Code.

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-1.1: Work with regional and local water providers to ensure that adequate supplies of water are available to meet existing and future demand.

Policy COS-1.2: Cooperate with local, regional, and state water agencies to develop new water sources.

Policy COS-1.3: Work with local and regional water providers to increase the production, distribution, and use of recycled water.

Policy COS-1.4: Maintain and restore natural watersheds to recharge the aquifers and ensure the viability of the ground water resources.

Policy COS-1.5: Cooperate with the Monterey County Water Resources Agency, the State Water Resources Control Board and the Regional Water Quality Control Board to implement programs that address the two primary causes of poor water quality in the planning area: salt water intrusion and nitrate contamination.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

Policy COS-2.1: Participate in and implement local and regional programs that promote water conservation.

Policy COS-2.2: Work with water providers to institute conservation programs to address water supply problems caused by groundwater overdrafting.

Policy COS-2.3: Apply standards that promote water conservation in agricultural, residential and non-residential uses.

Policy COS-2.4: Enforce the City's Water Conservation Ordinance.

Utility Master Plans

The City of Salinas maintains a variety of Master Plan documents that guide the design, development, and maintenance of the utilities within the city limits. These include the *Sewer System Management Plan* (2014), *City of Salinas Sanitary Sewer System Master Plan* (2011), *City of Salinas 2010 Municipal Service and Sphere of Influence Review*, *City of Salinas Stormwater Management Plan* (2012), the *City of Salinas Stormwater Development Standards for New and Redevelopment Projects* (2013), the California Water Service Company 2010 Urban Water Management Plan for the Salinas District (2011), and the 2015 Urban Water Management Plan for the Salinas District (2016).

THRESHOLDS OF SIGNIFICANCE – WATER SUPPLY

Consistent with Appendix G of the CEQA Guidelines, the proposed project may have a significant impact on the environment associated with Utilities if it would:

1. Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
2. Have insufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements are needed.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-5: The proposed project has the potential to require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (Less than Significant)

The provision of public services and the construction of onsite and offsite infrastructure improvements will be required to accommodate development proposed by the West Area Specific Plan. The West Area Specific Plan would require extension of offsite water infrastructure to the Plan Area for potable water. Offsite improvements include connection to the existing facilities at San Juan Grade Road, East Boronda Road, El Dorado Drive, and Mckinnon Street. All offsite water piping improvements will be in or adjacent to existing roadways, thereby limiting new environmental impacts.

New water mains would be installed throughout the Plan Area. There would be three new groundwater wells that would be developed on-site, including well site #1 that would include the development of a centralized treatment plant ("Well #1 Centralized Treatment Plant"). See Figure 3.11-2 for the water distribution system plan for the West Area Specific Plan. All improvements will be developed according to City standards and specifications.

The project requires construction of three wells with a minimum capacity of 1.72 million gallons per day (MGD) each to meet a maximum day demand at full buildout of the proposed project with two wells in operation and one well in reserve as a backup. Well locations are chosen on the basis of water quality and potential production capabilities. According to Cal Water's Assessment Report, it is expected that the proposed wells within the Plan Area will have a high probability of meeting drinking water quality standards. As a hedge against possible future changes in water quality, Cal Water may make provisions for on-site treatment with the design of the wells for the West Area Specific Plan development.

The proposed on-site water distribution system would be looped to maintain water quality and would be sized for minimum system pressures of 20 pounds per square inch (psi) at maximum day demand plus fire flow. The fire flow requirement for the West Area Specific Plan is 1,500 gallons per minute (gpm) for a minimum of two hours. Under peak day demand, the system would deliver the required flows with a minimum of 40 pounds per square inch (psi) residual pressure. The Plan Area would be served by 12-inch diameter and 16-inch diameter main trunk lines and 8-inch diameter distribution lines branching off the trunk lines and serving individual streets.

CONCLUSION

The proposed project would not require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. The water infrastructure is sized to meet the demand within the Plan Area. All offsite improvements are to be placed in or adjacent to existing streets to minimize potential impacts. Although the West Area Specific Plan would not require the expansion of existing water treatment facilities, the West Area Specific Plan may require the construction of a new centralized treatment facility within the Plan

Area. This treatment facility would be specifically sized to serve the West Area Specific Plan and would not be upsized to ensure that it does not induce growth beyond what is anticipated by the West Area Specific Plan. Implementation of the West Area Specific Plan would have a ***less than significant*** impact relative to this topic.

Impact 3.11-6: The proposed project has the potential to have insufficient water supplies available to serve the project from existing entitlements and resources (Less than Significant)

Project Water Demand

The projected water demand for the proposed project is based on the calculations described in the Water Supply Assessment developed by Yarne & Associates for the California Water Service Salinas District (Cal Water Salinas District) (the "Water Supply Assessment" or "WSA").

The WSA completed for the West Area Specific Plan demonstrates that the City's existing and additional potable water supplies are sufficient to meet the City's existing and projected future potable water demands, including those future water demands associated with the West Area Specific Plan, to the year 2035, under all hydrologic conditions. As described in the WSA, the Cal Water Salinas District has sufficient groundwater supplies to provide for all of its service area customers for years to come.

A comparison of Cal Water Salinas District projected water supplies and demands is shown in Table 3.11-11 for normal, single dry, and multiple dry Years. The supply-demand difference in Table 3.11-11 indicates that, in average precipitation years, in single dry years, and in multiple dry years, the District will have sufficient water to meet its customers' needs through 2035.

TABLE 3.11-11: SUPPLY CAPACITY VERSUS DEMAND FOR NORMAL, SINGLE DRY YEAR, AND MULTIPLE DRY YEARS[(A)]

YEAR	NORMAL YEAR, AFY			SINGLE-DRY YEAR DROUGHT, AFY			MULTI-DRY YEAR DROUGHT[(B)], AFY		
	SUPPLY	DEMAND	DIFF.[(A)]	SUPPLY	DEMAND	DIFF.[(A)]	SUPPLY	DEMAND	DIFF.[(A)]
2015	44,843	17,862	26,981	44,843	17,862	26,981	40,359	19,112	21,247
2020	52,592	16,651	35,941	52,592	16,651	35,941	47,333	17,817	29,516
2025	52,592	17,531	35,061	52,592	17,531	35,061	47,333	18,758	28,575
2030	52,592	18,459	34,133	52,592	18,439	34,133	47,333	19,751	27,582
2035	52,592	19,439	33,153	52,592	19,439	33,153	47,333	20,800	26,533

NOTE: (A) DIFFERENCE BETWEEN SUPPLY AND DEMAND. (B) 3RD DRY YEAR.
SOURCE CAL WATER, 2015, PGS. 36-37

The West Area Specific Plan proposes to construct three wells with a minimum capacity of 1.72 million gallons per day (MGD) each to meet a maximum day demand at full plan development of 2,257.6 acre feet/year with two wells in operation and one well in reserve as a backup. Well locations are chosen on the basis of water quality and potential production capabilities. Table 3.11-12 below describes the estimated daily demand for each of the projected uses, at full build-out, based on refined estimates of water demand provided within the Specific Plan. The three new groundwater wells would be sufficient to provide potable water to all uses within the proposed project. Therefore, buildout of the West Area Specific Plan would result in a ***less than significant*** impact relative to the potential of the project to have insufficient water supplies.

TABLE 3.11-12: WATER DEMAND ESTIMATE (AFY)

USE	*CALCULATION(1)*	*ACRE FEET PER YEAR*
Retail/Services	480,000 s.f. x 0.75 @ 0.3425 gal/s.f./day = 123,300 gpd	138.2
Residential	4,340 du x 3.66 persons/du x 59.2 gpcd = 940,333 gpd	1,054.1
Schools	90.73 acres @ 988 gal/acre/day = 89,641 gpd	100.5
Parks	44.8 irrigated acres @ 1.8 AFY/acre	80.6
TOTAL		**1,373.4**

SOURCE CAL WATER, 2015, PGS. 6-7

NOTE: THE TOTAL ESTIMATED AVERAGE ANNUAL WATER DEMAND ESTIMATE (1,373.4 AFY) DIFFERS SLIGHTLY FROM WHAT IS PROVIDED IN THE CAL WATER SB 610 WATER SUPPLY ASSESSMENT (WSA) (1,368 AFY), DUE TO A WSA CALCULATION ERROR.

Groundwater Basin Overdraft and Seawater Intrusion

Groundwater is currently the dominant source of water supply for agricultural and municipal water demands in the Salinas Valley. Agricultural water use represents approximately 90 percent of all water used in the Salinas Valley. Unlike the trend in reduced agricultural pumping, urban water use has been increasing. Increases in urban water use, particularly on non-irrigated lands in the northern portion of the Salinas Valley, will place additional pressure on groundwater pumping (Brown & Caldwell 2016, pp. 2-4 – 2-5). The Plan Area is located on irrigated agricultural land. Hence, water demand from their development with urban uses will replace water demand for irrigation.

Urban water supply to Salinas is currently derived exclusively from groundwater. There are no sources of imported water available to augment groundwater supplies within the district or within the groundwater basin. For this reason, the condition of groundwater resources from a supply and demand perspective is critically important in considering potential effects of increased water demand that would result from development of the Plan Area. Due to the growth of urban development and agricultural activities over time, demand for groundwater has increased, resulting in impacts on groundwater availability and quality.

Cal Water extracts groundwater from two hydraulically connected subbasins of the groundwater basin known as the Pressure Subarea and the East Side Subarea. Much of the water supply for Salinas is extracted from the Pressure Subarea. The Pressure Area is a region of gradually declining groundwater elevations and is characterized by three confined aquifer systems, overlain and separated by thick clay layers that act as aquicludes. These aquifers are named for their relative depths, and are known as the “180-foot", the “400-foot”, and “900-foot” aquifers, respectively. The groundwater level in the East Side Area is declining more rapidly than any other area in the groundwater basin. The East Side Area is comprised of unconfined, randomly scattered water bearing strata (Cal Water, 2015).

As described in Cal Water’s 2015 UWMP, the groundwater basin was in an overdraft condition at the time the UWMP was adopted. The State has designated the 180-foot and 400-foot aquifers as critically overdrafted. While the basin remains unadjudicated, the California Department of Water Resources has listed the groundwater basin as a high priority. The main concern of the overdraft is not water level, but rather seawater intrusion into these two aquifers. Seawater intrusion threatens the quality of water extracted from the aquifers.

The proposed project would replace agricultural water uses with urban water uses. The net change in water demand derived from this conversion is the difference between the existing agricultural baseline demand and water demand from development within the Plan Area. The groundwater basin is currently in overdraft. If the proposed project results in increased water demand that must be met by expanded groundwater pumping within the Pressure Subarea and/or the East Side Subarea, the proposed project would likely exacerbate overdraft and seawater intrusion conditions. In such a case, the sufficiency of water supply entitlements from Cal Water could be in question given the impact. The following analysis examines the net change in water demand (as provided within the WSA).

An estimated 90% of the land in the Plan Area or 720 acres is presently used to grow irrigated crops – lettuce and various vegetables (strawberries, broccoli, cauliflower, and alfalfa). Between two and three crops are grown annually. General cropping practice is to rotate crops. While as many as three crops can be produced in a year, normal practice is to grow two crops. Irrigation is by sprinkler or drip systems, which are supplied by groundwater pumped from agricultural wells in the area.

Groundwater recharge from irrigated agricultural land is a function of many variables including weather, hydrologic conditions, irrigation practices, crops, soil types, soil conditions, etc. One approach to determining recharge is to collect data and make estimates of monthly irrigation, monthly precipitation, runoff, plant evapotranspiration, evaporation, initial soil moisture and the soil's available water holding capacity. (Recharge is the net of irrigation and precipitation minus water losses associated with other factors).

Estimated groundwater pumping for existing irrigated agricultural use in the Plan Area is 4,320 AFY (Cal Water, 2015). The estimated 4,320 AFY ground water pumping for existing agricultural use in the West Area Specific Plan is 2,947 AFY more than the total buildout estimated demand for the West Area Specific Plan in the Water Supply Assessment, which is 1,373 AFY. Therefore, the total buildout estimated water demand for the West Area Specific Plan is projected to use less water than required for current irrigated agricultural uses.

The estimated amount of recharge from existing irrigated agriculture use is 1,296 AFY (Cal Water, 2015). Estimated net consumptive water use by existing irrigated agriculture use in the Plan Area upon buildout of the West Area Specific Plan is 3,024 AFY. The estimated average indoor water use of the West Area Specific Plan is: 0.265 x 78% + 0.735 x 67% = ~ 70%. Assuming similar average percentages of indoor water use for the other use categories results in a total estimated outdoor annual water demand for the Plan Area at buildout is 412 AFY. Additionally, the estimated amount of indoor water use that will become sanitary wastewater is 0.70 x 1,373 = 961 AFY (Cal Water, 2015). It should be noted that these values differ slightly than what was provided in the Cal Water SB 610 WSA, based on a calculation error (i.e. 1,373.4 AFY versus the 1,368 AFY provided in the WSA).

Sanitary wastewater is conveyed to the M1W Treatment Plant for tertiary treatment in compliance with California State Title 22 requirements. Approximately, 60% of treated effluent is used for agricultural crop irrigation through the Castroville Seawater Intrusion Project/purple pipe program.

The City of Salinas contributes approximately 60% of wastewater flows to the Regional Treatment Plant. Therefore, wastewater from the City of Salinas supplies approximately 36% of treated water used for crop irrigation (0.6 x 0.6 = 0.36). Treated sanitary wastewater (recycled water) from the Plan Area that will be used for agricultural irrigation is: 0.36 x 961 = 346 AFY. This recycled water is groundwater not pumped for agricultural irrigation assuming irrigators use a set amount of water annually for irrigation.

On the basis of this analysis, the estimated total amount of West Area Specific Plan consumptive water use at buildout would be 945 AFY. The estimated total amount of water consumptively used in the Plan Area for irrigating crops is 3,024 AFY (Cal Water, 2015). Therefore, conversion of the Plan Area from agricultural to urban land use could result in an estimated reduction of consumptive groundwater use (or increase in groundwater storage) of 2,078 AFY. This is a significant contribution in reducing overdraft in the Salinas Valley Ground Water basin. Therefore, buildout of the West Area Specific Plan would result in a ***beneficial*** impact relative impacts related to groundwater basin overdraft and the potential for seawater intrusion.

CONCLUSION

Water supplies are sufficient to meet the City's existing and projected future potable water demands, including those future water demands associated with the West Area Specific Plan, to the year 2035 under all hydrologic conditions. The three new groundwater wells would provide adequate groundwater for the proposed project. Additionally, the Cal Water Salinas District has sufficient water supply throughout its service area to serve the proposed project, even during the third year of a multi-year drought, and even if the proposed project's groundwater wells proved to not be sufficient to serve the entire Plan Area. Moreover, the development of the West Area Specific Plan would reduce consumption of groundwater (equivalent to increasing groundwater storage), when compared to the existing agricultural uses; this would also have the effect of reducing the potential for seawater intrusion into the groundwater basin, when compared to the existing agricultural uses. Therefore, overall, buildout of the West Area Specific Plan would result in a ***less than significant*** impact relative to this topic.

Impact 3.11-7: Cumulative Impact on Water Utilities (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for the analysis of cumulative impacts on water utilities is the Salinas Valley Groundwater Basin. This is the geographic area that is reasonably expected to be affected by the use of water utilities within the Plan Area.

Water demand from past and present development and from agricultural production activities within the boundary of the groundwater basin has contributed to groundwater overdraft conditions - a significant cumulative impact. Future urban development within the groundwater basin has potential to exacerbate overdraft conditions. However, where new urban development occurs on land in active agricultural use, the potential exists for urban uses to reduce demand for groundwater relative to agricultural uses, as urban uses often demand less water than is required for agricultural irrigation.

In addition to existing agricultural irrigation having contributed to groundwater overdraft, recent trends in the conversion of previously uncultivated land (e.g. range land and open space uses) to cultivated uses in Monterey County indicate that irrigation groundwater demand could be increasing. Data from the California Department of Conservation's Farmland Mapping and Monitoring Program shows that from 2010-2012, approximately 376 acres of agricultural land in Monterey County was converted to urban use. However, during the same period, nearly ten times that amount of land, previously in other uses (e.g. range land, open space, etc.), was converted to agricultural use. During the 2012-2014 period, the acreage of land converted to agricultural use declined. Although no specific studies have been identified, it is possible that demand for groundwater has increased along with increased agricultural activity and that the increase is exacerbating groundwater overdraft conditions.

The proposed project would convert actively cultivated agricultural land to urban use. The proposed project would result in significantly less demand for groundwater than the demand agricultural operations located within the Plan Area, as provided under impact 3.11-6 in this EIR. Though the proposed project represents a long-term commitment to continued use of groundwater supply, it would have a net beneficial cumulative effect reducing the magnitude of groundwater overdraft now occurring within the groundwater basin. A net beneficial effect, of course, is not cumulatively considerable.

As described in the Regulatory Setting in Section 3.14, by approximately 2040, conditions within the groundwater basin must be managed to ensure that the groundwater supply is stable. As such, by that time, overdraft conditions from cumulative demands on groundwater will have been addressed. Moreover, there would be sufficient water resources available to provide supply for buildout of the cumulative scenario, so that no significant cumulative effect on the overall water supply would result from the proposed project .

Under the combined General Plan/General Plan EIR and Economic Development Element buildout conditions, the City of Salinas would see an increased demand for water services. There are available water supplies to serve the proposed project from existing entitlements and resources. Additionally, the proposed project would not cause a significant impact related to the construction of the water system. Buildout of the General Plan and most recent City of Salinas Economic Development Element would add additional demand. Water demand for buildout of the entire City of Salinas Sphere of Influence (inclusive of the proposed project and all existing development within the City of Salinas) would be approximately 43,309.3 AFY. Additionally, water demand for buildout of the Economic Development Element would require an additional approximately 1,972.3 AFY. Combined, the cumulative scenario would require a total of 45,281.6 AFY, which is within the available supply of 47,333 AFY expected by 2035 under multiple dry-year conditions.

TABLE 3.11-13: SALINAS BUILDOUT CONDITIONS WATER GENERATION ESTIMATE [1]

USE	*CALCULATION* [1]	*ACRE FEET PER*
GENERAL PLAN/GENERAL PLAN EIR BUILDOUT CONDITIONS		
Retail/Services	56,053,000 s.f. @ 0.335 gal/s.f./day[2] = 18,777,755 gpd[2]	21,033.6
Residential	87.57 gal/resident @ 3.67 residents/unit = 321.4 gal/unit/day	20,900.5
Schools	310.22 acres @ 3,500 gal/acre/day = 318,325 gpd	1,216.2
Parks	63.61 acres @ 2,232 gal/acre/day = 141,985 gpd	159.0
SUBTOTAL		**43,309.3**
ECONOMIC DEVELOPMENT ELEMENT		
Retail/Services	5,255,959 s.f. @ 0.335 gal/s.f./day = 1,760,746 gpd	1,972.3
TOTAL		**45,281.6**

[1] Calculations in this table are derived from water demand estimates from the Final Supplement for the Salinas General Plan Program EIR, Appendix E, Water Supply Assessment – Cal Water.
[2] Gallons per day

There would be sufficient water resources available to provide supply for buildout of the cumulative scenario, so that no significant cumulative effect on the overall water supply would result. Therefore, this would result in a ***less than significant cumulative*** *impact* and a ***less than cumulatively considerable*** impact on water utilities.

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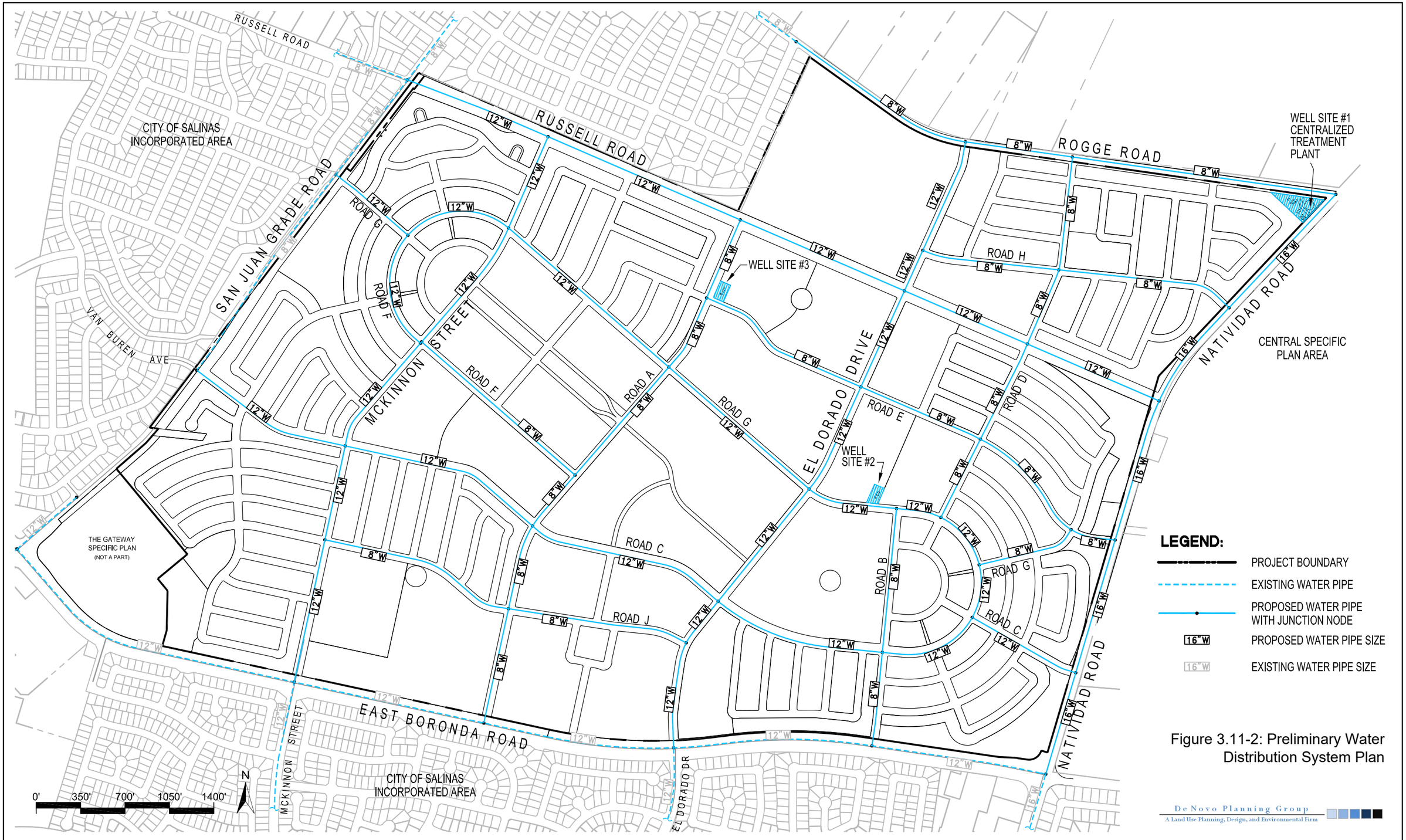

Figure 3.11-2: Preliminary Water Distribution System Plan

Source: AECOM, Wood Redgers, City of Salinas Figure 14 Preliminary Water Distribution System Plan

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3.11.3 STORMWATER

EXISTING SETTING

Existing Site Conditions

The existing site conditions are largely agricultural, with associated residences and farm yards. The ground surface is relatively uniformly sloped with crop tilling slowing and retaining overland flow. No paved roads cross the Plan Area; however, much of the Plan Area is bounded by dirt roadways associated with the farming.

Rainfall in the project area and contributing watershed is relatively uniform across the area. Average annual rainfall is calculated to be 15.5 to 16.1 inches, depending on the reporting agency (U.S. Climate data, 2016). Average rainfall depths have been estimated to be 2.4 to 2.5 inches for the 10-year, 24-hour event and 4.0 to 4.2 inches for the 100-year, 24-hour event (Balance Hydrologics, 2016). Monthly evapotranspiration in the project vicinity varied from 1.5 to 4.7 inches in 2015, with a total for that year of 38 inches (Balance Hydrologics, 2016).

No streams flow through the Plan Area. Runoff from the subdivisions to the west and northwest (across San Juan Grade Road and across Russell Road to the north) is diverted away from the Plan Area by existing storm drain lines which direct flow to Santa Rita Creek. Runoff from agricultural land (approximately 222 acres) to the northeast crosses Rogge Road and enters the Plan Area. The remainder of upslope runoff drains to Gabilan Creek to the east, which flows to Carr Lake. All runoff from the Plan Area is eventually conveyed to Monterey Bay via Zone 9 Reclamation Ditch and Tembladero Slough approximately ten miles northwest of the Plan Area. Constructed beginning in 1912, the Reclamation Ditch is the major drainage conveyance for the lower Salinas Valley north of the Salinas River itself and is owned and maintained by the Monterey County Water Resources Agency (MCWRA) (Balance Hydrologics, 2016).

Runoff from the eastern part of the Plan Area flows south to storm drain inlets along Boronda Road (42- and 48-inch diameter trunk storm drain line), then to Gabilan Creek Road (42- and 48-inch diameter trunk storm drain line), and then to Gabilan Creek approximately 2,000 feet east of Natividad Road. Gabilan Creek is a major tributary to Carr Lake, a regionally important drainage feature that represents the confluence point for Gabilan, Natividad, and Alisal Creeks northeast of U.S. 101. Carr Lake is one of the remnant lake features in the lower Salinas Valley, and the lake bed is currently in agricultural uses. The lake is drained by the Reclamation Ditch and has been the site of past flooding.

Existing City Facilities

The City's storm drainage system consists of approximately 74 miles of the larger storm drains from 24- to 84-inches in diameter, as well as some 18-inch drainage pipes. The City's system also contains many local storm drains that are 18-inches and smaller in diameter that were not modeled. Most of the existing pipes are reinforced concrete pipe or cast-in-place concrete.

The drainage system within each major watershed consists of a series of branches of pipes that drain to the receiving water. About 360 drainage subareas were defined and modeled by the City. The drainage system flows by gravity to all receiving waters, except for the Salinas River outfall.

The Salinas River Storm Drainage Pump Station and Blanco Detention Basin are located at the site of the former wastewater treatment plant at the southwest City boundary. A 66-inch corrugated metal outfall conveys flows to the Salinas River. During low flow conditions, gravity discharge can occur. When the flow increases, it is pumped to the river. The pump station has two pumps with a peak capacity of 110 cubic feet per second (cfs). If inflow exceeds the pump station capacity, it is stored temporarily in the Blanco Detention Basin, which has a capacity of 36 acre-feet (AF) with freeboard, and up to 50 AF when the freeboard is used and the basin is completely full.

There are three small lift stations to drain localized low spots at major underpasses, which are operated by Caltrans. One is located at the Alisal Street underpass, one at Front and Market Streets, and the third lift station on North Main north of Market Street.

The City of Salinas Stormwater Master Plan makes the following statements regarding the potential effects of urbanization in the Plan Area.

- Existing storm drains within Salinas are at maximum capacity and cannot accept increased peak flows without causing additional flooding.
- Certain reaches of Santa Rita Creek through the city are already at capacity and cannot accept increased peak flow rates without flooding.
- Detention storage will be required for all new development that contributes to the Markley Swamp stormwater sub-system and to the Santa Rita Creek stormwater sub-system.
- Detention storage will be required for all new development in the West Area Specific Plan area that contributes to Gabilan Creek, to avoid adversely impacting Carr Lake and the Reclamation Ditch.
- The hydraulic capacity of the Boronda Road storm drain flowing to Gabilan Creek is 50 cfs for the 42 inch segment and 120 cfs for the 48 inch segment.

The Stormwater Master Plan (SWDS) also identifies two potential stormwater detention basins within the Plan Area: a 40 acre-foot capacity basin east of San Juan Grade Road (draining to the Santa Rita Creek stormwater sub-basin) and a 40 acre-foot capacity basin immediately north of Boronda Road near McKinnon Street (draining to the Markley Swamp stormwater sub-basin). The SWDS states that these basins would be added during development of the West Area Specific Plan area.

Under the requirements of the Clean Water Act of 1972, the City of Salinas is required to apply for coverage under the National Pollution Discharge Elimination System (NPDES) Phase I permit, and develop and implement a Stormwater Management Plan (SWDS) and Stormwater Development Standards (SWDS) to control and prohibit the discharge of pollutants into the Municipal Storm Sewer System. The SWDS consists of 12 elements that, when implemented together, are expected to reduce pollutants discharged into receiving water bodies to the maximum extent possible.

The City has developed Best Management Practices (BMPs) to address stormwater quality within the City. The BMPs are intended to maintain surface water quality due to stormwater discharged from the City. New developments within the City are required to comply with the requirements of the SWDS. The City is also responsible for monitoring and reporting on BMPs as a method to fulfill NPDES permit requirements. The Stormwater Development Standards specify design requirements to be used during development design that, in turn, meets the NPDES permit requirements for the City.

Existing Flood Protection Facilities

Predicted flood conditions near the project area are shown on FEMA FIRM panels 06053C0207G, 06053C0209G, and 06053C0226G. Delineated flood zones are limited to a small area designated as shaded Zone X immediately east of San Juan Grade Road and south of Norman Way (located in the northwest corner of the Specific Plan Area). Flood conditions in this area are classified as shaded Zone X ("Other Flooded Areas"), which are limited to flooding of less than one-foot depth during the 100-year event and/or are subject to flooding between the 100- and 500-year events. The extent of flooding is naturally limited by existing topography. The parts of the project area outside of the shaded Zone X are designated unshaded Zone X - minimal flood hazard and would not be expected to have a flood hazard up to the level of the 500-year event. Lands designated as unshaded Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

Figure 3.6-3 (See Section 3.6: *Hydrology and Water Quality*) shows the flood boundaries as delineated by the FEMA FIRM and USACE.

Future Stormwater Drainage Demand and System Improvements

The proposed drainage infrastructure (conceptual level) includes primary storm drain piping along Natividad Road, East Boronda Road, San Juan Grade Road, parallel to El Dorado Drive through the West Area Specific Plan area, and an east-west line along new Road C. Altogether, these pipelines total roughly 25,000 feet in length. Five combination detention/water quality basins and water retention basins are planned for the southwest, northwest, central and southeast parts of the area. Following treatment in a water quality treatment/detention basin, stormwater which is not retained in a retention basin will discharge to the four existing storm drain inlets: Natividad Road at East Boronda Road, Santa Rita Creek at San Juan Grade Road, Dartmouth Way at East Boronda Road, and McKinnon Street at East Boronda Road. Low runoff flows would be retained in local decentralized Low Impact Development (LID) features and/or water quality management features. During periods when there are no significant rainfall events, little or no flows to the external storm drains will occur. Runoff which is retained in these features will be used by plantings, evaporate, or infiltrate into the ground.

Low Impact Development (LID) principles are to be applied throughout the Plan Area to help manage the predevelopment site hydrology to the maximum extent practicable by storing, infiltrating, and detaining runoff. The proposed decentralized LID features include pervious strips concentrated along residential streets and at driveways to disconnect developed lots from the drainage system,

bio-swales, on-site bio-retention, and porous pavement. Underdrains may be installed where soils have low permeability, to prevent extended ponding of trapped water.

Water quality management features will be included, referred to as Structural BMPs. These features include: vegetated linear swales (bio-swales) and extended detention depressions as well as the water quality basins associated with the retention/detention basins previously described. Extended detention depressions will be located in pocket parks distributed across the Plan Area.

A storm drain preliminary design for the proposed project (Wood Rogers, 2007) states that each water quality basin will detain/retain the water quality design storm (85th or 95th percentile depending on project requirement), and that the retention basin will store the additional volume of runoff caused by the development above the pre-development runoff during the design event[7]. In each of the water quality basin locations, storm drain flows enter a water quality basin where the water is detained and treated and then is discharged at a limited rate into an external storm drain. When inflows to the water quality basin exceed allowable discharge rates, the excess water flows to a retention basin where the water evaporates or percolates into the ground. If retention basin capacity is reached, overflows will be directed to the external storm drain. The size of the proposed supplemental basins will be determined during the development design phase.

The water quality treatment approach proposed for the area is intended to fully comply with local and State requirements and to meet the City's SWDS. A combination of LID features and stormwater treatment BMPs has been shown to substantially reduce the concentrations of a wide range of contaminants in both surface runoff and in water that percolates into the ground. The addition of supplemental water quality treatment basins further reduces the potential transport of contaminants from the Plan Area to the storm drain system and receiving waters.

REGULATORY SETTING - STORMWATER

Federal

CLEAN WATER ACT

The Clean Water Act (CWA) regulates the water quality of all discharges into waters of the United States including wetlands, perennial and intermittent stream channels. Section 401, Title 33, Section 1341 of the CWA sets forth water quality certification requirements for "any applicant applying for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters." Section 404, Title 33, Section 1344 of the CWA in part authorizes the U.S. Army Corps of Engineers to:

- Set requirements and standards pertaining to such discharges: subparagraph (e);

[7] The City of Salinas Stormwater design standards, defined in "Stormwater Standards for New and Redevelopment Projects" (City of Salinas, December 2013).

- Issue permits "for the discharge of dredged or fill material into the navigable waters at specified disposal sites": subparagraph (a);
- Specify the disposal sites for such permits: subparagraph (b);
- Deny or restrict the use of specified disposal sites if "the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies and fishery areas": subparagraph (c);
- Specify type of and conditions for non-prohibited discharges: subparagraph (f);
- Provide for individual State or interstate compact administration of general permit programs: subparagraphs (g), (h), and (j);
- Withdraw approval of such State or interstate permit programs: subparagraph (i);
- Ensure public availability of permits and permit applications: subparagraph (o);
- Exempt certain Federal or State projects from regulation under this Section: subparagraph (r); and,
- Determine conditions and penalties for violation of permit conditions or limitations: subparagraph (s).
- Section 401 certification is required prior to final issuance of Section 404 permits from the U.S. Army Corps of Engineers.

The California State Water Resources Control Board and RWQCBs enforce State of California statutes that are equivalent to or more stringent than the Federal statutes. RWQCBs are responsible for establishing water quality standards and objectives that protect the beneficial uses of various waters. In the Salinas Planning Area, the Central Coast RWQCB is responsible for protecting surface and groundwater from both point and non-point sources of pollution. Water quality objectives for all of the water bodies within the Salinas Planning Area were established by the Central Coast RWQCB and are listed in the Central Coast Basin Plan.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.)

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and its implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act goal of "fishable and

swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. To expedite the permit issuance process, the SWRCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from industrial and construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Coast Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB. The SWRCB adopted general permits for Phase II Regulated Small MS4s and Small Construction Activity. On March 10, 2003, Operators of Phase II Regulated Small MS4s and Small Construction Activity were required to obtain permit coverage.

The California Regional Water Quality Control Board issued a Phase 1 NPDES permit to the City of Salinas which regulates development within city limits (Central Coast Regional Water Quality Control Board, May 2012). This permit imposes multiple regulations, including the following key requirements:

1) Listed impairments to receiving waters from the project area (Santa Rita Creek, Gabilan Creek, Reclamation Ditch) include: nitrate, ammonia, fecal coliforms, E. Coli, Turbidity, priority organics, pesticides, copper, and low pH.
2) Discharges which contribute to exceedances of water quality standards and are not reduced to the maximum extent practicable are prohibited.
3) Projects in future growth areas (including West Area Specific Plan) are required to manage rainfall at the source using uniformly distributed decentralized controls, natural treatment, and volume reduction BMPs (e.g. bio-retention, vegetated swales, filter strips) as the first means of meeting stormwater management criteria.
4) Erosion and sediment control BMPs shall be installed to reduce pollutant discharges from construction areas and to control ongoing sediment production from slopes and channels.
5) Soil stabilization shall be implemented on disturbed areas immediately following the completion of earth disturbing activities.
6) Source control BMPs shall be implemented in projects to minimize the discharge of pollutants.
7) A 100-ft setback must be retained along Gabilan and Natividad Creeks and along wetlands not associated with streams established by the Salinas General Plan COS-17; for all other wetlands, a 30-ft setback shall be maintained.
8) Ground disturbance activities shall not be conducted in existing riparian vegetation and habitat.

Additionally, the NPDES permit identifies one Total Maximum Daily Load limitation; fecal coliform concentrations in receiving waters must not exceed 200 MPN/100 mL. Discharges to receiving waters which may result in an exceedance of this criterion must be planned for an preventative measures established.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Monterey County is a participant in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

State

DEPARTMENT OF WATER RESOURCES

The Department of Water Resources' (DWR) major responsibilities include preparing and updating the California Water Plan to guide development and management of the State's water resources, planning, designing, constructing, operating, and maintaining the State Water Resources Development System, protecting and restoring the Sacramento-San Joaquin Delta, regulating dams, providing flood protection, assisting in emergency management to safeguard life and property, educating the public, and serving local water needs by providing technical assistance. In addition, the DWR cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

CALIFORNIA WATER CODE

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region the regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

The Water Code Section 13260 requires all dischargers of waste that may affect water quality in waters of the State to prepare and provide a water quality discharge report to the RWQCB. Section 13260a-c is as follows:

(a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:

(1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the State, other than into a community sewer system.

(2) A person who is a citizen, domiciliary, or political agency or entity of this State discharging waste, or proposing to discharge waste, outside the boundaries of the State in a manner that could affect the quality of the waters of the State within any region.

(3) A person operating, or proposing to construct, an injection well.

(b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Each person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.

WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION

The Water Quality Control Plan for the Central Coast Region (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term “water quality standards,” as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region’s ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan,

along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

Local

City of Salinas General Plan

The Salinas General Plan establishes the following goals and policies relative to sewer facilities and stormwater in the General Plan:

LAND USE ELEMENT

Goal LU-7: Provide sewer service and maintain sewer facilities to meet community need for sewer collection and treatment.

Policy LU-7.1: Provide a sewer system that meets the needs of the community for sewer collection and treatment and work with M1W for sewer treatment needs.

Policy LU-7.2: Review development proposals to ensure that adequate sewer collection and treatment facilities are available to meet the needs of the development without negatively impacting the existing community.

Policy LU-7.3: Maintain the existing sewer system to provide a high level of service to existing neighborhoods.

Policy LU-8.1: Actively coordinate and work with MCWRA to provide and maintain necessary flood control facilities.

Policy LU-8.2: Apply appropriate development standards and fees to improve present drainage systems and provide adequate stormwater detention basins and sedimentation ponds with new construction.

Policy LU-8.3: Require new development, to the extent feasible, to provide flood control facilities that are visually attractive and ecologically beneficial, and require on-going maintenance of the facilities by the development through a maintenance district.

Policy LU-8.4: Continue the use of Carr Lake as a reclamation/flood control facility in addition to its other functions in addressing water quality, enhancing traffic/circulation, and creating recreational opportunities.

COMMUNITY DESIGN ELEMENT

Policy CD-1.6: Locate and design water retention areas and preserve important urban wildlife habitat areas to contribute to the visual quality of the city's open space system.

CONSERVATION/OPEN SPACE ELEMENT

Policy COS-1.5: Cooperate with the Monterey County Water Resources Agency, the State Water Resources Control Board and the Regional Water Quality Control Board to implement programs that address the two primary causes of poor water quality in the planning area: salt water intrusion and nitrate contamination.

Policy COS-1.6: Enforce national (NPDES) requirements and participate in regional efforts to protect and enhance water quality.

HOUSING ELEMENT

Policy H-1.2: New residential developments shall be adequately served by services and facilities, including park and recreation areas, libraries, sanitary and storm sewers, transportation, public safety and other services. Continue to ensure impact fees are adequate to provide these services and facilities to residential development through periodic review and updating.

SAFETY ELEMENT

Policy S-4.4: Maintain open areas needed to retain stormwater and prevent flooding of urban or agricultural land.

Policy S-4.5: Provide storm-water retention capacity consistent with Reclamation Ditch capacity to avoid damage to urban development as a result of a 100-year flood.

City of Salinas General Plan EIR

The following mitigation measures were provided in the City of Salinas General Plan EIR to reduce impacts to hydrology and water quality:

> **Mitigation Measure HW1.** The City will implement Implementation Program COS-1 on an ongoing basis and in response to development proposals. Implementation Program COS-1 requires new development projects and substantial rehabilitation projects to incorporate Best Management Practices (BMPs) pursuant to the National Pollutant Discharge Elimination System (NPDES) permit to ensure the City complies with applicable state and federal regulations.

Mitigation Measure HW4. The City will implement Implementation Program COS-3 on an ongoing basis. Implementation Program COS-3 requires the City, consistent with County of Monterey Draft General Plan Policy ER6.3, if adopted, to cooperate with Monterey County, the Regional Water Quality Control Board Central Coast (Region 3) and the Monterey County Water Resources Agency (MCWRA), providing technical assistance when necessary to help identify, protect, and preserve critical aquifer recharge areas so that their function is maintained and ground water quality is not further degraded.

Mitigation Measure HW5. The City will implement Implementation Program LU-17, on an ongoing basis. Implementation Program LU-17 requires, as a condition of project approval, new development to provide adequate stormwater and flood management facilities to control direct and indirect erosion and discharges of pollutants and/or sediments so that "no net increase in runoff" occurs as a result of the proposed project. In order to determine the facility and Best Management Practices (BMP) needs, the City will require, when necessary, a hydrological/drainage analysis to be performed by a certified and City-approved engineer, with the cost of said analysis the responsibility of the project applicant.

Salinas Municipal Code

In 2012 the Central Coast RWQCB adopted Order No. R3-2012-0005, which is the City's NPDES Permit (Permit No. CA0049981) for municipal stormwater and urban runoff discharges within the City. To comply with the permit, the City developed a variety of stormwater management programs, including the *Stormwater Management Plan* (SWMP), to effectively prohibit non-stormwater discharges and to reduce the discharge of pollutants to the maximum extent practicable. The City's stormwater program is based on the requirements and guidelines contained in the City's NPDES Permit, as well as relevant portions of other local and regional stormwater guidance documents and programs. In compliance with the Phase I regulations, the City's stormwater program is a comprehensive program designed to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The program includes all of the required and recommended control programs for municipal facilities, industrial facilities, and commercial facilities. This includes urban runoff control policies, outreach and education efforts, site visits and inspections. These programs guide the implementation of specific stormwater BMPs.

Chapter 29 of the Salinas Municipal Code, known as the "City of Salinas Stormwater Management and Discharge Control Ordinance" states:

> The purpose and intent of this chapter is to ensure the health, safety and general welfare of citizens, and protect the water quality of watercourses and water bodies in a manner pursuant to and consistent with the requirements of the NPDES permit issued to the city of Salinas by the California Regional Water Quality Control Board and the Federal Clean Water Act (33 U.S.C. Section 1251 et seq.) by reducing pollutants in urban stormwater discharges to the maximum extent practicable and by effectively prohibiting non-stormwater discharges to the storm sewer drain system. The provisions of this chapter shall be implemented and enforced in such a manner as to prevent or reduce downstream erosion, to protect stream habitat

and to implement controls for the post-development runoff and discharges. To that end, development within the jurisdictional authority of the city of Salinas shall be done in a manner consistent with low impact development guidance set forth in the stormwater development standards document established by the city of Salinas.

CHAPTER 36 INDUSTRIAL WASTE, WASTEWATER COLLECTION AND DISCHARGE

Sec. 36-5. - Permit required to connect.

It shall be unlawful for any person to connect any building sewer to any special sewer without a permit therefor having been first obtained from the director.

Sec. 36-8. - Unsanitary disposal of waste prohibited.

It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner on public or private property within the city or in any area under the jurisdiction of said city any human or animal excrement, garbage or other objectionable wastes. (Ord. No. 1870 § 3.)

Sec. 36-9. - Disposal of sewage to natural outlet prohibited.

It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner or public or private property within the city or in any area under the jurisdiction of said city any human or animal excrement, garbage or other objectionable wastes. It shall be unlawful to discharge to any natural outlet (to include storm drains) within the city or in any area under the jurisdiction of said city any sewage or other polluted waters except where suitable treatment has been provided in accordance with the provisions of this chapter. Any discharge into a natural outlet requires a discharge permit from the Regional Water Quality Control Board. (Ord. No. 1870 § 3; Ord. No. 2102 (NCS).)

Sec. 36-9.1. - Disposal of toxic pollutants to natural outlet prohibited.
It shall be unlawful to discharge to any natural outlet, including storm drains, toxic pollutants and other hazardous materials. (Ord. No. 2102 (NCS).)

Sec. 36-11. - Plumbing code applicable to private sewage systems.

All private sewage disposal systems shall conform with the city plumbing code currently in effect. (Ord. No. 1870 (NCS), § 3.)

Sec. 36-12.1. - Permit from M1W required.

Final approval for a sanitary sewer permit is contingent upon the compliance with requirements of the Monterey Regional Water Pollution Control Agency (M1W). (Ord. No. 2102 (NCS).)

Sec. 36-20.4 - Rules and Regulations

Stormwater, ground water, rain water, street drainage, roof runoff and unpolluted water shall not be discharged through direct or indirect connections to the city's industrial waste sewer line unless special approval in writing is authorized by the director. (Ord. No. 2102 (NCS).)

City of Salinas Stormwater Development Standards for New and Redevelopment Projects

Local stormwater management regulations are provided in the "Stormwater Standards for New and Redevelopment Projects" (2013), referred to as the Salinas Stormwater Development Standards (SWDS). This update of the SWDS was made in part to incorporate the requirements of the updated NPDES permit issued to the City. The regulations pertinent to this EIR, given the project size, are summarized below in Table 3.11-14.

The purpose of SWDS is to assist project applicants for new and redevelopment projects in complying with stormwater management requirements set forth by both the City of Salinas and the Central Coast RWQCB. New and redeveloped projects are required to implement Low Impact Development (LID) principles. The Stormwater Standards for New and Redevelopment Projects contain both stormwater design requirements and LID design guidance. LID features are intended to minimize the impacts of urban runoff to receiving waters and to promote healthy watersheds. LID features are designed to capture and treat runoff from relatively frequent rainfall events and are designed to promote infiltration where feasible. Table 3.11-14 provides a summary of applicable City of Salinas requirements to the Specific Plan Area.

TABLE 3.11-14: SUMMARY OF APPLICABLE CITY OF SALINAS REQUIREMENTS

SWDS SECTION	*APPLICABLE PROJECT IMPACT*	*LIMITATION OR SPECIFICATION*
2.1.1	Runoff generated by all portions of the specific plan	Include in treatment design
2.2.1	Changes in ground surface	1) Minimize impervious area 2) Limit disturbances of natural drainage features 3) Minimize compaction of highly permeable soils 4) Minimize clearing grading of native vegetation
2.2.1	Pollution source control	BMPs must be applied to all impervious areas and incorporate landscaping that minimizes runoff and promotes infiltration
2.2.4	Retention of runoff from impervious areas	Discharges from all rainfall events up to 0.98 inches of rainfall in 24 hours (95th percentile storm event) shall be prevented using retention and infiltration
2.2.5	Control of peak storm flows	Post development peak storm flows shall not exceed pre-project peak flows for the 2- through 100-year events. A calibrated continuous simulation hydrologic model must be used to evaluate stormwater control measures.
3.3.2.1	Proximity of BMPs to potable water wells	Minimum of 100 feet separation
3.3.2.3	Depth from infiltration BMPs to groundwater	Minimum of 5 feet for indirect infiltration features and 10 for direct infiltration features

SWDS SECTION	*APPLICABLE PROJECT IMPACT*	*LIMITATION OR SPECIFICATION*
4.5.1 and 4.6	Attenuation of peak flows to pre-project conditions	Reduction of the 100-year peak post project flow to the 10-year peak pre-project flow is not required. "Peak matching" (section 2.2.5) is sufficient. Adequate mitigation of the 2-year peak flow is assumed if the 10-year peak project flow is reduce to pre-project discharge.
5.9	Detention of discharges flowing to Carr Lake	Monterey County Water Resources Agency criteria will be met (see below).
5.9	Detention/retention facility sizing calculations	24-hour duration storms shall be used for detention facility sizing.
6.1.4	Control of potential groundwater contamination	Only indirect infiltration (infiltration after treatment in a BMP) is allowed when there is potential for contaminant spills or transportation of contaminants from contributing areas.

City of Salinas Stormwater Master Plan

The City of Salinas Storm Water Master Plan (May, 2004) updates the storm drainage information in the City's 1992 Sewage and Drainage Master Plan, which updated the 1972 Sewage and Drainage Survey. Since 1992, the City has experienced extensive development, particularly in the northern portion of its service area. In addition, the City's General Plan has been amended over the years.

To address these changes and adequately plan for storm drainage facilities for existing and future users, the City requested that Camp Dresser & McKee Inc. prepare an update to the 1992 Master Plan. The City of Salinas Storm Water Master Plan presents the updated City of Salinas Storm Drainage Master Plan.

According to the *Hydrology and Water Quality Technical Study* completed for the project, the City of Salinas Storm Water Master Plan makes the following statements and conclusions regarding the potential effects of urbanization in the Specific Plan Area:

- Existing storm drains within Salinas are at maximum capacity and cannot accept increased peak flows without causing additional flooding.
- Certain reaches of Santa Rita Creek through the city are already at capacity and cannot accept increased peak flow rates without flooding.
- Detention storage will be required for all new development that contributes to the Markley Swamp stormwater sub-system and to the Santa Rita Creek stormwater sub-system.
- Detention storage will be required for all new development in the West Area Specific Plan area that contributes to Gabilan Creek, to avoid adversely impacting Carr Lake and the Reclamation Ditch.
- The hydraulic capacity of the Boronda Road storm drain flowing to Gabilan Creek is 50 cfs for the 42-inch segment and 120 cfs for the 48-inch segment.

The Stormwater Master Plan also identifies two potential stormwater detention basins within the proposed Specific Plan Area: a 40 AF capacity basin east of San Juan Grade Road (draining to the Santa Rita Creek stormwater sub-basin) and a 40 AF capacity basin immediately north of Boronda Road near McKinnon Street (draining to the Markley Swamp stormwater sub-basin). The plan states that these basins would be added during development of the Specific Plan Area.

Reclamation Ditch Watershed Impact Fee/Draft Nexus Study Summary Report

The Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley. The final draft (August 2006) of the MCWRA's *Reclamation Ditch Watershed Impact Fee/Nexus Study Summary Report* ("Draft Nexus Study"), while not adopted, provides useful background information related to the current state of the Reclamation Ditch system.

The MCWRA has imposed regulations for floodplains in the County. Pertinent regulations include the following:

1. Lands within the FEMA FIRM identified 100-year floodplain (Special Hazards Areas) and areas within 200 feet of a river or with 50 feet of a watercourse are subject to these regulations.
2. No construction is allowed within regulatory floodways or Zones AE.
3. Any encroachment into a regulatory floodway shall not result in any increase of base flood elevations.
4. New construction shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.

(Note: All development in City of Salinas, including development in the Reclamation Ditch Watershed, must meet City flood damage prevention regulations.)

Salinas Flood Damage Prevention Ordinance

Article VI, Flood Damage Prevention, of the City's Municipal Code outlines the methods of reducing flood losses for subdivisions and other proposed developments via construction standards. The standards apply to all areas of special flood hazards within the jurisdiction of the City of Salinas.

In all areas of special flood hazards the following standards are required:

(a) Anchoring.

(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(2) All manufactured homes shall meet the anchoring standards of Section 9-55.4.

(b) Construction Materials and Methods.

(1) All new construction and substantial improvements shall be constructed with flood-resistant materials as specified in FEMA Technical Bulletin TB 2-93 or the most recent update, and utility equipment resistant to flood damage;

(2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage;

(3) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

(4) Require within Zones AH or AO adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

(c) Elevation and Floodproofing.

(1) Residential construction, new construction or substantial improvement of any structure shall have the lowest floor, including basement, elevated as follows:

(A) In an AO Zone, elevated above the highest adjacent grade to a height exceeding the depth number specified in feet on the FIRM by two feet, or elevated at least two feet above the highest adjacent grade if no depth number is specified;

(B) In an A Zone, elevated two feet (minimum) above the base flood elevation; such base flood elevation shall be determined by methods in Section 9-54.3(b) of this article.

(C) In all other zones, elevated two feet (minimum) above the base flood elevation.

Water Quality Control Plan for the Central Coastal Basin

The Water Quality Control Plan for the Central Coastal Basin (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

THRESHOLDS OF SIGNIFICANCE- STORM WATER

Consistent with Appendix G of the CEQA Guidelines, the proposed project may have a significant impact on the environment associated with Utilities if it would:

Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-8: The proposed project has the potential to require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (Less than Significant)

The preliminary drainage system plan for the proposed project is shown in Figure 3.11-3. No new or expanded existing off-site infrastructure is proposed or would be required. Proposed project storm water infrastructure would be developed on-site, with connections made to off-site existing storm drain pipes along existing rights-of-way (such as along McKinnon Street). Installation of storm drainage infrastructure would occur during the construction phase of the proposed project.

The construction of the new on-site stormwater drainage facilities, which are associated with the proposed project, has the potential to cause environmental impacts. The potential for environmental impacts associated with the installation of the stormwater system, and all construction activities within the Plan Area, are addressed throughout this EIR. In some cases, the direct and indirect impacts are potentially significant and warrant mitigation measures, while in other cases there are significant and unavoidable impacts. The installation of the stormwater system for the West Area Specific Plan project does not cause any impacts above what is already analyzed and disclosed for each environmental topic in this EIR. This is a ***less than significant*** impact relative to this environmental question.

Impact 3.11-9: Cumulative Impact on Stormwater Facilities (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for the analysis of cumulative stormwater facilities is best addressed on a regional/watershed basis. Because water resources are highly interconnected, the cumulative setting is based on Monterey County, which is located in the Central Coast Hydrological Region. With respect to surface waters, some runoff from the Specific Plan Area currently flows to Santa Rita Creek and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system, with inlets along Boronda Road at the east side of the Specific Plan Area, currently receives runoff from the Specific Plan Area and will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

As shown on Figure 3.6-3, predicted flood conditions in the vicinity of the Specific Plan Area are shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels 06053C0207G, 06053C0209G, 06053C0228G, and 06053C0226G. No portion of the Specific Plan Area is located within a 1-percent annual chance flood hazard zone. A small flood hazard area (located in the northwest corner of the Specific Plan Area) is identified as shaded Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in shaded Zone X ("Other Flooded Areas") are limited to less than one-foot depth or less than one acre during the 1-percent annual

chance flood and/or are subject to flooding between the 1-percent and 0.2-percent annual chance flood events. The extent of flooding is naturally limited by existing topography. Lands designated as unshaded Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project.

Future development projects in the area could result in additional discharges of stormwater during storm events. When combined, these future development projects could, in theory, could lead to an incremental increase in peak stormwater runoff and potential incremental increases in downstream flood elevations. However, in order to ensure that future development projects in the County do not increase downstream flood elevations, the City's Flood Damage Prevention Ordinance outlines the methods of reducing flood losses for subdivisions and other proposed developments via construction standards. The standards apply to all areas of special flood hazards within the jurisdiction of the City of Salinas, including the West Area Specific Plan area.

CONCLUSION

The West Area Specific Plan includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area. Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the Specific Plan Area. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, and supplemental detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

Future development in the area must be sited and designed in accordance with the City's flood regulations. The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures require designs that ensure structures are outside the base flood elevation and that storm water flows are maintained to prevent downstream flooding. The construction, maintenance, and operation of all stormwater facilities are not anticipated to cause substantial adverse impacts. The proposed project

would not have cumulatively considerable impacts associated with stormwater facilities. Overall, implementation of the proposed project would have a ***less than significant cumulative*** *impact* and ***less than cumulatively considerable*** incremental contribution to impacts on stormwater facilities.

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RUSSELL ROAD
CITY OF SALINAS
INCORPORATED AREA
SAN JUAN GRADE ROAD
RUSSELL ROAD
ROGGE ROAD
NATIVIDAD ROAD
CENTRAL SPECIFIC
PLAN AREA
ROAD G
ROAD H
ROAD F
MCKINNON STREET
ROAD A
ROAD G
EL DORADO DRIVE
ROAD E
ROAD D
ROAD C
ROAD J
ROAD B
ROAD G
ROAD C
SANTA RITA CREEK
VAN BUREN AVE
THE GATEWAY
SPECIFIC PLAN
(NOT A PART)
EAST BORONDA ROAD
MCKINNON STREET
EL DORADO DR
CITY OF SALINAS
INCORPORATED AREA
TO GABILAN
CREEK
0'
350'
700'
1050'
1400'
N

LEGEND:

- PROJECT BOUNDARY
- WATERWAY AND DRAIN
- EX. STORM DRAIN PIPE
- PROPOSED STORM DRAIN PIPE WITH MANHOLE
- PROPOSED WATERSHED BOUNDARY
- STORM DRAIN PIPE SIZE AND DIRECTION
- EX. STORM DRAIN PIPE SIZE AND DIRECTION
- PROPOSED SUPPLEMENTAL RETENTION BASIN
- PROPOSED SUPPLEMENTAL DETENTION / WATER QUALITY BASIN
- PROPOSED WATER QUALITY BMP

Figure 3.11-3: Preliminary Drainage System Plan

Source: AECOM, Wood Rodgers, City of Salinas Figure 14 Preliminary Water Drainage System Plan

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3.11.4 SOLID WASTE

EXISTING SETTING

The City of Salinas is currently served by the Salinas Valley Solid Waste Authority (SVSWA); a joint powers agency representing the City of Salinas, the City of Gonzales, the City of Greenfield, the City of King, the City of Soledad, and the County of Monterey. Solid Waste generated within the Plan Area is collected by Republic Services of Salinas and delivered to SVSWA transfer stations, after which it is sent to the Johnson Canyon Landfill, which SVSWA owns and operates by contract. It is estimated that the landfill has 38-45 years of disposal capacity to meet the need of current jurisdiction served by the landfill. Solid waste would likely be delivered to the Johnson Canyon Landfill that is operated by the SVSWA, of which the City is a member, or to other facilities that may be developed or secured by the Salinas Valley Solid Waste Authority over time. Recyclable materials would be delivered to the SVSWA's Sun Street Transfer facility, where materials are segregated and recycled consistent with State solid waste diversion regulations (currently, Sun Street Transfer Station provides this function; however, this may change over time).

The City of Salinas is currently evaluating its participation in the SVSWA. At this point it is not known what the outcome of this assessment will be or at what point any adjustment would be made.

SVSWA has proposed a comprehensive approach to providing for solid waste disposal needs of its member jurisdictions for approximately 70 years which includes increased waste division and materials recovery as well as the application of advanced technologies for processing solid waste. In addition to providing sufficient long-term capacity, the SVSWA facility improvements would increase the ability of SVSWA's member jurisdictions to achieve their Assembly Bill (AB) 939 diversion mandates.

The SVSWA is responsible for ensuring that the cumulative solid waste disposal capacity needs of its member jurisdictions are met over time through expansion of existing landfill capacity, creation of new landfill capacity, and/or deployment of waste conversion technology that substitutes for landfill disposal capacity. The Johnson Canyon Landfill is permitted to accept up to 1,574 tons of waste per day and has a permitted capacity of approximately 13.8 million cubic yards, and a remaining estimated capacity of approximately 6.9 million cubic yards. The cease operation date under the current permit for the facility is currently December 21, 2055 (CalRecycle, 2019). The average daily volume (years 2017-2018) was approximately 585 tons per day, and the total annual volume for the landfill in years 2017-2018 was 213,714 tons.

The City of Salinas achieved a diversion rate of 61 percent in the period of 2005-2006, exceeding the State-mandated requirement of 50 percent. The latest information available from Cal Recycle also shows that the area within the jurisdiction of SVSWA had a solid waste disposal rate of 3.8 pounds per resident per day for household waste and 11.0 pounds per employee for business waste in 2014 (CalRecycle, 2019).

The Johnson Canyon Landfill is permitted to accept agricultural waste, appliances, cardboard, clothing, concrete rubble, demolition debris, dirt (clean fill), garbage, electronics, lumber, recycling-separated plastic and glass containers, aluminum and paper, scrap metal, tires (without rims), wood

(clean), tree stumps and branches, and yard waste. The landfill is not permitted to accept hazardous or toxic wastes, including but not limited to aerosols, antifreeze, auto batteries, household cleaners, cooking oil/grease, electronic waste, fluorescent light bulbs and tubes, paint, pesticides & fertilizers, pharmaceuticals, sharps (needles or syringes), thermometers or other mercury containing items, thinners and solvents, and used motor oil and filters. These household hazardous items are accepted for no charge at the Sun Street Household Hazardous Waste (HHW) facility, located in the City of Salinas.

REGULATORY SETTING – SOLID WASTE

State

AB 939: CALIFORNIA'S INTEGRATED WASTE MANAGEMENT ACT OF 1989

California's Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling and composting. In order to achieve this goal, AB 939 requires that each City and County prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 939 also established requirements for cities and counties to develop and implement plans for the safe management of household hazardous wastes. In order to achieve this goal, AB 939 requires that each city and county prepare and submit a Household Hazardous Waste Element.

AB 341 (75 PERCENT SOLID WASTE DIVERSION)

In 2011, the Legislature implemented a new approach to the management of solid waste. AB 341 (Chesbro, Chapter 476, Statutes of 2011) required that CalRecycle oversee mandatory commercial recycling and established a new statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020. This paradigm adds to the policies in AB 939 in several significant ways. First, AB 341 established a statewide policy goal, rather than a jurisdictional mandate. This places the onus for achieving the goal on the State rather than on the cities and counties that are directly responsible for waste disposal and recycling. Under the law, individual jurisdictions are not required to meet the new policy goal.

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the State to divert 75 percent of the solid waste generated in the State from disposal by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012, and also streamlines various regulatory processes.

SB 1374 (CONSTRUCTION AND DEMOLITION WASTE MATERIALS DIVERSION)

Senate Bill 1374 (SB 1374), Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required the

CIWMB to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

CALGreen requires the diversion of at least 50 percent of the construction waste generated during most new construction projects (CALGreen Sections 4.408 and 5.408) and some additions and alterations to nonresidential building projects.

Local

CITY OF SALINAS GENERAL PLAN

The City of Salinas General Plan contains the following solid waste disposal and recycling goals and policies that are relevant to the proposed project:

SAFETY ELEMENT

Policy S-3.5: Limit hazardous waste facilities within the planning area to transfer stations, which shall be limited to the collection, temporary storage, and transfer of small quantity generator and household hazardous waste as specified in the Monterey County Hazardous Waste Management Plan.

Policy S-3.6: Limit the location of a Hazardous Waste Transfer Station to land designated for General Industrial use and ensure that the station conforms to the siting criteria in the Monterey County Hazardous Waste Management Plan.

CITY OF SALINAS MUNICIPAL CODE, CHAPTER 14

Chapter 14 of the Municipal Code regulates the management of garbage, recyclables, and other wastes. Chapter 14 sets forth solid waste collection, disposal, and diversion requirements for residential, commercial, industrial, and other uses and addresses yard waste, hazardous materials, recyclables, and other forms of solid waste. Additionally, Article V, Section 7-500.200 provides supplemental recycling and solid waste disposal regulations.

THRESHOLDS OF SIGNIFICANCE- SOLID WASTE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact on the environment associated with Utilities if it will:

1. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

2. Comply with federal, State, and local statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.11-10: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and comply with federal, State, and local statutes and regulations related to solid waste (Less than Significant)

Permitted maximum disposal at the Johnson Canyon Landfill is 1,574 tons per day. The total permitted capacity of the landfill is 13.8 million cubic yards. SVSWA indicates that, based upon diversion and other efforts, the actual life of the Johnson Canyon Landfill will be in the range of 38-45 years, with a permit cease operation date of December 21, 2055. The addition of the volume of solid waste associated with the West Area Specific Plan to the landfill would not exceed the landfill's remaining capacity. Based on the waste generation factors provided by CalRecycle, the proposed project is expected to generate 48,922 pounds per day of solid waste upon full buildout, which is equivalent to 24.5 tons per day. Shown in Table 3.11-15 is the estimated solid waste generation for the proposed project.

TABLE 3.11-15: *ESTIMATED SOLID WASTE GENERATION*

LAND USE	*GENERATION FACTOR*[1]	*PROJECT*	*ESTIMATED SOLID WASTE (LBS/DAY)*
Retail/Services	6 lb./1,000 s.f./day	571,000 s.f.	3,426 lbs
Residential	10 lb./unit/day	4,340 units	43,400
Schools	0.5 lb./student/day	4,191 students	2,096
TOTAL			**48,922**

[1] CalRecycle

Additionally, recyclable materials would be delivered to the SVSWA's Sun Street Transfer facility (or other transfer station as may be established in the future), where the materials would be segregated and recycled consistent with State solid waste diversion regulations. However, this may change over time. The SVSWA is responsible for ensuring that sufficient transfer facility capacity is available to serve the City of Salinas, including the proposed project.

CONCLUSION

The West Area Specific Plan would be required to comply with applicable State and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. The addition of the volume of solid waste associated with the West Area Specific Plan, approximately 24.5 tons per day at total buildout, would increase the total to the Johnson Canyon Landfill; however, this increase would not cause an exceedance of the landfill's remaining capacity. This is a ***less than significant*** impact.

Impact 3.11-11: Cumulative Impact on Solid Waste Facilities (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for cumulative impacts on solid waste facilities is the Salinas Valley Solid Waste Authority service area. The Salinas Valley Solid Waste Authority serves a large portion of the

Salinas Valley, including the City of Salinas, all or part of the cities of Soledad, Gonzalez, Greenfield, King City, and unincorporated portions of Monterey County.

Solid waste generated in the City is disposed at the Johnson Canyon Landfill. This landfill is permitted through the year 2040 and based upon SVSWA, has a likely lifespan for in excess of the permit. The permitted maximum disposal at the Johnson Canyon Landfill is 1,574 tons per day. Currently, the average daily disposal is approximately 585 tons per day. The total permitted capacity of the landfill is 6.9 million cubic yards.

The Salinas Valley Solid Waste Authority service area is expected to add numerous developments through 2055. The Central Area Specific Plan, East Area Specific Plan, and the Economic Development Element (EDE) are three such areas, located within the City of Salinas. These new areas would generate an estimated 75 to 100 tons per day at total buildout. Buildout of other communities within the Salinas Valley Solid Waste Authority' service area would also affect Johnson County Landfill. These jurisdictions within the region are likely to generate new sources of solid waste that would need to be processed at the landfill. The Johnson Canyon Landfill has the capacity to serve nearly three times as much waste per day as it does currently and will have sufficient capacity to serve communities within the Salinas Valley Solid Waste Authority service area. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. Therefore, this would result in a ***less than significant*** and a ***less than cumulatively considerable*** impact on solid waste facilities.

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CEQA requires an EIR to evaluate a project's effect in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents a discussion of CEQA-mandated analysis for cumulative impacts, significant irreversible effects, and significant and unavoidable impacts associated with the West Area Specific Plan. Growth Inducement is discussed in Section 3.8, Population and Housing.

4.1 CUMULATIVE SETTING AND IMPACT ANALYSIS

INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) contain an assessment of the cumulative impacts that could be associated with the West Area Specific Plan. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively considerable," as defined in section 15065(a)(3), means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

> *…the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,

(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

CUMULATIVE SETTING

The cumulative setting uses growth projections listed in the City of Salinas General Plan (General Plan Land Use Table LU-3 Development Capacity), the General Plan Final EIR, and the most recent Economic Development Element as a basis for cumulative growth.

The Salinas General Plan represents the culmination of several years of an intense work program, including over 35 public meetings. The Plan is founded upon the community's vision for the future. Table 4.0-1, below, shows the growth projections as described within the City of Salinas General Plan. The General Plan was approved in September of 2002, and assumes full build-out of the Sphere of Influence.

TABLE 4.0-1: GROWTH PROJECTIONS AT SALINAS GENERAL PLAN BUILDOUT

	TOTAL ACRES	*TOTAL PROJECTED DWELLING UNITS/HOUSING*	*TOTAL PROJECTED NON-RESIDENTIAL SQUARE FEET (THOUSANDS)*	*TOTAL PROJECTED POPULATION*
Open Space Land Use Designations				
Agriculture	22	0	0	0
Open Space	611	0	0	0
Parks	1,272	0	2,771	0
Residential Land Use Designations				
Residential Low Density	3,992	25,950	0	95,235
Residential Medium Density	1,414	16,619	0	60,991
Residential High Density	827	13,846	0	50,816
Commercial/Office Land Use Designations				
Retail				
Citywide	549	155	5,984	570
Central City	9	13	586	49
Office				
Citywide	126	42	1,371	155
Central City	42	63	2,724	230
East Romie Lane Corridor	47	24	1,030	87
Light Industrial/Industrial Land Use Designations				
Business Park	230	0	3,503	0
General Comm./Light Ind.	659	0	8,607	0
General Industrial	1,311	0	17,136	0

	TOTAL ACRES	TOTAL PROJECTED DWELLING UNITS/HOUSING	TOTAL PROJECTED NON-RESIDENTIAL SQUARE FEET (THOUSANDS)	TOTAL PROJECTED POPULATION
Public/Semipublic Land Use Designations				
Public/Semipublic	1,241	0	13,513	0
Salinas Municipal Airport	620	0	1,351	0
Other Land Use Designations				
Mixed Use				
Citywide	231	692	5,026	2,541
Central City	62	339	8,056	1,244
Arterial Frontage	62	312	679	1,145
TOTAL	**13,328**	**58,055**		

SOURCE: CITY OF SALINAS GENERAL PLAN AND GENERAL PLAN EIR, 2002

The City of Salinas Economic Development Element (EDE) was adopted by the City Council on December 5, 2017. The EDE, as a comprehensive, strategic planning document, provides the vision, context, and focus for the community's economic development efforts. The EDE describes areas for potential future expanded economic development, referred to as Economic Opportunity Areas (EOAs), which were identified and mapped through the community outreach process. A total of 25 EOAs were created and policy direction for catalyzing development opportunities in these areas was included in the EDE.

Table 4.0-2 describes the additional development capacity identified and proposed in the EDE. This new development capacity was not originally included in the build-out growth projections provided within the City of Salinas General Plan and General Plan EIR. This total new development capacity consists of that proposed within the EOA target areas located outside the Sphere of Influence (SOI) plus the new development capacity within the SOI for Target Area, *EOA V - Carr Lake*, as summarized below, in Table 4.0-2.

TABLE 4.0-2: TOTAL NEW ECONOMIC DEVELOPMENT ELEMENT (EDE) DEVELOPMENT CAPACITY

LOCATION	NEW LAND SUPPLY (GROSS ACRES)	NEW BUILDING CAPACITY (SQUARE FEET)
EOA Target Areas Outside the SOI		
Industrial	147	1,502,820
Retail	164	1,383,030
Business Park	132	1,570,338
EOA V - Carr Lake		
Retail	115	810,448
Total	*558*	*5,266,636*

SOURCE: EMC PLANNING GROUP, 2017

CUMULATIVE EFFECTS OF THE PROJECT

Cumulative settings are identified under each cumulative impact analysis. Cumulative settings vary because the area that the impact may affect is different. For example, noise impacts generally only impact the local surrounding area because noise travels a relatively short distance while air quality impacts affect the whole air basin as wind currents control air flow and are not generally affected

by natural or manmade barriers which would affect noise. Cumulative project impacts were addressed throughout each Chapter 3.0 section, and are summarized below.

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. State CEQA Guidelines 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines 15355[b]). Cumulative impact analysis may be less detailed than the analysis of the project's individual effects (State CEQA Guidelines 15130[b]).

There are two approaches to identifying cumulative projects and the associated impacts. The list approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The projection approach identifies potential cumulative impacts through the use of a summary of projections found in adopted local, regional or statewide plans (e.g., General Plans) or related planning or environmental documents as sometimes supplemented by additional information such as a regional modeling program. This EIR uses the projection approach for the cumulative analysis and considers the development anticipated to occur upon General Plan buildout in the area in addition to the pending and proposed projects in the area.

Project Assumptions

The West Area Specific Plan contribution to environmental impacts under cumulative conditions is based on full buildout of the Plan Area. See Chapter 2, Project Description, for a complete description of the West Area Specific Plan.

Cumulative Impacts

Some cumulative impacts for issue areas are not quantifiable and are therefore discussed in general terms as they pertain to development patterns in the surrounding region. Exceptions to this are topics like traffic and utilities, which may be quantified by estimating future traffic patterns, pollutant emitters, etc. and determining the combined effects that may result. The potential cumulative impacts associated with the West Area Specific Plan are summarized below. It should be noted that cumulative impact analysis is also previously provided in each of the Chapter 3.0 sections.

AIR QUALITY

The cumulative setting for this analysis is the North Central Coast Air Basin (NCCAB), which consists of three counties: Santa Cruz County, San Benito County, and Monterey County. This area was chosen both because it forms a logical geographic unit to consider and a logical jurisdictional unit as

well. The air basin is bounded by mountains the north and east. San Joaquin Air Basin lies to the east, separated by the Diablo Coastal range, with gaps such as Pacheco Pass. The San Francisco Bay Air Basin lies to the north.

Impact 3.1-7: Cumulative impact on the region's air quality (Cumulatively Considerable and Significant and Unavoidable)

Under buildout conditions within the NCCAB, criteria pollutants would continue to increase and efforts to improve air quality throughout the basin would be hindered. Unfortunately, much of the increase in criteria pollutants in the NCCAB are out of the control of the communities within NCCAB, since criteria pollutants generated in other air basins flow into the NCCAB (including from the San Francisco Bay Area and SFFAB). As described previously in this Section, Monterey County has a State designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. Table 3.1-2 in Section 3.1 presents the state and federal attainment status for Monterey County.

As discussed under Impact 3.1-2, implementation of the Specific Plan would result in increased emissions primarily from vehicle miles travelled associated with project implementation and area sources. The MBARD has established operations-related emissions thresholds of significance and it was determined that the Specific Plan annual emissions of ROG, NOx, and PM_{10} at full buildout would exceed the MBARD's thresholds of significance for these pollutants, even with mitigation.

The main source of pollution are mobile source emissions for ROG, NOx, and PM_{10}. Area source emissions for ROG are also a major source of pollution resulting in the exceedance.

There are limited mitigation inputs available within the California Emission Estimator Model (CalEEMod)™ (v.2016.3.2) to quantify emission reductions for large-scale "plans". As shown in Tables 3.1-9 and 3.1-10 in Section 3.1, even with mitigation incorporated into the model, the Specific Plan would exceed several of the MBARD's thresholds of significance for operations.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD *2012-2015 AQMP*. The mitigation measures provided within this air quality discussion (i.e. throughout the impact analysis provided in Section 3.1: Air Quality) have been designed to be consistent with the mitigation measures provided in the MBARD *CEQA Air Quality Guidelines*, where applicable. As is currently proposed, the Specific Plan is expected to be built out under a staged approach, and all mitigation would be applicable to each stage. However, even with the application of mitigation measures, operational emissions levels would remain above the defined thresholds of significance. Exceedance of the threshold within an area designated as nonattainment would be a cumulatively considerable impact. As such, implementation of the Specific Plan would have a ***cumulatively considerable contribution*** and **a *significant and unavoidable*** impact on the region's air quality.

BIOLOGICAL RESOURCES

The cumulative context for a cumulative analysis can be defined by region, by political subdivision, or by the geography. This cumulative analysis utilizes the "Bioregion" as its cumulative setting. The

Plan Area is located in the Central Coast Bioregion, which has a wide variety of habitats and vegetation, including coastal prairie scrub, chaparral, mixed hardwoods, oak woodlands, and redwood forests, among many other habitats. The climate in this Bioregion does not vary much with the seasons. The northern portion, and more coastal areas, experience relatively cool, often foggy summers, mild falls, and chilly, rainy winters. The southern and inland portions of this Bioregion have hot, dry summers and warm autumns that are followed by mild, wet winters. Snowfall is rare. The Central Coast Bioregion is the appropriate cumulative context because environmental impacts related to biological resources are best addressed in the context of geographic areas defined by natural features rather than by political or administrative boundaries.[1]

Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species (Cumulatively Considerable and Significant and Unavoidable)

The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures were developed to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats. It has been found in this EIR that, with the implementation of mitigation measures, the project would not, directly or indirectly, have a substantial adverse effect through habitat modifications or reductions, cause populations to drop below self-sustaining levels, substantially eliminate a community, or substantially reduce the number of, or restrict the range of, an endangered, rare or threatened species, including those considered candidate, sensitive, or special status in local or regional plans, policies, regulations, or by the CDFW or USFWS.

The West Area Specific Plan will eliminate the onsite irrigation ditches, which provide some, but relatively little quality habitat. The West Area Specific Plan is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures were developed to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance, and that there be a no net loss of wetlands (1:1 minimum replacement ratio). The permit process ensures that minimization and compensation is incorporated into the activity. It has been found in this EIR that, with the implementation of mitigation measures, the project would not have substantial adverse effects, directly or indirectly, on protected wetlands and jurisdictional waters.

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large

[1] U.S.G.S. Bioregions of the Pacific U.S. Available at: <https://www.usgs.gov/centers/werc/science/bioregions-pacific-us?qt-science_center_objects=0#qt-science_center_objects>.

scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

Impacts from development, such as habitat fragmentation and/or isolation, and the creation of impassable barriers can cause a significant impact to wildlife corridors. Depending on the organism and its needs, movement corridors can either be continuous or discontinuous patches of suitable habitat. Preserving expanses of open space that are connected may enable species utilizing these areas as foraging or breeding habitat to persist.

The Specific Plan Area is used predominantly for active agricultural production, which generally prohibits most overland wildlife movement due to the lack of suitable vegetative cover. The exception is the irrigation and roadside ditches that drain irrigation runoff. This network of irrigation ditches throughout the Specific Plan Area provides some aquatic linkage and potential movement corridors for special-status species documented in the vicinity, including CTS and CRLF, which have not been observed on the site and which are rare within the Bioregion. The roadside ditches located along Boronda Road and San Juan Grade Road also provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris.

The project would result in impacts to biological resources including habitats and special status species. Development of the proposed project would eliminate any movement habitat through the Specific Plan Area, along with any upland habitat adjacent to the movement corridors. This permanent loss of movement habitat was determined to be a significant and unavoidable impact. While the City has evaluated urban development in the Plan Area extensively through the General Plan and North of Boronda FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this loss of movement/migration habitat. Given the rareness of CTS and CRLF in the Bioregion, the incremental loss of movement habitat from the proposed project, when considered alongside all past, present, and probable future projects (inclusive of all communities within the Bioregion), is a ***significant and unavoidable cumulative impact***, and the Specific Plan's incremental contribution to this impact is itself ***cumulatively considerable***.

CULTURAL RESOURCES

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography, where sufficient inventory data is available to define it. The cumulative setting for cultural resources includes all of the Monterey County, which includes the entire Salinas Planning Area. There are extensive cultural sites located in Monterey County and the region as a whole. Generally, these sites are related to Native Americans who historically have lived in the area; however, there are also numerous historical resources such as nearby ranches. Monterey County was chosen as the cumulative context for this analysis because it encompasses an extensive set of cultural resources potentially present over a wide geographic area. Discovery of cultural resources

have the potential to be interlinked; that is, knowledge of cultural resources in one part of Monterey County has the potential to affect cultural resources in other parts of Monterey County.

Impact 3.3-5: Cumulative impacts on known and undiscovered cultural resources (Less than Significant and Less than Cumulatively Considerable)

The Salinas General Plan Final Program EIR includes mitigation measures that would reduce impacts to cultural resources (Mitigation Measures CR1, CR2, and CR3). However, although these mitigation measures were found to reduce the potentially significant impact to paleontological resources to a less than significant level, the Salinas General Plan Final Program EIR found that these mitigation measures may not reduce the potentially significant impacts to historic and archaeological resources for the following reasons: Mitigation Measure CR1 would apply only to discretionary permits, which would allow ministerial projects to be processed without being reviewed and subjected to the requirements of Mitigation Measures CR1; Mitigation Measure CR2, which is presented as a way to extend the discretionary review powers of the City over projects with potential impacts to historic and archaeological resources only requires the City to consider implementing the historic/architectural preservation ordinance. Moreover, there exists the potential for cumulative impacts to cultural resources throughout the remainder of Monterey County. Therefore, there exists the potential for the proposed project combined with all past, present, and probably future projects to cause a significant cumulative impact to historical and/or archaeological resources.

While there are extensive documented cultural resources in Salinas and unincorporated Monterey County, there are no cultural resources that were found during field surveys of the proposed project. Additionally, there are no cultural resources that have been identified in the Plan Area on maps and files maintained by the Northwest Information Center (NWIC). There have been three previous cultural resource studies that examined approximately three-quarters of the Plan Area and no cultural resources were documented. The Monterey County Historic Property Data File Directory and National Register of Historic Resources do not list any cultural resources in the Plan Area. Furthermore, mitigation measures incorporated into this EIR would require the proposed project to evaluate any cultural resources discovered during construction activities. Any significant discoveries during construction would be required to be preserved in place or mitigated through relocation or documentation; and the project is not anticipated to considerably contribute to a significant reduction in cultural resources.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts. The proposed project would not have cumulatively considerable impacts associated with cultural resources. Implementation of the proposed project would have a ***less than significant cumulative impact*** and ***less than cumulatively considerable*** incremental contribution to cumulative impacts on cultural resources.

GREENHOUSE GASES AND CLIMATE CHANGE

As the California Supreme Court has emphasized, all CEQA analyses of the environmental effects of GHG emissions are inherently cumulative in character. "[B]ecause of the global scale of climate

change, any one project's contribution is unlikely to be significant by itself. *** 'With respect to climate change, an individual project's emissions will most likely not have any appreciable impact on the global problem by themselves, but they will contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the project's incremental addition of greenhouse gases is 'cumulatively considerable' in light of the global problem, and thus significant.'" (*Center for Biological Diversity v. California Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 219, quoting (Crockett, *Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World* (July 2011) 4 Golden Gate U. Envtl. L.J. 203, 207–208.) Thus, the analysis below considers the entire planet as a backdrop while focusing on whether the proposed project's incremental contribution to worldwide GHG emissions is cumulatively considerable.

Impact 3.4-4: Cumulative impact on climate change from increased project-related greenhouse gas emissions (Cumulatively Considerable and Significant and Unavoidable)

Greenhouse gas emissions from a single project will not cause global climate change; however, greenhouse gas emission from multiple projects throughout a region or state could result in a cumulative impact with respect to global climate change.

In California, there has been extensive legislation passed with the goal of reducing GHG emissions. The legislative goals are as follows: 1) 2000 levels by 2010, 2) 1990 levels by 2020, and 3) 40% below 1990 levels by 2030. An additional goal -- 80% below the 1990 levels by the year 2050 – was set by Governor Schwarzenegger through S-03-05. To achieve the legislative goals, the CARB has developed regional GHG emission reduction targets for the automobile and light truck sectors (the largest single source of GHG emissions) for 2020 and 2035. The regional GHG emission reduction targets for each region in California were established the CARB.

As described in Impact 3.4-2 in Section 3.4, implementation of the proposed project will still generate GHG emissions that would not otherwise exist without the proposed project. Given the length of construction activities for a project of this size, the construction emissions would be a long-term release of approximately 168,734.3 MT CO_2e. The operational emissions would be a long-term release totaling approximately 51,939.2 MT CO2e per year without mitigation, and 47,684.9MT CO_2e per year with mitigation. The City of Salinas must weigh the economic and social benefits of development against the environment impacts associated with development. The City of Salinas's planning efforts included targeted growth that accommodates the economic and social needs of the community, while recognizing and seeking to mitigate environmental impacts when growth occurs. The use of New Urbanism principles, which emphasize compact, walkable communities, and which were incorporated into the design of the proposed project, would help minimize GHG emissions generated by the proposed project. Further, the proposed project would be required to implement mitigation measures that are intended to reduce GHG emissions to the maximum extent feasible. The State of California continues to implement measures that are intended to reduce emissions on a State-wide scale (i.e. vehicle fuel efficiency standards in fleets, low carbon fuels, etc.) that are consistent with AB 32 and SB 32. These types of statewide measures will benefit the proposed project (and city as a whole) in the long-term as they come into effect; however, the City does not

have the jurisdiction to create far-reaching (i.e. statewide) measures to reduce GHG emissions. On a project-by-project case, the City of Salinas evaluates a project and the potential to impose project-specific mitigation, which has been done through this GHG analysis. However, because it is possible that individual projects within the Plan Area may not achieve GHG reductions needed for their individual impacts to be less than significant, implementation of the Specific Plan would have a ***cumulatively considerable contribution*** and ***significant and unavoidable*** impact to greenhouse gases.

HAZARDS AND HAZARDOUS MATERIALS

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography, where sufficient inventory data is available to define it. The cumulative context for the analysis of cumulative hazards and human health impacts is all of Monterey County, which includes the entire Salinas Planning Area. This geographic and political extent was chosen because it encompasses hazards potentially present over a wide geographic extent (i.e. it covers both local and regional hazards). For example, smaller-scale local hazards, such as the use of hazardous materials during construction and potential contamination, are generally site specific, whereas more regional hazard topic areas, such as implementation of emergency response or emergency evacuation plans, may cover geographic areas beyond the areas that are within the direct land use authority of a local jurisdiction, and are normally coordinated between varied city and county functions.

Impact 3.5-3: Cumulative impact related to hazards and hazardous materials (Less than Significant and Less than Cumulatively Considerable)

Cumulative development within the region is expected to include buildout of the various General Plans within Monterey County. The West Area Specific Plan, in conjunction with cumulative development in the region, includes areas designated for development of a variety of urban, agricultural, and open space uses as defined by the applicable General Plans. Cumulative development would include continued operation of existing developed area and development of new facilities as allowed under each land use designation.

New development would inevitably increase the use of some hazardous materials within the region, resulting in potential health and safety effects related to hazardous materials use. Any use of hazardous materials must be managed in accordance with federal, State, and local (including Monterey County) regulations to minimize any risk.

For the most part, potential risks from hazardous materials associated with new and future development would be confined to commercial and industrial areas. There are no specific commercial or industrial users that are proposed with the West Area Specific Plan that would pose a risk related to hazardous materials. Specific users would be required to obtain a conditional use permit, which would allow the City to evaluate any use of hazardous materials in their business operations before the use is approved.

Hazardous materials incidents, if any, are typically site-specific and involve accidental spills or inadvertent releases. Associated health and safety risks generally are limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Hazard-related impacts tend to be site-specific and project-specific.

The proposed project includes the approval and subsequent implementation of an approximately 797-acre Specific Plan Area that includes residential, mixed use commercial, a community park, neighborhood parks, small parks, schools, and open space (with supplemental storm water detention/retention basins). These uses are not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Additionally, these uses are not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed Specific Plan land uses are not expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Mitigation measures have been included to minimize the risk of on-site hazards.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts. The proposed project would not have cumulatively considerable impacts associated with hazards and hazardous materials. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to hazards and hazardous materials.

HYDROLOGY AND WATER QUALITY

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography. The cumulative context for the analysis of cumulative stormwater runoff impacts is best addressed on a regional/watershed basis (geography), as such an area captures flows occurring both upstream and downstream of the project site. Because water resources are highly interconnected, the cumulative setting is based on Monterey County, which is located in the Central Coast Hydrological Region. With respect to surface waters, some runoff from the Specific Plan Area currently flows to Santa Rita Creek and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system with inlets along Boronda Road at the east side of the Specific Plan Area currently receives runoff from the Specific Plan Area and will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

The City of Salinas is located in the Salinas Valley Groundwater Basin Area. The Salinas Valley is the largest coastal groundwater basin in Central California, and is drained by the Salinas River. Salinas Valley extends approximately 150 miles from the headwaters to the mouth of the River at Monterey Bay, draining approximately 5,000 square miles. The western portion of the Specific Plan Area is located in the Alisal Slough-Templadero Slough watershed and the eastern portion of the Specific Plan Area is located in the Natividad Creek-Gabilan Creek watershed.

Impact 3.6-8: Cumulative increases in peak stormwater runoff from the plan area (Less than Significant and Less than Cumulatively Considerable)

Implementation of the West Area Specific Plan would increase the amount of impervious surfaces in the Specific Plan Area, which, without intervention, could increase peak stormwater runoff rates and volumes on and downstream of the Specific Plan Area. The West Area Specific Plan includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area.

Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the site. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

With the design and construction of flood control improvements, the West Area Specific Plan would not increase peak stormwater runoff. The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures would control peak stormwater runoff. The proposed project would not have cumulatively considerable impacts associated with stormwater runoff. Overall, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to stormwater runoff.

Impact 3.6-9: Cumulative impacts related to degradation of water quality (Less than Significant and Less than Cumulatively Considerable)

The project will discharge storm water to Santa Rita Creek and to the existing City storm drain system. As shown in Figure 3.11-3 (within Section 3.11: Utilities), the proposed drainage infrastructure (conceptual level) includes primary storm drain piping along Natividad Road, East Boronda Road, San Juan Grade Road, parallel to El Dorado Drive through the Plan Area, and an east-west line along new Road C. Altogether, these pipelines total roughly 25,000 feet in length. Parcel-based retention and five combination supplemental detention/water quality basins and water retention basins are planned for the southwest, northwest, central and southeast parts of the area. Following treatment in a water quality treatment/detention basin, storm water which is not retained in a supplemental retention basin will overflow to the four existing storm drain inlets: Natividad Road at East Boronda Road, Santa Rita Creek at San Juan Grade Road, Dartmouth Way at East Boronda Road, and McKinnon Street at East Boronda Road.

Development of the West Area Specific Plan could contribute to a cumulative increase in urban pollutant loading, which could adversely affect water quality. Cumulative development in the Salinas area, including within the Plan Area, would also result in increased impervious surfaces that could increase the rate and amount of runoff, thereby potentially adversely affecting existing surface water quality through increased erosion and sedimentation. The primary sources of water pollution include: runoff from roadways and parking lots; runoff from landscaping areas; non-stormwater connections to the drainage system; accidental spills; and illegal dumping. Runoff from roadway and parking lots could contain oil, grease, and heavy metals; additionally, runoff from landscaped areas could contain elevated concentrations of nutrients, fertilizers, and pesticides.

The West Area Specific Plan is required to comply with Mitigation Measure 3.6-1, which requires the development and approval of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will include BMPs to regulate stormwater quality for the Specific Plan Area. In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, Mitigation Measure 3.6-1 ensures compliance with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB), Central Coast Region, has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The RWQCB has stated that these erosion control measures are only examples of what should be considered and should not preclude the use of equally or more effective new or innovative approaches currently available or being developed. The specific controls are subject to the review and approval by the RWQCB and the City of Salinas and are an existing regulatory requirement.

While there are no assurances that other projects in the County would incorporate the same degree or methods of treatment as the West Area Specific Plan, several of the projects within the City of Salinas would phase out existing agricultural runoff discharges from their respective sites and, similar to the West Area Specific Plan, could provide some level of water quality improvement. Also, each project in the City that would discharge stormwater runoff would be required to comply with NPDES discharge permits from the RWQCB, which adjusts requirements on a case-by-case basis to avoid significant degradation of water quality. Therefore, while a greater quantity of urban runoff may result from implementation of other future projects, because of an increase in impervious surfaces, the associated surface water quality impacts would be expected to be less than significant because of improved or similar quality of runoff compared to existing conditions.

Compliance with City and County water quality protection regulations, approval from the RWQCB, and implementation of Mitigation Measure 3.6-1 would ensure that the West Area Specific Plan minimizes impacts to surface water quality. The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures would control storm water quality. The proposed project would not have cumulatively considerable impacts associated with water quality. Overall, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for degradation of water quality.

Impact 3.6-10: Cumulative impacts related to degradation of groundwater supply or recharge (Less than Significant and Less than Cumulatively Considerable)

The West Area Specific Plan would result in new impervious surfaces and could reduce rainwater infiltration and groundwater recharge in those areas. Infiltration rates vary depending on the overlying soil types. In general, sandy soils have higher infiltration rates and can contribute to significant amounts of ground water recharge; clay soils tend to have lower percolation potential; and impervious surfaces such as pavement significantly reduce infiltration capacity and increase surface water runoff.

The proposed development, including water quality BMPs, detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible. Consequently, infiltration into the ground water aquifers will be maximized to the extent possible through the storm drainage design.

There are currently three water supply wells located on-site. These wells would be destructed and abandoned prior to development of the Plan Area. The project would provide three new wells (and potentially a treatment facility) to be constructed as development progresses. The first well would be operational at the time of the issuance of the first Certificate of Occupancy. The assumption for the design capacity of the three new Specific Plan area wells is 1,200 gpm each. The first well that would be functioning in 2020 would add 1,200 gpm capacity, or 1,937 AFY. Thus, in 2020, the total design capacity of wells serving the City of Salinas including the Specific Plan Area would be 52,592 AFY (44,843 AFY + 5,812 AFY + 1,937 AFY = 52,592 AFY).

In addition to constructing new wells, the project will modify the movement of water across the land surface and the infiltration of rain water into the groundwater system. The aquifers underlying the Plan Area are impacted by nitrate contamination. Groundwater in the project vicinity is subject to increasing salinity due to seawater intrusion from Monterey Bay. Both of these impairments affect use of the groundwater for potable water supplies and use for irrigation. The proposed project, if no means were provided to preserve infiltration of rainwater, would likely reduce net infiltration of rain water and runoff into the groundwater system and reduce the diluting effect of this fresh water supply. The net impact would be a further increase in sea water intrusion and build-up of contaminants in the groundwater in the Salinas basin. However, the proposed project, without mitigation, would also likely decrease the amount of nitrates entering the groundwater from the Plan Area, due to elimination of agricultural activity including fertilizer application. Surface water quality detention basins and BMPs also have the potential to add to groundwater contamination levels if they are not properly designed and sited.

The proposed project, without mitigating features, would reduce infiltration of rainwater and runoff into the local groundwater system due to the increase in impermeable area. The total annual rainfall depth in an average year is approximately 16 inches and the project surface area is approximately 797 acres, producing an annual rainfall volume of approximately 1,060 AF. Nearly all of this area is

currently in agriculture, while the proposed project could convert as much as 60 percent of the area to impervious surfaces, resulting in a reduction in groundwater recharge in the range of 400 to 600 AF.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures require maintaining water quality standards and preserving the infiltration of rainwater within the aquifer. The proposed project would not have cumulatively considerable impacts associated with groundwater supply/recharge. Overall, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for degradation of groundwater supply or recharge.

Impact 3.6-11: Cumulative impacts related to flooding (Less than Significant and Less than Cumulatively Considerable)

As shown on Figure 3.6-3, predicted flood conditions in the vicinity of the Specific Plan Area are shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels 06053C0207G, 06053C0209G, 06053C0228G, and 06053C0226G. No portion of the Specific Plan Area is located within a 1-percent annual chance flood hazard zone. A small flood hazard area is identified as shaded Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in shaded Zone X ("Other Flooded Areas") are limited to less than one-foot depth or less than one acre during the 1-percent annual chance flood and/or are subject to flooding between the 1-percent and 0.2-percent annual chance flood events. The extent of flooding is naturally limited by existing topography. Lands designated as unshaded Zone X are outside of the Special Flood Hazard Areas. Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project. Therefore, the West Area Specific Plan is not at risk of the 1-percent annual chance flood.

Future development projects in the area could result in additional discharges of stormwater during storm events. When combined, these future development projects could, in theory, lead to an incremental increase in peak stormwater runoff, and potential incremental increases in downstream flood elevations. However, in order to ensure that future development projects in the County do not increase downstream flood elevations, the Monterey County Water Resources Agency (MCWRA) oversees the development and implementation of water quality, water supply, and flood control projects in Monterey County, including operation and maintenance of the Reclamation Ditch. The Reclamation Ditch is part of a complex drainage system within the lower Salinas Valley

which helps collect surface water stormwater flows to ensure stormwater during storm events does not increase downstream flood elevations.

Additionally, Article VI (Flood Damage Prevention) of the City's Municipal Code outlines the methods of reducing flood losses for subdivisions and other proposed developments via construction standards. The standards apply to all areas of special flood hazards within the jurisdiction of the City of Salinas, including the West Area Specific Plan Area.

The West Area Specific Plan includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area. Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the Specific Plan Area. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, and supplemental detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

Future development in the area must be sited and designed in accordance with the aforementioned MCWRA regulations (i.e., Article VI, Flood Damage Prevention, of the City's Code). The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures require designs that ensure structures are outside the base flood elevation and that storm water flows are maintained to prevent downstream flooding. The proposed project would not have cumulatively considerable impacts associated with flooding. Overall, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to the potential for impacts related to flooding.

NOISE

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography. The cumulative setting for noise includes the study roadway segments as identified in the traffic analysis in this EIR. This area was chosen because it represents the area that is reasonably expected to be affected by changes to the ambient noise levels as the project buildouts out.

Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development (Cumulatively Considerable and Significant and Unavoidable)

As also provided in Section 3.7 Noise, the following tables show the predicted traffic noise level increases on the local roadway network for Cumulative, Cumulative + Project, and Cumulative + Project + Central Area Specific Plan (CASP) conditions. **Appendix H** of this EIR provides the complete inputs and results of the FHWA traffic noise modeling.

TABLE 4.0-3: CUMULATIVE AND CUMULATIVE PLUS PROJECT TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT ?
Constitution Blvd.	South of E. Boronda	62.2	64.7	2.5	+3 dB	No
E. Boronda Rd.	N. Main to San Juan Grade	66.5	67.9	1.3	+1.5 dB	No
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.7**	**2.4**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	65.9	1.4	+3 dB	No
E. Boronda Rd.	El Dorado to Natividad	64.1	67.0	2.9	+3 dB	No
E. Boronda Rd.	Natividad to Independence	66.6	68.0	1.4	+1.5 dB	No
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**66.9**	**1.8**	**+1.5 dB**	**Yes**
E. Boronda Rd.	Hemmingway to Constitution	58.2	59.9	1.7	+5 dB or > 60 dB	No
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.0	2.4	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.0**	**2.4**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	54.8	0.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	60.8	0.3	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.2	1.6	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	66.9	0.0	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.4	2.1	+5 dB or > 60 dB	No
Natividad Rd.	**South of E. Boronda**	**63.0**	**66.8**	**3.7**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.1**	**3.0**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.3	0.2	+3 dB	No
Natividad Rd.	North of Rogge	62.0	62.3	0.3	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.1	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.0	0.0	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	56.2	0.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	West of San Juan Grade	67.5	68.7	1.2	+1.5 dB	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT	CHANGE	CRITERIA[1]	SIGNIFICANT ?
San Juan Grade Rd.	South of E. Boronda	65.8	66.7	0.8	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.2	1.6	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.7	0.0	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

TABLE 4.0-4: CUMULATIVE AND CUMULATIVE PLUS PROJECT + CASP TRAFFIC NOISE LEVELS

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
Constitution Blvd.	**South of E. Boronda**	**62.2**	**65.7**	**3.5**	**+3 dB**	**Yes**
E. Boronda Rd.	**N. Main to San Juan Grade**	**66.5**	**68.1**	**1.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**San Juan Grade to McKinnon**	**65.3**	**67.9**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	McKinnon to El Dorado	64.4	66.1	1.7	+3 dB	No
E. Boronda Rd.	**El Dorado to Natividad**	**64.1**	**67.4**	**3.3**	**+3 dB**	**Yes**
E. Boronda Rd.	**Natividad to Independence**	**66.6**	**69.3**	**2.6**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Independence to Hemmingway**	**65.1**	**68.6**	**3.5**	**+1.5 dB**	**Yes**
E. Boronda Rd.	**Hemmingway to Constitution**	**58.2**	**61.3**	**3.0**	**+5 dB or > 60 dB**	**Yes**
E. Boronda Rd.	Constitution to N. Sanborn	60.6	63.8	3.2	+3 dB	No
E. Boronda Rd.	**N. Sanborn to Williams**	**59.6**	**62.7**	**3.1**	**+5 dB or > 60 dB**	**Yes**
El Dorado Dr.	South of E. Boronda	54.1	54.9	0.8	+5 dB or > 60 dB	No
Hemmingway Dr.	South of E. Boronda	54.8	58.8	4.0	+5 dB or > 60 dB	No
Independence Blvd.	South of E. Boronda	60.5	62.1	1.6	+3 dB	No
McKinnon St.	South of E. Boronda	63.6	65.3	1.7	+3 dB	No
N. Main	North of E. Boronda	69.7	69.7	0.0	+1.5 dB	No
N. Main	South of E. Boronda	66.8	67.0	0.2	+1.5 dB	No
N. Sanborn Rd.	South of E. Boronda	56.3	58.9	2.6	+5 dB or	No

ROADWAY	SEGMENT	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
		CUMULATIVE	CUMULATIVE + PROJECT + CASP	CHANGE	CRITERIA[1]	SIGNIFICANT?
					> 60 dB	
Natividad Rd.	**South of E. Boronda**	**63.0**	**67.5**	**4.5**	**+3 dB**	**Yes**
Natividad Rd.	**E. Boronda to Future Russell Rd.**	**64.1**	**67.9**	**3.8**	**+3 dB**	**Yes**
Natividad Rd.	Future Russell Rd. to Rogge	64.1	64.9	0.8	+3 dB	No
Natividad Rd.	North of Rogge	62.0	63.0	1.1	+3 dB	No
Old Stage Rd.	North of Future Constitution	59.1	59.8	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	Future Constitution to Williams	58.0	58.7	0.7	+5 dB or > 60 dB	No
Old Stage Rd.	South of Williams	56.2	57.2	1.0	+5 dB or > 60 dB	No
Rogge Rd.	San Juan Grade to Natividad	61.7	61.7	0.0	+3 dB	No
Russell Rd.	**West of San Juan Grade**	**67.5**	**69.4**	**1.9**	**+1.5 dB**	**Yes**
San Juan Grade Rd.	South of E. Boronda	65.8	66.9	1.1	+1.5 dB	No
San Juan Grade Rd.	E. Boronda to Van Buren	69.3	69.5	0.2	+1.5 dB	No
San Juan Grade Rd.	Van Buren to Russell	69.0	69.3	0.3	+1.5 dB	No
San Juan Grade Rd.	Russell to Rogge	66.0	66.5	0.5	+1.5 dB	No
San Juan Grade Rd.	North of Rogge	63.1	63.8	0.7	+3 dB	No
Van Buren Ave.	West of San Juan Grade	57.3	57.3	0.0	+5 dB or > 60 dB	No
Williams Rd.	West of E. Boronda	64.6	66.8	2.2	+3 dB	No
Williams Rd.	East of E. Boronda	51.7	51.8	0.1	+5 dB or > 60 dB	No

NOTE: [1] WHERE EXISTING NOISE LEVELS ARE LESS THAN 60 DB AN INCREASE OF 5 DB WOULD BE A SIGNIFICANT INCREASE. ADDITIONALLY, ANY INCREASE CAUSING NOISE LEVELS TO EXCEED THE CITY'S NORMALLY ACCEPTABLE 60 DB LDN NOISE LEVEL STANDARD AT AN EXISTING OUTDOOR ACTIVITY AREA OF A RESIDENTIAL USE WOULD ALSO BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 60 DB BUT ARE LESS THAN 65 DB, AN INCREASE OF 3 DB OR MORE WOULD BE SIGNIFICANT. WHERE EXISTING NOISE LEVELS EXCEED 65 DB, AN INCREASE OF 1.5 DB OR MORE WOULD BE SIGNIFICANT. ***BOLD*** *TEXT INDICATES UNACCEPTABLE NOISE INCREASE.*

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2016.

As shown in the above tables, some noise-sensitive receptors located along the Plan Area roadways are currently exposed to exterior traffic noise levels exceeding the City of Salinas 60 dB L_{dn} exterior noise level standard for residential uses. These receptors would continue to experience elevated exterior noise levels with implementation of the proposed project.

In some locations, the proposed project is predicted to cause increases in traffic noise levels which would trigger a new exceedance of the City of Salinas' 60 dB L_{dn} exterior noise level standard at sensitive receptor locations, or exceed the FICON allowable increase criteria outlined in Table 3.7-7. The greatest number of significant traffic noise increases would occur under the Cumulative Plus Project Plus CASP traffic condition.

Significant traffic noise increases under the Cumulative Plus Project Plus CASP traffic condition include the following segments:

- Constitution Blvd., South of E. Boronda – noise levels are predicted to increase by 3.5 dB from 62.2 dB to 65.7 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Main to San Juan Grade – noise levels are predicted to increase by 1.5 dB from 66.5 dB to 68.1 dB L_{dn}. This would equal the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, San Juan Grade to McKinnon – noise levels are predicted to increase by 2.6 dB from 65.3 dB to 67.9 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, El Dorado to Natividad – noise levels are predicted to increase by 3.3 dB from 64.1 dB to 66.1 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Natividad to Independence – noise levels are predicted to increase by 2.6 dB from 66.6 dB to 69.3 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Independence to Hemmingway – noise levels are predicted to increase by 3.5 dB from 65.1 dB to 68.6 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.
- E. Boronda Road, Hemmingway to Constitution – noise levels are predicted to increase by 3.0 dB from 58.2 dB to 61.3 dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- E. Boronda Road, N. Sanborn to Williams – noise levels are predicted to increase by 3.1 dB from 59.6 dB to 62.7dB L_{dn}. This would not exceed the FICON criteria of 5 dB where existing noise levels are less than 60 dB, as outlined in Table 3.7-7, but would cause a new exceedance of the City's 60 dB L_{dn} exterior noise level standard at outdoor activity areas of the nearest residential receptors.
- Natividad Road., South of E. Boronda – noise levels are predicted to increase by 4.5 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7.
- Natividad Road., E. Boronda to Future Russell Road – noise levels are predicted to increase by 3.8 dB from 63.0 dB to 67.5 dB L_{dn}. This would exceed the FICON criteria of +3 dB where no project noise levels are between 60 to 65 dB, as outlined in Table 3.7-7. However, it should be noted that this roadway segment is located between the West Area Specific Plan and Central Area Specific Plan projects and future sensitive receptors along this roadway would be constructed with noise control measures designed to achieve compliance with the City of Salinas exterior and interior noise level standards.

- Russell Road, West of San Juan Grade – noise levels are predicted to increase by 1.9 dB from 67.5 dB to 69.4 dB L_{dn}. This would exceed the FICON criteria of +1.5 dB where no project noise levels are greater than 65 dB, as outlined in Table 3.7-7.

The proposed project would cause increased noise levels exceeding the City of Salinas 60 dB Ldn exterior noise level standard at existing residential receptors. Therefore, there would be a cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the General Plan), would result in a significant cumulative impact related to traffic noise. The proposed project's incremental contribution toward this significant cumulative impact would be cumulatively considerable due to the large number of vehicle trips that would be generated at buildout of the Plan Area.

It is noted that the City's General Plan and General Plan EIR assumes development of the Plan Area for urban uses as part of the FGA buildout. As buildout occurs it will inherently result in an increase in traffic-related noise levels. The City of Salinas certified the Final Environmental Impact Report, Salinas General Plan (City of Salinas, 2002), adopted a statement of overriding considerations relative to this significant and unavoidable impact, and approved the Salinas General Plan.

Implementation of the West Area Specific Plan would have a ***significant cumulative impact*** and a ***cumulatively considerable contribution*** to noise.

POPULATION AND HOUSING

The cumulative context for a cumulative analysis can be defined by region, by political subdivision or by the geography. The cumulative setting for population and housing includes Monterey County. This area was chosen because it represents the area that is reasonably expected to be affected by population and housing changes generated by the proposed project. Monterey County was also the geographic area evaluated under the cumulative analysis contained within the Final General Plan EIR.

Impact 3.8-2: Cumulative impact on the potential to induce substantial population growth in an area (Less than Significant and Less than Cumulatively Considerable)

Continued development in Salinas and Monterey County will result in housing unit and population increases in the region. Future development according to the land uses identified in the Salinas General Plan will result in a population growth of approximately 69,300 people in the City between the years of 2000 and buildout of the General Plan. Based on the growth projected to occur in the planning area, the Final General Plan EIR concluded a potentially significant impact associated with substantial growth is anticipated. However, the Final General Plan EIR concluded that implementation of the mitigation measures contained in the FEIR would reduce the population and housing impacts created by implementation of the General Plan to a less than significant level.

Mitigation measures identified in the Final General Plan EIR would continue to apply to the implementation of the proposed project.

Development of the North of Boronda FGA is a component of the City's planned long-term growth as identified in the City's General Plan. Infrastructure needed to support development of the site and the FGAs, and the subsequent population, housing and employment increases expected through implementation of the West Area Specific Plan, have already been planned and evaluated. Additionally, all lands within the General Plan jurisdiction have been planned to accommodate growth within the City have been evaluated in the General Plan FEIR. The proposed project does not change the intent, intensities, or densities of land uses identified within the General Plan; therefore, development of the Specific Plan Area will not induce growth in the Specific Plan Area, adjacent undeveloped parcels, or within the City of Salinas that has not already been accounted for in the General Plan, and evaluated for environmental impacts by the City in the Final General Plan EIR.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts. The proposed project would not have cumulatively considerable impacts associated with population and housing. As such, implementation of the proposed project would have a ***less than significant*** and ***less than cumulatively considerable*** contribution to impacts to population and housing.

PUBLIC SERVICES

The cumulative setting would include all areas covered in the service areas of the City of Salinas Police Department, City of Salinas Fire Department, City of Salinas Recreation and Community Services Department, the Santa Rita Union School District, Salinas Union High School District, and the Salinas Public Library System. This geographic area was chosen because these service providers would be required to serve the proposed project and contains those service providers that have to potential to bear a cumulative impact from the proposed project, when the proposed project is considered together with all past, present, and probably future projects.

Impact 3.9-6: Under cumulative conditions the proposed project may result in effects on public facilities (Less than Significant and Less than Cumulatively Considerable)

Under cumulative conditions future local and regional growth will result in increased demand for schools, police protection, fire protection, schools, parks/recreation, and library services. The City and its associated service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand.

Under cumulative conditions future local and regional growth will result in increased demand for schools, police protection, fire protection, schools, parks/recreation, and library services. The City and its associated service providers must continue to evaluate the levels of service desired and the funding sources available to meet increases in demand.

The 2002 General Plan Final Program EIR analyzed impacts to public services (including police

protection, fire and emergency services, schools, parks, and libraries), and found that General Plan policies addressed the public services needs of future development resulting from implementation of the General Plan. The specific environmental impact of constructing new facilities could not be determined at the time, but the Final Program EIR found that construction and operation of such facilities could potentially cause significant impacts. These potential impacts, however, were addressed and mitigated to the greatest extent feasible by the General Plan policies and mitigation measures included in Sections 5.1 through 5.12 of the Salinas General Plan Final Program EIR.[2]

The impact fees developed and reviewed by the City will recover future development's proportionate share of capital asset costs. Fees, as applied only to new development, represent future development's proportionate share of public services and facilities capital costs.

However, while new development will avoid project level impacts associated with service ratios to the extent allowed by the associated impact fees, there are existing deficiencies with regard to library services that will need to be addressed by the City in order to meet service goals set forth by the General Plan. It is important to note that impact fees may not be used to correct existing deficiencies, but may be used to pay for increased demand for public facilities or increased demand upon existing capital facilities provided that those facilities are needed to serve additional development and have the capacity to do so, given relevant level-of-service standards.

It is also important to note that, in addressing public service demand issues under CEQA, the appropriate focus is on the environmental effects of whatever steps might be necessary to achieve or maintain adequate service. For example, if proposed new development would create an increased demand for law enforcement or fire protection services, an EIR should inquire as to whether new or expanded physical facilities may be required in order to provide such service. The "impacts" addressed under CEQA are the physical effects of providing service, not any possible failure to provide adequate service under applicable standards. (See *City of Hayward v. Board of Trustees of the Cal. State University* (2015) 242 Cal.App.4th 833, 843 ["[t]he need for additional fire protection services is not an environmental impact that CEQA requires a project proponent to mitigate"]; *Goleta Union School Dist. v. Regents of Univ. of Cal.* (1995) 37 Cal.App.4th 1025, 1031–1034 [school overcrowding attributable to new development is not an environmental effect subject to CEQA, though the physical effects of new facility construction to serve new students would be]; and CEQA Guidelines, § 15131, subd. (a) ["[e]conomic or social effects of a project shall not be treated as significant effects on the environment"].)

Moreover, it is critical to understand that special legal principles apply to impacts to school facilities. According to Government Code Section 65996, the development fees authorized by Senate Bill 50 (1998) (described earlier) are deemed to be "full and complete school facilities mitigation" for impact caused by new development. The legislation also recognized the need for the fee to be adjusted periodically to keep pace with inflation. The legislation indicated that in January 2000, and every two years thereafter, the State Allocation Board would increase the maximum fees according

[2] Sphere of Influence Amendment and Annexation Initial Study, August 2007

to the adjustment for inflation in the statewide index for school construction.

Section 65996 also prohibits public agencies from using CEQA or "any other provision of state or local law" to deny approval of "a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property or any change in governmental organization or reorganization" on the basis of the project's impacts on school facilities.

The construction and operation of future public facilities required to serve cumulative development (including the West Area Specific Plan Area) could potentially cause significant impacts. Cumulative development including additional parkland, schools, library, and other public facilities within the city and service area would contribute to significant and unavoidable cumulative impacts that have been identified within this EIR related to: air quality (Impact 3.1-7), biological resources (Impact 3.2-12), greenhouse gases (Impact 3.4-4), noise (Impact 3.7-8), and transportation and circulation (Impacts 3.10-3, and 3.10-4). Therefore, consistent with the analysis included in this Draft EIR, cumulative impacts related to the construction of public facilities needed to meet future demand are considered ***significant and unavoidable*** *and* ***cumulatively considerable***.

TRANSPORTATION AND CIRCULATION

The cumulative setting for this analysis including the City of Salinas SOI and some nearby areas of unincorporated County (the location of the 56 study intersections under study). This geographic limitation was used because it represents the area that would reasonably be expected to be affected by the proposed project in in combination with past, present, and probable future projects.

The analysis models the overall change in traffic volumes in Salinas as a result of forecast development, with the addition of the proposed project. The intent is to understand how the proposed project will influence travel behavior in light of future conditions, and to identify possible significant future impacts.

The year 2045 is the horizon year for cumulative condition impact analyses. Based on observed volumes in the existing condition, Fehr & Peers used travel behavior forecasting software to estimate and distribute future vehicle traffic onto the roadway network in order to test how the proposed project would impact the transportation network. The roadway network improvements included in the City's General Plan, including the eastside and westside bypasses, are reflected in the cumulative analyses. This reflects the level of development anticipated within the foreseeable future.

Impact 3.10-9: Under cumulative conditions, project implementation would exacerbate levels of service at various facilities within the study (Cumulatively Considerable and Significant and Unavoidable)

Project Plus Cumulative Conditions: As shown in Table 3.10-21, Table 3.10-22, and Table 3.10-23 (as contained within Section 3.10: Transportation and Circulation), implementation of the Specific Plan under the cumulative Plus Project scenario would result in unacceptable operation at

seventeen of the study intersections, and three of the freeway segments. The locations that would operate with unacceptable LOS under the cumulative scenario include the following intersections s:

- U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1): LOS F during the PM peak hour
- U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2): LOS F during the PM peak hour
- Crazy Horse Canyon Road/San Juan Grade Road (#5): LOS F during the PM peak hour
- Hebert Road/San Juan Grade Road (#6): LOS E during the PM peak hour
- Natividad Road/Rogge Road (#12): LOS F during the PM peak hour
- Natividad Road/Russell Road (#13): LOS F during both peak hours
- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during the PM peak hour
- North Main Street/West Laurel Drive (#32): LOS F during the PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during both peak hours
- Constitution Boulevard/East Laurel Drive (#34): LOS E during the PM peak hour
- Old Stage Road/Williams Road/Private Road (#36): LOS F during both peak hours
- North Main Street/East Bernal Drive (#37): LOS E during both peak hours
- Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- South Davis Road/Blanco Road (#53): LOS F during both peak hours
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours
- South Main Street/West Blanco Road/East Blanco Road (#56): LOS D during the AM peak hour and LOS E during the PM peak hour

In addition, the following freeway segments would operate with unacceptable LOS under the cumulative scenario:

- San Juan Road to Crazy Horse Canyon Road (southbound): LOS F during the PM peak hour
- San Miguel Canyon Road to SR 156:
    - Northbound: LOS E during AM peak hour and LOS F during PM peak hour
    - Southbound: LOS E during AM peak hour and LOS F during PM peak hour
- SR 156 to Sala Road (southbound): LOS F during the PM peak hour

With implementation of the mitigation measures provided within Section 3.10: Transportation and Circulation, operation at all seventeen of the affected intersections and each of the freeway segments would be improved. However, even with implementation of these mitigation measures, some of the affected facilities would remain above the applicable threshold.

Project Plus Cumulative with Central Area Specific Plan Conditions: As shown in Table 3.10-26, Table 3.10-27, and 3.10-28 (as contained within Section 3.10: Transportation and Circulation), implementation of the Specific Plan would result in unacceptable operation at twenty-two of the

study intersections, and four of the freeway segments, under the cumulative Plus Project with CASP scenario. A This would be a ***potentially significant*** impact.

The locations that would operate with unacceptable LOS under the cumulative plus project with Central Area Specific Plan scenario include the following intersections:

- U.S. 101 Southbound Ramps/Echo Valley Road/Crazy Horse Canyon Road (#1): LOS F during the PM peak hour
- U.S. 101 Northbound Ramps/Crazy Horse Canyon Road (#2): LOS F during the PM peak hour
- Crazy Horse Canyon Road/San Juan Grade Road (#5): LOS F during the PM peak hour
- Hebert Road/San Juan Grade Road (#6): LOS E during the PM peak hour
- Old Stage Road/Herbert Road (#7): LOS E during PM peak hour
- Natividad Road/Rogge Road (#12): LOS F during the PM peak hour
- Natividad Road/Russell Road (#13): LOS F during both peak hours
- San Juan Grade Road/Van Buren Avenue (#14): LOS F during both peak hours
- North Main Street/Boronda Road (#17): LOS F during the PM peak hour
- Natividad Road/Boronda Road (#22): LOS F during PM peak hour
- North Main Street/West Laurel Drive (#32): LOS F during the PM peak hour
- Natividad Road/East Laurel Drive (#33): LOS F during the PM peak hour
- Constitution Boulevard/East Laurel Drive (#34): LOS F during both peak hours
- North Sanborn Road/Boronda Road (#35): LOS F during PM peak hour
- Old Stage Road/Williams Road/Private Road (#36): LOS F during both peak hours
- North Main Street/East Bernal Drive (#37): LOS E during both peak hours
- Sherwood Drive/Natividad Road/East Bernal Drive/La Posada Way (#38): LOS F during both peak hours
- Williams Road/East Boronda Road (#40): LOS F During PM peak hour
- East Front Street/Sherwood Drive/Market Street (#51): LOS E during PM peak hour
- South Davis Road/Blanco Road (#53): LOS F during both peak hours
- Salinas Street/North Main Street/West Market Street/East Market Street (#55): LOS F during both peak hours
- South Main Street/West Blanco Road/East Blanco Road (#56): LOS E during PM peak hour

In addition, the following freeway segments would operate with unacceptable LOS under the cumulative plus project with Central Area Specific Plan scenario:

- San Juan Road to Crazy Horse Canyon Road:
    - Southbound: LOS F during the PM peak hour
    - Northbound: San Juan Road to Crazy Horse Canyon Road (northbound): LOS E during both peak hours
- Crazy Horse Canyon Road to San Miguel Canyon Road: (southbound) LOS E during the PM peak hour

- San Miguel Canyon Road to SR 156:
  - Northbound: LOS F during both peak hours
  - Southbound: LOS E during AM peak hour and LOS F during PM peak hour
- SR 156 to Sala Road (southbound): LOS F during the PM peak hour

With implementation of the mitigation measures provided within Section 3.10: Transportation and Circulation, operation at all twenty-two of the affected intersections and each of the freeway segments would be improved. However, even with implementation of these mitigation measures, some of the affected facilities would remain above the applicable threshold.

Conclusion: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans. Due to the fact that implementation of the West Area Specific Plan under both cumulative conditions would cause some affected facilities to remain as significant and unavoidable impacts, implementation of the proposed project would have a ***cumulatively considerable*** and ***significant and unavoidable*** contribution to traffic.

UTILITIES

The cumulative setting for each of the utilities impacts is described in the respective impacts, below.

Impact 3.11-4: Cumulative impact on wastewater utilities (Less than Significant and Less than Cumulatively Considerable)

The geographic boundary for cumulative wastewater impacts is development within the wastewater collection and treatment service area of M1W. The M1W service area includes: the cities of Pacific Grove, Monterey, Seaside, Del Rey Oaks, Marina, Salinas, and Castroville; Moss Landing (within unincorporated Monterey County); and farmlands in the Castroville area that received recycled water produced by M1W. This geographic boundary was chosen because it contains the area that has the potential to cause a cumulative wastewater impact to M1W facilities (including the M1W Treatment Plant) and/or City of Salinas sewer facilities.

The proposed project would not exceed the RWQCB wastewater treatment requirements or cause a significant impact related to the construction of new wastewater treatment or collection facilities or expansion of existing facilities. There is sufficient capacity at the M1W Regional Treatment Plant to serve the proposed project.

The City requires each project applicant to secure adequate wastewater treatment capacity. The project applicant(s) are required to provide the City with documentation of a will-serve or other commitment from M1W at the time of development. Additionally, the project applicant(s) will be required to install/connect and/or fund the necessary collection/transmission infrastructure to ensure the appropriate treatment of all wastewater.

The amount of wastewater that the M1W Treatment Plant receives and treats has been decreasing over time. It is projected that wastewater flows to the M1W Treatment Plan will continue to

decrease until approximately the year 2030, when wastewater flows are projected to between 17.1 and 19.2 MGD. Wastewater flows are projected to increase after 2030 and may range between 22.7 and 24.3 MGD by the year 2055, or 77 percent to 82 percent of regional treatment plant design capacity (Brezack & Associates Planning, 2014). Wastewater demand for the buildout of the most recent version of the Economic Development Element is estimated to add approximately 0.65 MGD to this total[3], which would increase the total cumulative demand at the Regional Treatment Plant to approximately 25.0 MGD by 2055, under the worst case scenario modelled. The M1W plant is designed and constructed to handle 29.6 MGD; which is more than 4 MGD than the project 2055 demand, under the worst case scenario modelled. The 1.0 MGD expected to be generated by full buildout of the proposed project would thereby leave approximately 3.6 MGD available in 2055, under the worst case scenario modelled. Moreover, it is more than likely that this represents an overestimate of cumulative wastewater demand, given that this estimate utilizes the higher end of the range of projected wastewater at the M1W Regional Treatment Plant in the future. Additionally, buildout of the Specific Plan is expected to occur over an approximately 20 to 30 year timeframe; therefore buildout is expected to occur no later than approximately 2048 (at latest). Therefore, using the year 2055 as the analysis year serves as a conservative date for buildout of the proposed project. Therefore, this would result in *a* ***less than significant*** impact and ***less than cumulatively considerable*** incremental impact on wastewater utilities.

Impact 3.11-7: Cumulative impact on water utilities (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for the analysis of cumulative impacts on water utilities is the Salinas Valley Groundwater Basin. This is the geographic area that is reasonably expected to be affected by the use of water utilities within the Plan Area.

Water demand from past and present development and from agricultural production activities within the boundary of the groundwater basin has contributed to groundwater overdraft conditions - a significant cumulative impact. Future urban development within the groundwater basin has potential to exacerbate overdraft conditions. However, where new urban development occurs on land in active agricultural use, the potential exists for urban uses to reduce demand for groundwater relative to agricultural uses, as urban uses often demand less water than is required for agricultural irrigation.

In addition to existing agricultural irrigation having contributed to groundwater overdraft, recent trends in the conversion of previously uncultivated land (e.g. range land and open space uses) to cultivated uses in Monterey County indicate that irrigation groundwater demand could be increasing. Data from the California Department of Conservation's Farmland Mapping and Monitoring Program shows that from 2010-2012, approximately 376 acres of agricultural land in Monterey County was converted to urban use. However, during the same period, nearly ten times that amount of land, previously in other uses (e.g. range land, open space, etc.), was converted to agricultural use. During the 2012-2014 period, the acreage of land converted to agricultural use

[3] As provided within the Draft Salinas Economic Development Program EIR

declined. Although no specific studies have been identified, it is possible that demand for groundwater has increased along with increased agricultural activity and that the increase is exacerbating groundwater overdraft conditions.

The proposed project would convert actively cultivated agricultural land to urban use. The proposed project would result in significantly less demand for groundwater than the demand agricultural operations located within the Plan Area, as provided under impact 3.11-6 in this EIR. Though the proposed project represents a long-term commitment to continued use of groundwater supply, it would have a net beneficial cumulative effect reducing the magnitude of groundwater overdraft now occurring within the groundwater basin. A net beneficial effect, of course, is not cumulatively considerable.

As described in the Regulatory Setting in Section 3.14, by approximately 2040, conditions within the groundwater basin must be managed to ensure that the groundwater supply is stable. As such, by that time, overdraft conditions from cumulative demands on groundwater will have been addressed. Moreover, there would be sufficient water resources available to provide supply for buildout of the cumulative scenario, so that no significant cumulative effect on the overall water supply would result from the proposed project .

Under the combined General Plan/General Plan EIR and Economic Development Element buildout conditions, the City of Salinas would see an increased demand for water services. There are available water supplies to serve the proposed project from existing entitlements and resources. Additionally, the proposed project would not cause a significant impact related to the construction of the water system. Buildout of the General Plan and most recent City of Salinas Economic Development Element would add additional demand. Water demand for buildout of the entire City of Salinas Sphere of Influence (inclusive of the proposed project and all existing development within the City of Salinas) would be approximately 43,309.3 AFY. Additionally, water demand for buildout of the Economic Development Element would require an additional 1,972.3 AFY. Combined, the cumulative scenario would require a total of 45,281.6 AFY, which is within the available supply of 47,333 AFY expected by 2035 under multiple dry-year conditions.

TABLE 4.0-5: SALINAS BUILDOUT CONDITIONS WATER GENERATION ESTIMATE [1]

USE	*CALCULATION [1]*	*ACRE FEET PER*
GENERAL PLAN/GENERAL PLAN EIR BUILDOUT CONDITIONS		
Retail/Services	56,053,000 s.f. @ 0.335 gal/s.f./day[2] = 18,777,755 gpd[2]	21,033.6
Residential	87.57 gal/resident @ 3.67 residents/unit = 321.4 gal/unit/day	20,900.5
Schools	310.22 acres @ 3,500 gal/acre/day = 318,325 gpd	1,216.2
Parks	63.61 acres @ 2,232 gal/acre/day = 141,985 gpd	159.0
SUBTOTAL		**43,309.3**
ECONOMIC DEVELOPMENT ELEMENT		
Retail/Services	5,255,959 s.f. @ 0.335 gal/s.f./day = 1,760,746 gpd	1,972.3
TOTAL		**45,281.6**

[1] Calculations in this table are derived from water demand estimates from the Final Supplement for the Salinas General Plan Program EIR, Appendix E, Water Supply Assessment – Cal Water.
[2] Gallons per day

There would be sufficient water resources available to provide supply for buildout of the cumulative scenario, so that no significant cumulative effect on the overall water supply would result. Therefore, this would result in a ***less than significant cumulative*** *impact* and a ***less than cumulatively considerable*** impact on water utilities.

Impact 3.11-9: Cumulative impact on stormwater facilities (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for the analysis of cumulative stormwater facilities is best addressed on a regional/watershed basis. Because water resources are highly interconnected, the cumulative setting is based on Monterey County, which is located in the Central Coast Hydrological Region. With respect to surface waters, some runoff from the Specific Plan Area currently flows to Santa Rita Creek and some runoff flows to Gabilan Creek via existing storm drains. Gabilan Creek flows into the Carr Lake basin, while Santa Rita Creek flows westward and enters the Reclamation Ditch near Castroville. The existing storm drain system, with inlets along Boronda Road at the east side of the Specific Plan Area, currently receives runoff from the Specific Plan Area and will receive some of the future project runoff, conveying it to Carr Lake and the Reclamation Ditch at Carr Lake.

As shown on Figure 3.6-3, predicted flood conditions in the vicinity of the Specific Plan Area are shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels 06053C0207G, 06053C0209G, 06053C0228G, and 06053C0226G. No portion of the Specific Plan Area is located within a 1-percent annual chance flood hazard zone. A small flood hazard area is identified as shaded Zone X and is located in a local depression adjacent to San Juan Grade Road where Santa Rita Creek flows next to the road, across from the Specific Plan Area. Flood conditions in shaded Zone X ("Other Flooded Areas") are limited to less than one-foot depth or less than one acre during the 1-percent annual chance flood and/or are subject to flooding between the 1-percent and 0.2-percent annual chance flood events. The extent of flooding is naturally limited by existing topography. Lands designated as unshaded Zone X are outside of the Special Flood Hazard Areas.

Changes to land surfaces in these areas do not trigger map revisions and no flood insurance requirements are imposed on structures in these areas.

No other parts of the Specific Plan Area are designated as flood prone, and there are no impacts to regulatory floodways or Special Flood Hazard Areas (Zone A or AE) as defined by FEMA. Provided that the storm drain system and detention/retention facilities to be installed as part of the proposed development are adequately sized and properly installed and maintained, additional flooding will not be induced by the proposed project.

Future development projects in the area could result in additional discharges of stormwater during storm events. When combined, these future development projects could, in theory, could lead to an incremental increase in peak stormwater runoff and potential incremental increases in downstream flood elevations. However, in order to ensure that future development projects in the County do not increase downstream flood elevations, the City's Flood Damage Prevention Ordinance outlines the methods of reducing flood losses for subdivisions and other proposed developments via construction standards. The standards apply to all areas of special flood hazards within the jurisdiction of the City of Salinas, including the West Area Specific Plan area.

The West Area Specific Plan includes an extensive system of on-site stormwater collection, treatment and retention facilities to accommodate the increased stormwater flows that would originate in the Specific Plan Area. Surface runoff from the area will be managed via detention/retention basins and flow reducing Best Management Practices (BMPs) to prevent local flooding within the Specific Plan Area. These features will also reduce peak flows from the Specific Plan Area to receiving creeks and storm drains to amounts less than such flows under existing conditions.

The proposed development, including water quality BMPs, and supplemental detention basins, and retention basins, is designed to minimize or eliminate increases in runoff from these new impervious surfaces entering surface water courses and storm drains. The stormwater runoff calculations completed as part of the Hydrology and Water Quality Technical Study indicate that peak runoff and total volume of runoff will be minimized by the proposed development storm drainage design which retains water to the maximum extent possible.

Future development in the area must be sited and designed in accordance with the City's flood regulations. The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within Monterey County), would not be expected to cause any significant cumulative impacts given that mitigation measures require designs that ensure structures are outside the base flood elevation and that storm water flows are maintained to prevent downstream flooding. The construction, maintenance, and operation of all stormwater facilities are not anticipated to cause substantial adverse impacts. The proposed project would not have cumulatively considerable impacts associated with stormwater facilities. Overall, implementation of the proposed project would have a ***less than significant cumulative*** *impact* and ***less than cumulatively considerable*** incremental contribution to impacts to stormwater facilities.

Impact 3.11-11: Cumulative impact on solid waste facilities (Less than Significant and Less than Cumulatively Considerable)

The cumulative context for cumulative impacts on solid waste facilities is the Salinas Valley Solid Waste Authority service area. The Salinas Valley Solid Waste Authority serves a large portion of the Salinas Valley, including the City of Salinas, all or part of the cities of Soledad, Gonzalez, Greenfield, King City, and unincorporated portions of Monterey County.

Solid waste generated in the City is disposed at the Johnson Canyon Landfill. This landfill is permitted through the year 2040 and based upon SVSWA, has a likely lifespan for in excess of the permit. The permitted maximum disposal at the Johnson Canyon Landfill is 1,574 tons per day. Currently, the average daily disposal is approximately 585 tons per day. The total permitted capacity of the landfill is 6.9 million cubic yards.

The Salinas Valley Solid Waste Authority service area is expected to add numerous developments through 2040. The Central Area Specific Plan, East Area Specific Plan, and the Economic Development Element (EDE) are three such areas, located within the City of Salinas. These new areas would generate an estimated 75 to 100 tons per day at total buildout. Buildout of other communities within the Salinas Valley Solid Waste Authority' service area would also affect Johnson County Landfill. These jurisdictions within the region are likely to generate new sources of solid waste that would need to be processed at the landfill. The Johnson Canyon Landfill has the capacity to serve nearly three times as much waste per day as it does currently and will have sufficient capacity to serve communities within the Salinas Valley Solid Waste Authority service area. Implementation of the proposed project would have a less than significant cumulative impact relative to this environmental topic. Therefore, this would result in a ***less than significant*** and a ***less than cumulatively considerable*** impact on solid waste facilities.

4.2 SIGNIFICANT IRREVERSIBLE EFFECTS

LEGAL CONSIDERATIONS

CEQA Section 15126.2(c) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), requires that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Analysis

Implementation of the West Area Specific Plan would result in the conversion of approximately 797 acres of land currently used primarily for agricultural uses into residential, mixed use commercial, community park, neighborhood park, small park and open space facilities. Development of the West Area Specific Plan would constitute a long-term commitment to these uses. It is unlikely that circumstances would arise that would justify the return of the land to its original condition as agricultural land.

A variety of resources, including land, energy, water, construction materials, and human resources would be irretrievably committed for the initial construction, infrastructure installation and connection to existing utilities, and its continued maintenance. Construction of the West Area Specific Plan would require the commitment of a variety of other non-renewable or slowly renewable natural resources such as lumber and other forest products, sand and gravel, asphalt, petrochemicals, and metals.

Additionally, a variety of resources would be committed to the ongoing operation and life of the West Area Specific Plan. The introduction of commercial and industrial uses to the Plan Area will result in an increase in area traffic over existing conditions. Fossil fuels are the principal source of energy and the West Area Specific Plan would increase consumption of available supplies, including natural gas, gasoline and diesel. These energy resource demands relate to initial project construction, project operation and site maintenance and the transport of people and goods to and from the Plan Area.

The commitment of these resources is justified due to the fact the North of Boronda FGA, of which the West Area Specific Plan is a part, has been in the General Plan and overall City planning since 2002. Additionally, the proposed project is in part a response to a market need for housing. California is in the midst of a housing crisis, and the proposed project is consistent with California's legislative findings about the current housing crisis. (See Gov. Code, § 65589.5[a][1][A] ["California has a housing supply and affordability crisis of historic proportions. The consequences of failing to effectively and aggressively confront this crisis are hurting millions of Californians, robbing future generations of the chance to call California home, stifling economic opportunities for workers and businesses, worsening poverty and homelessness, and undermining the State's environmental and climate objectives."].) Therefore, development of the Specific Plan is justified.

4.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

It is noted that the proposed project is consistent with the land uses and densities in the North of Boronda FGAs as established by the Salinas General Plan, for which an EIR was certified *[Final*

Environmental Impact Report, Salinas General Plan (City of Salinas, 2002) and *Final Supplemental for the Salinas General Plan Final Program EIR* (City of Salinas, 2007)].

Under section 15183 and the statute on which it is based, Public Resources Code section 21083.3, CEQA generally applies only to the impacts that are "peculiar to the parcel or to the project" and have not been previously disclosed, except where "substantial new information" shows that previously identified impacts would be more significant than previously assumed. Notably, impacts are considered not to be "peculiar to the parcel or to the project" if they can be substantially mitigated pursuant to previously adopted, uniformly applied development policies or standards. Moreover, lead agencies need not revisit impacts previously addressed as significant effects in the prior EIR. As is discussed in this EIR, the City has determined that, in light of the extensive coverage of particular topics in the General Plan EIR, this EIR need not revisit particular environmental topics.

CEQA Guidelines section 15183 may be used to narrow the range of impacts addressed in an EIR for a project consistent with a local general plan for which an EIR was prepared. As discussed in Section 1.0 Introduction, the following environmental topics, or elements of a topic, were either found to have no impact or be less than significant, or were found to be sufficiently addressed in the General Plan EIR, and thus certain elements of the following topics are not included within individual sections of the Draft EIR: Aesthetics, Agricultural Resources, Geology and Soils, Hazards and Hazardous materials, Land Use and Planning, Mineral Resources, Population and Housing, Recreation, and Transportation. See Section 1.0 for more information.

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the proposed project are discussed in Chapters 3.1 through 3.11 and previously in this chapter (cumulative-level). The following environmental topics were found to have one or more impacts that were found to be significant and unavoidable: Air Quality, Biological Resources, Greenhouse Gases/Climate Change/Energy, Noise, Public Services, and Transportation and Circulation. Those topics are summarized below:

- Impact 3.1-2: Project operation has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation.
- Impact 3.1-7: Cumulative impact on the region's air quality.
- Impact 3.2-9: The proposed project has the potential to interfere with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites.
- Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species.
- Impact 3.4-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

- Impact 3.4-4: Cumulative Impact on climate change from increased project-related greenhouse gas emissions.
- Impact 3.7-1: The proposed project has the potential to increase traffic noise levels at existing receptors.
- Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development.
- Impact 3.9-3: Project implementation may result in in the need for the construction of new schools, which has the potential to cause substantial adverse physical environmental impacts.
- Impact 3.9-4: Project implementation may result in effects on parks, or has the potential to require the construction of park facilities which may cause substantial adverse physical environmental impacts.
- Impact 3.9-6: Under cumulative conditions the proposed project may result in effects on public facilities.
- Impact 3.10-3: Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans.
- Impact 3.10-4: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans.

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5.1 CEQA REQUIREMENTS

CEQA requires that an EIR analyze a reasonable range of feasible alternatives that meet most or all project objectives while reducing or avoiding one or more significant environmental effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice (CEQA Guidelines Section 15126.6[f]). Where a potential alternative was examined but not chosen as one of the range of alternatives, the CEQA Guidelines require that the EIR briefly discuss the reasons the alternative was dismissed.

Alternatives that are evaluated in the EIR must be potentially feasible alternatives. However, not all possible alternatives need to be analyzed. An EIR must "set forth only those alternatives necessary to permit a reasoned choice." (CEQA Guidelines, Section 15126.6(f).) The CEQA Guidelines provide a definition for a "range of reasonable alternatives" and, thus limit the number and type of alternatives that need to be evaluated in an EIR. An EIR need not include any action alternatives inconsistent with the lead agency's fundamental underlying purpose in proposing a project. (In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1166.)

First and foremost, alternatives in an EIR must be potentially feasible. In the context of CEQA, "feasible" is defined as:

> *… capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.* (CEQA Guidelines 15364)

The inclusion of an alternative in an EIR is not evidence that it is feasible as a matter of law, but rather reflects the judgment of lead agency staff that the alternative is potentially feasible. The final determination of feasibility will be made by the lead agency decision-making body through the adoption of CEQA Findings at the time of action on the Project. (Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 477, 489 see also CEQA Guidelines, §§ 15091(a)) (3) (findings requirement, where alternatives can be rejected as infeasible); 15126.6 ([an EIR] must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation").) The following factors may be taken into consideration in the assessment of the feasibility of alternatives: site suitability, economic viability, availability of infrastructure, general plan consistency, other plan or regulatory limitations, jurisdictional boundaries, and the ability of the proponent to attain site control (Section 15126.6 (f) (1)).

Equally important to attaining the project objectives is the reduction of some or all significant impacts, particularly those that could not be mitigated to a less-than-significant level. The following significant and unavoidable impacts of the West Area Specific Plan Project are discussed throughout the individual EIR sections contained in Chapter 3:

- Impact 3.1-2: Project operation has the potential to cause a violation of an air quality standard or contribute substantially to an existing or projected air quality violation.
- Impact 3.1-7: Cumulative impact on the region's air quality.
- Impact 3.2-9: The proposed project has the potential to interfere with the movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites.
- Impact 3.2-12: Cumulative loss of biological resources including habitats and special status species.
- Impact 3.4-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Impact 3.4-4: Cumulative Impact on climate change from increased project-related greenhouse gas emissions.
- Impact 3.7-1: The proposed project has the potential to increase traffic noise levels at existing receptors.
- Impact 3.7-8: Cumulative exposure of existing and future noise-sensitive land uses to increased noise resulting from cumulative development.
- Impact 3.9-3: Project implementation may result in the need for the construction of new schools, which has the potential to cause substantial adverse physical environmental impacts.
- Impact 3.9-4: Project implementation may result in effects on parks, or has the potential to require the construction of park facilities which may cause substantial adverse physical environmental impacts.
- Impact 3.9-6: Under cumulative conditions the proposed project may result in effects on public facilities.
- Impact 3.10-3: Under Cumulative Plus Project conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans.
- Impact 3.10-4: Under Cumulative Plus Project with Central Area Specific Plan conditions, implementation of the proposed Specific Plan may conflict with the transportation performance measures established by the City of Salinas, Monterey County, and Caltrans.

PROJECT OBJECTIVES

The underlying purpose of the proposed project is the approval and subsequent implementation of the proposed West Area Specific Plan and related entitlements. Proposed land uses in the 797-acre Specific Plan Area include residential, mixed use commercial, community park, neighborhood parks, small parks, schools and open space (including supplemental storm water detention/retention basins). Implementation will involve development of the site under the New

Urbanism Zoning Districts of Neighborhood Edge (NE)/Low Density Residential, Neighborhood General 1 (NG-1)/Low/Medium Density Residential, Neighborhood General 2 (NG-2)/High Density Residential, Village Center (VC) as well as the Public and Semipublic (PS), Parks (P), and Open Space (OS) Zoning Districts. A Specific Plan Overlay District will also apply to each of the Zoning Districts. These Zoning Districts are further described below.

Quantifiable Objectives

The quantifiable objectives of the proposed project include the development of up to 4,340 residential dwelling units (with a minimum of 3,553 required under the General Plan), up to 571,500 square feet of commercial/mixed use building area, and up to 177 acres of public facilities (including three elementary schools, a high school, a middle school, open space (including supplemental detention/retention basins) and 11 parks).

Specific Plan Goals/Objectives

The Specific Plan includes goals, which are a description of some desired future condition, as a basis for policies, implementation measures, and other tools used for achieving the goals. The goals for the Specific Plan are based on the Salinas General Plan, especially as it applies to the North of Boronda FGA and the principles of New Urbanism developed by the City. The design principles of Crime Prevention through Environmental Design (CPTED), Health in all Policies, Smart Growth and Green building/streets are also included to promote the creation of a vibrant, healthy, walkable, safe and sustainable community. The City's National Pollutant Discharge Elimination System (NPDES) Permit, Storm Water Development Standards (SWDA) and Storm Water Standard Plans (SWSP) are also addressed in the design.

The Specific Plan's goals are as follows:

- Create a community with a compact form that promotes sustainable neighborhood design and is pedestrian, bicycle, and transit friendly.
- Provide a variety of land uses in easy walking distance of housing including a mixed-use village, parks, and schools to reduce vehicle miles travelled.
- Provide parks and other public green space in accordance with General Plan standards that are designed to be safe and easily accessible to residents.
- Provide a balance of low density, medium density, and high density housing to provide a variety of housing options for residents at various life stages.
- Provide public services and infrastructure improvements that achieve and maintain City service standards.

These Specific Plan goals functionally represent project objectives as required by CEQA Guidelines section 15124, subdivision (b).

Overarching Project Objectives

It is noted that there are additional project objectives that are not specifically presented in the Specific Plan, but are more overarching and are a response to, and driven by, the policy direction from the State Legislature and the Salinas City Council.

The State Legislature has declared that "*California has a housing supply and affordability crisis of historic proportions. The consequences of failing to effectively and aggressively confront this crisis are hurting millions of Californians, robbing future generations of the chance to call California home, stifling economic opportunities for workers and businesses, worsening poverty and homelessness, and undermining the state's environmental and climate objectives*." Government Code section 65589.5. The legislature notes that "*California housing has become the most expensive in the nation. The excessive cost of the state's housing supply is partially caused by activities and policies of many local governments that limit the approval of housing, increase the cost of land for housing, and require that high fees and exactions be paid by producers of housing."* The legislature further found that "*Among the consequences of those actions are discrimination against low-income and minority households, lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration*." The legislative intent of Government Code section 65589.5 is to "*significantly increase the approval and construction of new housing for all economic segments of California's communities by meaningfully and effectively curbing the capability of local governments to deny, reduce the density for, or render infeasible housing development projects and emergency shelters. That intent has not been fulfilled*." The State Legislature established their policy direction in the statute as follows: "*It is the policy of the state that this section should be interpreted and implemented in a manner to afford the fullest possible weight to the interest of, and the approval and provision of, housing*."

The City of Salinas has recognized the need for additional housing supply for its citizens for many decades. Dating back to 1986, the City entered into the Boronda Memorandum of Understanding (MOU) with the County of Monterey to preserve the best agricultural land and to provide certain areas for future urban growth. Twenty years later, in 2006, the Greater Salinas Area MOU was adopted to preserve agricultural lands within Monterey County, and to provide future growth areas (FGSs) for Salinas. A year later, in 2007, applications for an amendment to the City's Sphere of Influence (to include the FGAs) and Pre-Zoning and Annexation (for the majority of the North of Boronda FGA consisting of approximately 2,400 acres) were submitted to the Monterey County Local Agency Formation Commission (LAFCO) for consideration. A Supplemental EIR for the Salinas General Plan Final Program EIR (SCH#2007031055) was also submitted in conjunction with the applications. The applications were approved by LAFCO on May 19, 2008. The North of Boronda FGA (which includes the West Area Specific Plan) was formally annexed to the incorporated City of Salinas on September 8, 2008 and zoned New Urbanism Interim (NI) with a Specific Plan Overlay. The West Area Specific Plan is a reflection of over thirty years of planning for new development, which is reflected by the City Council's approval of the FGA, including annexation of the land into the City limits.

The following two overarching project objectives are presented here as a response to: 1) the State Legislature's declaration of a housing crisis in California, 2) the State Legislature's policy direction for the provision of more housing, 3) the Salinas City Council's more than 30 years of planning for urban development within the FGAs, which includes the West Area Specific Plan, and 4) the Salinas City Council's policy direction as provided in the approved FGAs and General Plan:

- Objective 1: Respond to the State Legislature's declaration of a housing crisis in California, and their policy direction that local governmental agencies provide more housing, by including provisions for the construction of new housing supply within the West Area Specific Plan.
- Objective 2: Respond to the Salinas City Council's long-term vision and policy direction for new urban development to be focused in the Future Growth Areas, by including provisions the construction of new urban development consistent with the City of Salinas General Plan.

5.2 ALTERNATIVES CONSIDERED IN THIS EIR

Four alternatives to the proposed project were developed based on input from City staff, the public during the NOP review period, and technical analyses performed to identify the environmental effects of the proposed project. The alternatives analyzed in this EIR include the following four alternatives in addition to the proposed project that is described in Section 2.0, Project Description.

- No Project (No Build) Alternative
- Reduced Land Area Project Alternative
- Reduced Residential Intensity/Density Project Alternative
- Smaller-Scale Project Alternative

NO PROJECT (NO BUILD) ALTERNATIVE

The CEQA Guidelines (Section 15126.6[e]) require consideration of a no project alternative that represents the existing conditions, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved. For purposes of this analysis, the No Project (No Build) Alternative assumes that development of the Plan Area would not occur, and the Plan Area would remain in its current agricultural condition. It is noted that the No Project (No Build) Alternative would fail to meet the project objectives identified for the West Area Specific Plan and is inconsistent with the goals of the General Plan for the future growth areas of the City.

REDUCED LAND AREA PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be developed with the same components as described in the Project Description, but the area utilized for the development (i.e., the project footprint) would be reduced by approximately 20 percent. Under this alternative, approximately 162 acres

of land in the northeast corner of the Plan Area would be removed. This removed area would include the 52.85-acre Mortensen property (APN 21101108) and the 108.32-acre Madolora/Global property (APN 21101109), which are shown on Figure 5.0-1. The resultant Plan Area would include approximately 635 acres. The proposed land uses within this area identified for removal under this alternative would be incorporated into the remaining 635 acres of the Plan Area, which would increase the residential density of the Plan Area under this alternative, while retaining the same number of residences, mixed use commercial areas, schools, parks, etc. as the proposed project. This alternative would establish a site for a third 10.0-acre elementary school to be developed by the Santa Rita Union School District (District). However, if the District decides against the elementary school siting, the area would instead be residential units.

Under this alternative the average residential density (units per net acre) would increase from 9.0 to approximately 11.3 units/acre. It is assumed that the number of Neighborhood Edge (NE) parcels would be reduced, and the number of Neighborhood General 1 (NG-1) parcels would increase. The proposed Village Center would remain unchanged under this alternative, and would still include up to 571,500 square feet of mixed use commercial floor area and a minimum of 91 dwelling units.

REDUCED RESIDENTIAL INTENSITY/DENSITY PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be developed with a reduction in the overall residential intensity/density while maintaining the approximate overall project footprint. For the purposes of discussion, this option considers a 25 percent reduction in the intensity/density of the residential components of the project while maintaining the approximately 797-acre project footprint. This would result in fewer residential lots, but larger lot sizes. This alternative would result in up to 3,255 residential units. This alternative would retain the approximately 571,500 square feet of mixed commercial uses, the five proposed schools (three elementary, one middle, and one high school), and the same acreage of parks and detention basins as the proposed project.

Under this alternative, the average residential density (units per net acre) would decrease from 9.0 to approximately 6.8 units/acre. It is assumed that the number of Neighborhood Edge (NE) parcels would be increased, and the number of Neighborhood General 1 (NG-1) and Neighborhood General 2 (NG-2) parcels would increase. The proposed Village Center would remain unchanged under this alternative, and would still include up to 571,500 square feet of mixed use commercial floor area and a minimum of 91 dwelling units.

This alternative, based upon residential overall density, is inconsistent with the Salinas General Plan's standards for the Plan Area, which require a minimum of 3,553 residential units within the Plan Area, and the incorporation of New Urbanism concepts which mandates that new residential development have a minimum average density of 9 dwelling units per net residential acre. A General Plan Amendment would be required.

SMALLER-SCALE PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be reduced by approximately 33 percent and the proposed residential and non-residential uses would also be reduced by approximately 33 percent. For the purposes of discussion, this alternative assumes that approximately 264 acres of land along the entire eastern boundary of the Plan Area would be removed and remain as undeveloped agricultural land. The resultant Plan Area under this alternative would be approximately 533 acres in size, and include up to 2,908 residential units, up to 382,905 square feet of commercial/mixed use building area, and up to 119 acres of public facilities (including two elementary schools, a high school, a middle school, open space (including supplemental detention/retention basins) and up to 8 parks). The number of residential units under this alternative would not meet the minimum of 3,553 residential units as provided within the City of Salinas General Plan. The residential densities under this alternative would be similar to the proposed Project.

Table 5.0-1 provides a summary of each alternative's tendency to meet the project objectives.

TABLE 5.0-1: ABILITY OF ALTERNATIVES TO MEET PROPOSED PROJECT OBJECTIVES

PROJECT OBJECTIVES	*NO PROJECT (NO BUILD) ALTERNATIVE*	*REDUCED LAND AREA PROJECT ALTERNATIVE*	*REDUCED RESIDENTIAL INTENSITY/ DENSITY ALTERNATIVE*	*SMALLER-SCALE PROJECT ALTERNATIVE*
Create a community with a compact form that promotes sustainable neighborhood design and is pedestrian, bicycle, and transit friendly	No	Yes	No	Yes
Provide a variety of land uses within easy walking distance of housing, including a Mixed Use Village Center, parks, and schools, to lower vehicle miles travelled	No	Yes	Yes	Yes
Provide parks and other public green space in accordance with General Plan standards that are designed to be safe and easily accessible to residents	No	Yes	Yes	Yes
Provide a balance of low density, medium density, and high density housing to provide a variety of housing options for residents at various life stages	No	Yes	No	Yes
Provide public services and infrastructure improvements that achieve and maintain City service standards.	No	No	Yes	No
Provide an inviting tree-lined street system which incorporates	No	Yes	Yes	Yes

traffic calming and other measures				
Establish an interconnected sidewalk/pathway and open space system throughout the development which links to the greater FGA and City as a whole	No	No	Yes	No
Create a sense of place and unique identity through the use of entry treatments, landscaping, streetscapes, public art, decorative street lighting, pedestrian amenities and other elements	No	Yes	Yes	Yes
Provide a reasonable jobs/housing balance	No	Yes	No	Yes
Provide for site/parcel-based post-construction Stormwater Control Measures (SCMs)/LID to the maximum extent practicable	No	Yes	Yes	Yes

ALTERNATIVES NOT SELECTED FOR FURTHER ANALYSIS

A Notice of Preparation was circulated to the public to solicit recommendations to help the City formulate a reasonable range of alternatives to the proposed project for inclusion in this Draft EIR. Additionally, a public scoping meeting was held during the public review period to solicit recommendations for a reasonable range of alternatives to the proposed project. No specific alternatives were recommended by commenting agencies or the general public during the NOP public review process.

CEQA Guidelines section 15126.6(f)(2) describes conditions under which consideration of alternative project location is appropriate. The key question to be considered is whether or not any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location and whether the proposed project, placed at an alternative location, is environmentally superior to the proposed project. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in an EIR.

The City of Salinas considered alternative locations early in the Draft EIR preparation process. The City's key considerations in identifying an alternative location were as follows:

- Is there an alternative location where significant effects of the project would be avoided or substantially lessened?
- Is there a site available within the City's Sphere of Influence with the appropriate size and characteristics such that it would meet the basic project objectives?

The City's consideration of alternative locations for the project included a review of previous land use planning and environmental documents in Salinas, including the General Plan. The City found that there are three potential alternative locations that exist within the City's Sphere of Influence with the appropriate size and characteristics that would meet the basic project objectives. These alternative project locations are shown on Figure 5.0-2. However, upon further screening, these alternatives were determined to be unsuitable or viable alternative project locations, as described below.

Alternative Location 1 - Central Area Specific Plan

As shown on Figure 5.0-2, the Central Area Specific Plan area encompasses approximately 792 acres of land immediately east of the West Area Specific Plan, within the City's Future Growth Area. The City is currently processing an application for the Central Area Specific Plan, which is anticipated to include between 3,419 and 3,983 residential units, approximately 250,000 square feet of retail and office uses, three schools, and various parks, civic buildings, and supporting infrastructure. Given that this alternative location site is currently the subject of an active application with the City, and preparation of a specific plan for this area is currently underway, this alternative location was rejected for further analysis and consideration in this EIR. Notably, the City's General Plan contemplates full development of both the West Area Specific Plan and the Central Area Specific Plan.

Alternative Location 2 - East Area Specific Plan

As shown on Figure 5.0-2, the East Area Specific Plan area encompasses approximately 879 acres of land to the east of the West Area Specific Plan and immediately east of the Central Area Specific Plan, within the City's Future Growth Area. Preparation of a detailed specific plan for this area is anticipated to occur in the future. The East Area Specific Plan may accommodate up to 4,000 residential units, approximately 22 acres of village center/commercial, and extensive areas of habitat preservation. The East Area Specific Plan includes the Natividad Creek corridor, which has areas of ecological sensitivity. A grove of heritage Oaks are also located within this area. Development of the proposed West Area Specific Plan on the East Area Specific Plan site would not reduce or avoid any of the significant environmental impacts identified for the West Area Specific Plan in this EIR. Additionally, this area is subject to a future specific plan that will guide growth and development of this portion of the City's Future Growth Area. Notably, the City's General Plan contemplates full development of the East Area Specific Plan, as well as both the West Area Specific Plan and the Central Area Specific Plan. For these reasons, this alternative location was rejected for further analysis and consideration in this EIR.

Alternative Location 3 - Eastern Future Growth Area

As shown on Figure 5.0-2, Alternative Location 3 encompasses approximately 863 acres of land generally to the south of the East Area Specific Plan, between Williams Road and Bardin Road, within the City's Future Growth Area. A large part of the southern portion of this alternative location site would overlap with the Salinas Municipal Airport Area of Influence, as shown in Figure 5.0-2, which could create incompatibility between residential uses and noise from aircraft and airport operations. Additionally, over half of this area is identified in the City General Plan as

Industrial land uses, and conversion to primarily residential development would eliminate critical future job-generating land uses in the City, which would be inconsistent with the Economic Development Element adopted in 2017. Such a change in land uses would also necessitate a General Plan Amendment. Development of this Plan Area would not reduce or eliminate any significant environmental impacts, would likely add additional concerns and would require the City to consider residential land uses in an area that is intended for industrial uses.

5.3 ENVIRONMENTAL ANALYSIS

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR. Following the analysis of each alternative, Table 5.0-10 summarizes the comparative effects of each alternative.

NO PROJECT (NO BUILD) ALTERNATIVE

This alternative assumes that development of the Plan Area would not occur, and the Plan Area would remain in its current agricultural condition. It is noted that the No Project (No Build) Alternative would fail to meet the project objectives identified for the West Area Specific Plan and is inconsistent with the goals of the General Plan for the future growth areas of the City.

Air Quality

As a result of development in Monterey County, the North Central Coast Air Basin (NCCAB) would continue to experience increases in criteria pollutants. Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. The County has a national designation of unclassified or attainment for all criteria pollutants.

The West Area Specific Plan would result in increased emissions primarily from area source and mobile source emissions associated with project implementation. The Monterey Bay Air Resources District (MBARD) has established operations related emissions thresholds of significance and it was determined that annual unmitigated emissions of ROG, NOx, and PM_{10} exceed the MBARD thresholds of significance. Even with basic mitigation incorporated into the model, the West Area Specific Plan project would exceed the thresholds of significance for these criteria pollutants.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2012-2015 Air Quality Management Plan*. As is currently proposed, the West Area Specific Plan is expected to be built out under a staged approach, and all mitigation would be applicable throughout all stages of the buildout. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance and it was determined that the West Area Specific Plan would have a *cumulatively considerable contribution* and *significant and unavoidable* impact on the region's air quality.

Under the No Project (No Build) Alternative, the Plan Area would not be developed, and there would be no net change in emissions and no potential for a conflict with any adopted plans or policies related to air quality. As such, the project level and cumulative impacts would be greatly reduced when compared to the proposed project.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the West Area Specific Plan project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The West Area Specific Plan project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The West Area Specific Plan project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures were developed to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance, and that there be a no net loss of wetlands (1:1 minimum replacement ratio). The permit process ensures that minimization and compensation at a 1:1 ratio is incorporated into the activity. It has been found in this EIR that with the implementation of mitigation measures, the project would not have substantial adverse effects, directly or indirectly, on protected wetlands and jurisdictional waters.

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

The Specific Plan Area is used predominantly for active agricultural production, which generally prohibits most overland wildlife movement due to the lack of suitable vegetative cover. The exception is the irrigation and roadside ditches that drain irrigation runoff. This network of irrigation ditches throughout the Specific Plan Area provides some aquatic linkage and potential movement corridors for special-status species documented in the vicinity, including CTS and CRLF, which are rare within the Bioregion. The roadside ditches located along Boronda Road and San Juan Grade Road also provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris.

Development of the proposed project would eliminate any movement habitat through the Specific Plan Area, along with any upland habitat adjacent to the movement corridors. This permanent loss of movement habitat was determined to be a significant and unavoidable impact. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this loss of movement/migration habitat. Given the rareness of CTS and CRLF in the Bioregion, the incremental loss of movement habitat from the proposed project, when considered alongside all past, present, and probable future projects (inclusive of all communities within the Bioregion), is a cumulatively considerable contribution and significant and unavoidable impact.

Under the No Project (No Build) Alternative, the West Area Specific Plan would not be constructed, no habitat would be removed, no wetlands disturbed, and no ground disturbing activities would occur. The Plan Area would remain open to migration, foraging, nesting, and other uses by wildlife. Therefore, potential for impacts to biological resources would be eliminated under the No Project (No Build) Alternative. Impacts to biological resources would be reduced as compared to the proposed project.

Cultural Resources

No cultural resources were identified within the West Area Specific Plan Area, according to maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and three previous cultural resource inventories, which have examined the area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and/or historical resource or human remains. Implementation of the mitigation measures incorporated into this EIR would reduce impacts associated with unknown cultural resources where they to be found.

The No Project (No Build) Alternative would continue to result in ground disturbing activities associated with the agricultural operations (i.e., soil tilling); however, because the ground disturbance associated with farming has occurred for an extended period of time with no cultural resources being found it is anticipated that the continuation of these operations under this alternative would have a significantly reduced potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. While the West Area Specific Plan is not anticipated to result in significant impacts to cultural resources, the No Project (No Build) Alternative would result in slightly less potential for impacts to cultural resources as the entire Plan Area would continue to be used for agriculture production.

Greenhouse Gases and Climate Change

Given the size and scope of development of the West Area Specific Plan, both construction and operational GHG emissions generated by development of the West Area Specific Plan are expected to have a significant impact on the environment. The overall annual GHG emissions associated with the West Area Specific Plan would be reduced with mitigation. However, even with mitigation applied, the West Area Specific Plan would exceed the construction and operational thresholds established for the proposed project. However, with mitigation, the West

Area Specific Plan would not conflict with the applicable GHG-related plans, policies, and regulations. Nevertheless, the West Area Specific Plan would have an individual and cumulative impact related to greenhouse gases and climate change that is significant and unavoidable.

Under the No Project (No Build) Alternative, the Plan Area would not be developed, and there would be no net change in emissions and no potential for a conflict with any adopted plans or policies related to GHG reductions. As such, this impact would be reduced when compared to the proposed project. This does not necessarily mean, however, that the No Project Alternative represents a better long-term policy outcome for climate than the proposed project. California has a large housing need, and new housing will have to be built somewhere, if not on the project site. As the California Supreme Court explained, "[g]iven the reality of growth, some greenhouse gas emissions from new housing and commercial developments are inevitable. The critical CEQA question is the cumulative significance of a project's greenhouse gas emissions, and from a climate change point of view it does not matter where in the state those emissions are produced." (*Center for Biological Diversity v. California Dept. of Fish and Wildlife* (2015) 62 Cal.4th 204, 220-221.)

Hazards and Hazardous Materials

The Plan Area is currently agricultural land, used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. Several small clusters of buildings located on the northern, western, and eastern edges of the Plan Area include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the site has the potential for certain environmental conditions related to pesticide and herbicide application that may have caused these chemicals to be present in the soil. The Phase 1 Environmental Site Assessment (ESA) identified the following chemicals in connections with the Project site: OCPs, arsenic, PCBs, and TPH. Additionally, the West Area Specific Plan includes components which would likely use a variety of hazardous materials including: paints, cleaners, and cleaning solvents.

There would be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by Environmental Health Division of the County of Monterey Health Department. However, under the No Project (No build) Alternative, there would be no new release of these materials into the environment, since the Plan Area would not be modified for development.

Under the No Project (No Build) Alternative, no new land uses would be introduced to the Plan Area, and the potential for hazardous material release in the Plan Area would be reduced. Ongoing pesticide use would occur within the area to remain in agriculture, and this has the potential to generate negative health effects on existing residents located in the areas south and west of the Plan Area. However, there would not be long-term potential for hazards associated with use and generation of household and commercial hazardous wastes, because development

would not occur. While the West Area Specific Plan is not anticipated to result in significant impacts associated with hazards and hazardous materials, the No Project (No Build) Alternative would result in less potential for impacts.

Hydrology and Water Quality

Implementation of the West Area Specific Plan has the potential to result in the violation of water quality standards and waste discharge of pollutants into surface waters during both construction and long-term operations. Construction operations could result in temporary increases in runoff, erosion, sedimentation, soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The long-term operation of the West Area Specific Plan could result in long-term impacts to surface water quality from urban stormwater runoff and could enter groundwater or surface water systems. Additionally, the proposed project would result in new impervious surfaces that could reduce rainwater infiltration and groundwater recharge. Mitigation measures incorporated into the project would reduce potential water quality impacts to a less than significant level. The West Area Specific Plan would not place persons or structures in a flood hazard zone.

Under the No Project (No Build) Alternative, potential new water quality impacts from construction and operation of the West Area Specific Plan would be eliminated. Under this alternative, the land would be kept in its present state with the majority of the Plan Area either fallow land or being used for agricultural purposes. The No Project (No Build) Alternative would have a greater chance of groundwater recharge because it does not introduce large areas of impervious surfaces as would the West Area Specific Plan. However, the beneficial impact of reducing the consumptive use of water by 2,078 AFY (Cal Water, 2015) would not exist. This is a significant contribution in reducing overdraft in the Salinas Valley Ground Water basin.

The potential to result in the violation of water quality standards would be reduced under this alternative as compared with the proposed project. However, there are some instances where the No Project (No Build) Alternative would have greater discharges of certain pollutants (such as erosion, sedimentation, pesticides release, etc.) when compared to the proposed project. Nevertheless, overall, potential impacts related to hydrology and water quality would be reduced under this alternative.

Noise

Some existing noise-sensitive receptors located near the Plan Area are currently exposed to exterior traffic noise levels exceeding the 60 dB L_{dn} exterior noise level standard for residential uses. In some locations, the noise levels are predicted to increase to levels that would trigger a new exceedance of the 60 dB L_{dn} exterior noise level standard, or exceed the FICON allowable increase criteria. A mitigation measure has been incorporated into the project to ensure that the project applicant consider repaving affected roadway segments, which is anticipated to reduce traffic noise levels along affected roadways.

The proposed project has the potential to expose new sensitive receptors to excessive noise. Several mitigation measures have been incorporated into the project to ensure that the potential

noise impacts to new sensitive receptors is mitigated. For instance, there are measures that require sound walls and/or landscaped berms as a form of attenuation for traffic noise. There are also measures that address stationary sources (i.e. generators, mechanical equipment, etc.) to ensure that they do not adversely affect sensitive receptors. Lastly, there are measures that address business operations (i.e. loading docks, truck routes, etc.) to ensure that they do not adversely affect sensitive receptors.

The proposed project has the potential to increase noise levels and vibration levels associated with construction activities. Mitigation measures have been incorporated into the project to require construction activities that limit construction to the least noise sensitive times of the day/week, and to ensure that all equipment would be fitted with factory-equipped mufflers.

Existing agricultural activities within the Plan Area sometimes involve on-going noise sources such as agricultural equipment (i.e. tractors, harvesters, plantors, etc.). Such noise sources are part of the existing ambient noise levels in the Plan Area. Under the No Project (No Build) Alternative, the Plan Area would not be developed and there would be no potential for new noise sources; however, existing noise from agricultural operations would continue. As such, this alternative would have less impact relative to the proposed project.

Population and Housing

The City anticipates growth within the community over time, and has responded to the anticipated growth by establishing a Future Growth Area (FGA). The FGA was established through a community process that focused on allowing new development to specific areas of the city that have been determined to have adequate infrastructure and resources to accommodate the growth. The Plan Area is within the North of Boronda FGA, and the West Area Specific Plan is a planning document that implements the City's intent to focus new development, and the growth that goes along with the new development, into the FGA. The West Area Specific Plan would not displace substantial numbers of existing housing and/or substantial numbers of people, but would instead provide new housing consistent with the City's General Plan. The West Area Specific Plan does not divide the community, but rather, it is an extension of the existing community.

Under the No Project (No Build) Alternative, the Plan Area would not be developed and the Plan Area would not accommodate the City's anticipated growth. Growth would still be anticipated to occur within the region, but it would not be accommodated in the FGA which has undergone extensive planning efforts by the City and community for over a decade. This would not be consistent with the FGA and General Plan. The City would need to look to other undeveloped areas of the region to develop for new housing, which would be expected to have environmental impacts that have not yet been assessed, but could well be worse than those of the West Area Specific Plan, particularly with respect to prime agricultural land, which is abundant in the region. Overall, this alternative would have a greater impact when compared to the proposed project.

Public Services

New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The West Area Specific Plan project

incorporates sites for new schools and parks. A new fire station will be built within the Central Area Specific Plan to accommodate buildout of the North of Boronda FGA, including the Plan Area. The Plan Area is currently served by Station 6 located at 45 East Bolivar Street. The City has indicated that a new public safety facility is needed to meet the needs of the City in the long-term, although West Area Specific Plan project does not directly trigger the need for a new facility. Additional staff and equipment for fire and police services will be warranted.

Mitigation measures have been incorporated into the project that require payment of impact fees to the City and other public agencies to ensure that the West Area Specific Plan project does not have adverse financial impacts on these agencies. The West Area Specific Plan includes land for schools and parks to ensure the increased demand for these services is met within the Plan Area.

Under the No Project (No Build) Alternative, there would be no increased demand for police, fire, schools, parks, or other public services. Alternatively, this alternative would result in no new school or park facilities, which are designed to accommodate more than the demand that is generated by the West Area Specific Plan. Overall, this alternative would have a slightly greater impact to public services when compared to the proposed project.

Transportation and Circulation

Implementation of the West Area Specific Plan would cause an increase in traffic on roadway segments, intersections and ramp junctions that would cause traffic operations to degrade to an unacceptable level of service. Mitigation measures have been incorporated into the project to reduce these traffic impacts to a less than significant level. In some cases, the cumulative traffic conditions on roadway segments, intersections and ramp junctions are anticipated to degrade to an unacceptable level of service. The project applicant(s) will be required to make certain traffic improvements and pay traffic impact fees, but some of these cumulative impacts will remain significant and unavoidable.

Under the No Project (No Build) Alternative, there would be no new traffic generated within the Plan Area. This alternative would also not result in new traffic improvements on the City's roadway system and it would not result in payments of traffic impact fees into the City's CIP program that would be used for the roadway system. Existing deficiencies in the traffic system would not receive the benefit of improvements to improve existing deficiencies; however, this would be more than offset by the fact that there would be no new contribution to degrading traffic levels of service at a project and cumulative level. Overall, this alternative would have less of an overall traffic impact than the proposed project. Still, the growth for which there is market demand would still be anticipated to occur somewhere else within the region, possibly in areas that could result in transportation effects worse than those of the West Area Specific Plan.

Utilities

Implementation of the West Area Specific Plan could result in potentially significant impacts to the utility systems including wastewater, water, storm water drainage, and solid waste providers. Mitigation measures have been incorporated into the project to ensure that capacity is available and any impacts from increased demand are reduced.

The proposed project would replace agricultural water uses with urban water uses. An estimated 90% of the land in the Plan Area or 720 acres is presently used to grow irrigated crops – lettuce and various vegetables (strawberries, broccoli, cauliflower, and alfalfa). The estimated total amount of West Area Specific Plan consumptive water use at buildout would be 941 AFY. The estimated total amount of water consumptively used in the Plan Area for irrigating crops is 3,024 AFY. Therefore, conversion of the Plan Area from agricultural to urban land use could result in an estimated reduction of consumptive groundwater use (or increase in groundwater storage) of 2,078 AFY (Cal Water, 2015). This is a significant contribution in reducing overdraft in the Salinas Valley Ground Water basin. This beneficial impact would not exist under the No Project (No Build) Alternative.

Under the No Project (No Build) Alternative, the Plan Area would not have an increased demand for wastewater, storm drainage, or solid waste disposal. There would be no new impacts on these utilities and there would be no need to construct new infrastructure. Therefore, overall, the impact on wastewater, solid waste, and storm drainage would be reduced under this alternative.

In conclusion, the No Project (No Build) Alternative would not result in a beneficial impact to groundwater recharge. However, this alternative would decrease the amount of solid waste and wastewater generated at the site, and would not require construction of new utilities infrastructure. Overall, the No Project (No Build) Alternative would not add new impacts to wastewater, storm drainage, or solid waste disposal systems, but would not result in the beneficial impacts to the groundwater system.

REDUCED LAND AREA PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be developed with the same components as described in the Project Description, but the area utilized for the development (i.e., the project footprint) would be reduced by approximately 20 percent. Under this alternative, approximately 162 acres of land in the northeast corner of the Plan Area would be removed. The average residential density (units per net acre) would increase from 9.0 to approximately 11.3 units/acre. It is assumed that the number of NE parcels would be reduced, and the number of NG-1 parcels would increase. The proposed Village Center would remain unchanged under this alternative, and would still include up to 571,500 square feet of mixed use commercial floor area and a minimum of 91 dwelling units.

Air Quality

As a result of development in Monterey County, the North Central Coast Air Basin (NCCAB) would continue to experience increases in criteria pollutants. Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. The County has a national designation of unclassified or attainment for all criteria pollutants.

The West Area Specific Plan would result in increased emissions primarily from area source and mobile source emissions associated with project implementation. The Monterey Bay Air Resources District (MBARD) has established operations related emissions thresholds of

significance and it was determined that annual unmitigated emissions of ROG, NOx, and PM_{10} exceed the MBARD thresholds of significance. Even with basic mitigation incorporated into the model, the West Area Specific Plan project would exceed the thresholds of significance for these criteria pollutants.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2012-2015 Air Quality Management Plan (AQMP)*. As is currently proposed, the West Area Specific Plan is expected to be built out under a staged approach, and all mitigation would be applicable throughout all stages of the buildout process. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance and it was determined that the West Area Specific Plan would have a *cumulatively considerable contribution* and *significant and unavoidable* impact on the region's air quality.

Under the Reduced Land Area Project Alternative, the Plan Area would be developed with a 20 percent smaller development area, with an overall increase in residential density. Although the number of users would be the same under this alternative as compared with the proposed project, this alternative has reduced mobile emissions when compared to the proposed project, due to the more compact design of this alternative. It was assumed that mobile emissions under this alternative would be reduced by approximately twenty percent (as compared to the proposed project), the same amount as the reduction in the size of this alternative's footprint when compared to the proposed project. However, as shown in Table 5.0-2, project operational activities under this alternative would still exceed the threshold of significance and generate a significant and unavoidable impact for ROG, NOx, and PM_{10} at buildout.

TABLE 5.0-2: ESTIMATED OPERATIONAL EMISSIONS OF THE REDUCED LAND AREA ALT. AT FULL BUILDOUT

	ROG		***NOx***		***PM_{10}***		***SOx***	
Threshold	**≤ 137 lbs/day**		**≤ 137 lbs/day**		**≤ 82 lbs/day**		**≤ 150 lbs/day**	
Category	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated
Reduced Land Area Alternative								
Area	1,170.9	246.4	31.5	25.3	168.4	3.7	2.3	0.2
Energy	5.1	5.1	44.7	44.7	3.5	3.5	0.3	0.3
Mobile	40.3	38.5	229.5	221.6	162.9	139.3	1.7	1.4
Total	**1,216.3**	**290.0**	**305.7**	**291.6**	**334.8**	**146.5**	**4.3**	**1.9**
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**
Proposed Project								
Area	1,170.9	246.4	31.5	25.3	168.4	3.7	2.3	0.2
Energy	5.1	5.1	44.7	44.7	3.5	3.5	0.3	0.3
Mobile	50.4	48.1	286.9	277.0	203.6	174.1	2.1	1.8
Total	**1,226.4**	**299.6**	**363.1**	**347.0**	**375.6**	**181.3**	**4.6**	**2.2**
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**

SOURCE: CALEEMOD (V.2016.3.2)

This alternative would provide more compact development than the proposed project, providing greater opportunities for non-motorized transportation choices (such as walking or cycling). This

would slightly reduce vehicle miles travelled (VMT) as compared to the proposed project, which would slightly the mobile source emissions. As such, this impact would be slightly reduced when compared to the West Area Specific Plan.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the West Area Specific Plan project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The West Area Specific Plan project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The West Area Specific Plan project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures were developed to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance, and that there be a no net loss of wetlands (1:1 minimum replacement ratio). The permit process ensures that minimization and compensation at a 1:1 ratio is incorporated into the activity. It has been found in this EIR that with the implementation of mitigation measures that project would not have substantial adverse effects, directly or indirectly, on protected wetlands and jurisdictional waters.

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

The Specific Plan Area is used predominantly for active agricultural production, which generally prohibits most overland wildlife movement due to the lack of suitable vegetative cover. The exception is the irrigation and roadside ditches that drain irrigation runoff. This network of irrigation ditches throughout the Specific Plan Area provides some aquatic linkage and potential movement corridors for special-status species documented in the vicinity, including CTS and CRLF, which are rare within the Bioregion. The roadside ditches located along Boronda Road and San Juan Grade Road also provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris.

Development of the proposed project would eliminate any movement habitat through the Specific Plan Area, along with any upland habitat adjacent to the movement corridors. This permanent loss of movement habitat was determined to be a significant and unavoidable impact. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this loss of movement/migration habitat. Given the rareness of CTS and CRLF in the Bioregion, the incremental loss of movement habitat from the proposed project, when considered alongside all past, present, and probable future projects (inclusive of all communities within the Bioregion), is a cumulatively considerable contribution and significant and unavoidable impact.

Under the Reduced Land Area Project Alternative, less habitat would be removed, and fewer ground disturbing activities would occur. It is still anticipated that the drainage ditches along Boronda Road would be eliminated (i.e. fill activity). A portion of the Plan Area (twenty percent) would remain open to migration, foraging, nesting, and other uses by wildlife. The balance of the Plan Area (eighty percent of site) would be developed and no longer available for migration, foraging, nesting, and other uses by wildlife. This would still be a significant and unavoidable impact, and would be cumulatively considerable.

When compared to the Specific Plan, potential for impacts to biological resources would be reduced under the Reduced Land Area Project Alternative proportionate to the reduction in developed area estimated at twenty percent.

Cultural Resources

No cultural resources were identified within the West Area Specific Plan Area, according to maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and three previous cultural resource inventories, which have examined the area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and/or historical resource or human remains. Implementation of the mitigation measures incorporated into this EIR would reduce impacts associated with unknown cultural resources where they to be found.

The Reduced Land Area Project Alternative would result in fewer ground disturbing activities and would have a slightly reduced potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. While the West Area Specific Plan is not anticipated to result in significant impacts to cultural resources with mitigation, the Reduced Land Area Project Alternative would result in slightly less potential for impacts to cultural resources, as a portion of the Plan Area would remain undeveloped.

Greenhouse Gases and Climate Change

Given the size and scope of development of the West Area Specific Plan, both construction and operational GHG emissions generated by development of the West Area Specific Plan are expected to have a significant impact on the environment. The overall annual GHG emissions associated with the West Area Specific Plan would be reduced with mitigation. However, even

with mitigation applied, the West Area Specific Plan would exceed the construction and operational thresholds established for the proposed project. However, with mitigation, the West Area Specific Plan would not conflict with the applicable GHG-related plans, policies, and regulations. Nevertheless, the West Area Specific Plan would have an individual and cumulative impact related to greenhouse gases and climate change that is significant and unavoidable.

The Reduced Land Area Project Alternative would not develop approximately 162 acres that is proposed to be developed under the proposed project. This would provide more compact development, creating more opportunities for non-motorized transportation options (such as walking or cycling). This is likely to reduce overall vehicle miles travelled (VMT) as compared to the proposed project. This would reduce mobile-related GHG emissions by an amount approximately equivalent to proportional reduction in the size of the Plan Area (twenty percent) under this alternative, as compared with the proposed project. Estimated mitigation operational GHG emissions at Plan Area buildout are shown in Table 5.0-3. As shown, total operational emissions would be reduced by approximately 11% under this scenario, as compared to the proposed project. However, Plan Area operational activities under this alternative would be expected to generate a significant and unavoidable impact on operational greenhouse gases.

TABLE 5.0-3: REDUCED LAND AREA PROJECT ALT. GHG EMISSIONS (MITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Reduced Land Area Alternative						
Area	0	1,080.9	1,080.9	0.1	0	1,088.6
Energy	0-	14,718.3	14,718.3	0.9	0.3	14,836.9
Mobile	0	21,026.6	21,026.6	0.9	0	21,049.4
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	116.0	378.4	494.4	12.0	0.3	880.6
Total	**1,959.5**	**37,204.2**	**39,163.7**	**122.8**	**0.6**	**42,422.6**
Proposed Project						
Area	0	1,080.9	1,080.9	0.1	<0.1	1,088.6
Energy	0	14,718.3	14,718.3	0.9	0.3	14,836.9
Mobile	0	26,283.3	26,283.3	1.1	0	26,311.7
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	116.0	378.4	494.4	12.0	0.3	880.6
Total	**1,959.5**	**40,844.8**	**44,420.4**	**123.1**	**0.6**	**47,684.9**

SOURCES: CALEEMOD (V.2016.3.2)

With a total projected service population of 16,785 (same as the proposed project), this alternative would generate approximately 2.53 MT CO_2e/service population/year in the mitigated scenario (in Year 2035). This value is above the derived per capita GHG threshold of 1.94 MT CO_2e/service population/year for Year 2035. However, this value is below the per service population estimate for the proposed project of 2.84 MT CO_2e/service population/year (in Year 2035). Therefore, the emissions per capita under this alternative would be reduced as compared with the proposed project. This impact would be slightly reduced when compared to the proposed project.

Hazards and Hazardous Materials

The Plan Area is currently agricultural land, used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. Several small clusters of buildings located on the northern, western, and eastern edges of the Plan Area include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the site has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase 1 Environmental Site Assessment (ESA) identified the following chemicals in connections with the Project site: OCPs, arsenic, PCBs, and TPH. Additionally, the West Area Specific Plan includes components which would likely use a variety of hazardous materials including: paints, cleaners, and cleaning solvents.

There would be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by Environmental Health Division of the County of Monterey Health Department. However, implementation of the mitigation measures identified within this EIR would minimize the potential for an impact.

Under the Reduced Land Area Project Alternative, the land area to be developed would be reduced by 20 percent and the potential for exposure to hazardous materials, or a release of hazardous materials would be reduced proportionately. Ongoing pesticide use would occur within the area to remain in agriculture, and this would have the potential to generate negative health effects on new residents in the development. Similar to the proposed project, new development would introduce new sensitive receptors into an area that contains land that has historically utilized chemicals for agricultural production. Any negative health effects associated with the residuals of these chemicals would be alleviated through compliance with state and federal regulations that require remediation when above certain thresholds. There would be a long-term potential for hazards associated with use and generation of household and commercial hazardous wastes, although compliance with state and federal regulations would be required. While the West Area Specific Plan is not anticipated to result in significant impacts associated with hazards and hazardous materials, the Reduced Land Area Project Alternative would result in slightly less potential for impacts.

Hydrology and Water Quality

Implementation of the West Area Specific Plan has the potential to result in the violation of water quality standards and waste discharge of pollutants into surface waters during both construction and long-term operations. Construction operations could result in temporary increases in runoff, erosion, sedimentation, soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The long-term operation of the West Area Specific Plan could result in long-term impacts to surface water quality from urban stormwater runoff and could enter groundwater or surface water systems. Additionally, the proposed project would result in new impervious surfaces that could reduce

rainwater infiltration and groundwater recharge. Mitigation measures incorporated into the project would reduce potential water quality impacts to a less than significant level. The West Area Specific Plan would not place persons or structures in a flood hazard zone.

Under the Reduced Land Area Project Alternative, potential water quality impacts from construction and operation of the West Area Specific Plan would be reduced. Under this alternative, the developed area would be reduced by 20 percent when compared with the proposed project. The Reduced Land Area Project Alternative would have a greater chance of groundwater recharge because it would reduce the amount of impervious surfaces by 20 percent as compared to the West Area Specific Plan. The areas that would not be developed would remain under agricultural production, and while they would have better recharge in those areas, they would continue to require intensive groundwater pumping for the agricultural production. The higher amount of groundwater pumping under this alternative would result in a greater impact on the Salinas Valley Ground Water basin, when compared to the proposed project. There would still be some benefit on the Salinas Valley Ground Water basin under this alternative because 80 percent of the land area would be converted into a use that would not require intensive groundwater pumping.

Under this alternative, there are some instances where the undeveloped portions of the Plan Area would have greater discharges of certain pollutants (such as erosion, sedimentation, pesticides release, etc.) when compared to the proposed project. Additionally, while the potential to result in water quality violations would be reduced under this alternative when compared with the proposed project, overdraft conditions would worsen in the Salinas Valley Ground Water basin under this alternative when compared to the proposed project. As such, potential impacts related to hydrology and water quality would be increased under this alternative when compared to the proposed project.

Noise

Some existing noise-sensitive receptors located near the Plan Area are currently exposed to exterior traffic noise levels exceeding the 60 dB L_{dn} exterior noise level standard for residential uses. In some locations, the noise levels are predicted to increase to levels that would trigger a new exceedance of the 60 dB L_{dn} exterior noise level standard, or exceed the FICON allowable increase criteria. A mitigation measure has been incorporated into the project to ensure that the project applicant consider repaving affected roadway segments, which is anticipated to reduce traffic noise levels along affected roadways.

The proposed project has the potential to expose new sensitive receptors to excessive noise. Several mitigation measures have been incorporated into the project to ensure that the potential noise impacts to new sensitive receptors is mitigated. For instance, there are measures that require sound walls and/or landscaped berms as a form of attenuation for traffic noise. There are also measures that address stationary sources (i.e. generators, mechanical equipment, etc.) to ensure that they do not adversely affect sensitive receptors. Lastly, there are measures that address business operations (i.e. loading docks, truck routes, etc.) to ensure that they do not adversely affect sensitive receptors.

The proposed project has the potential to increase noise levels and vibration levels associated with construction activities. Mitigation measures have been incorporated into the project to require construction activities that limit construction to the least noise sensitive times of the day/week, and to ensure that all equipment would be fitted with factory-equipped mufflers.

Under the Reduced Land Area Project Alternative, development would be reduced by 20 percent when compared with the proposed project. As a result of less development, noise levels associated with traffic, stationary sources, and construction would be expected to be reduced under this alternative. Receptors would be subject to ongoing agricultural noise under this alternative. It is noted that, despite this reduction in the size of development under this alternative, it is expected that some noise levels associated with traffic, stationary sources, and construction would still generate a significant and unavoidable impact. As such, this alternative would have a reduced impact relative to the proposed project.

Population and Housing

The City anticipates growth within the community over time, and has responded to the anticipated growth by establishing a Future Growth Area (FGA). The FGA was established through a community process that focused on allowing new development to specific areas of the city that have been determined to have adequate infrastructure and resources to accommodate the growth. The Plan Area is within the North of Boronda FGA, and West Area Specific Plan is a planning document that implements the City's intent to focus new development, and the growth that goes along with the new development, into the FGA. The West Area Specific Plan would not displace substantial numbers of existing housing and/or substantial numbers of people, but would instead provide new housing consistent with the City's General Plan. The West Area Specific Plan does not divide the community, but rather, it is an extension of the existing community.

Under the Reduced Land Area Project Alternative, development would be reduced by 20 percent when compared with the proposed project. Development of housing would still occur under this alternative, but fewer units would be built. Growth would still be anticipated to occur within the region, but it would not be fully accommodated in the North of Boronda FGA which has undergone extensive planning efforts by the City and community for over a decade. This would not be consistent with the FGA and General Plan. The City would need to look to other undeveloped areas of the region to develop for new housing which would be expected to have environmental impacts that have not yet been assessed but could well be worse than those of the West Area Specific Plan, particularly with respect to prime agricultural land, which is abundant in the region. Overall, this alternative would have a greater impact when compared to the proposed project.

Public Services

New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The West Area Specific Plan project incorporates sites for new schools and parks. A new fire station will be built within the Central Area Specific Plan to accommodate buildout of the North of Boronda FGA, including the Plan Area. The Plan Area is currently served by Station 6 located at 45 East Bolivar Street. The City has indicated that a new public safety facility is needed to meet the needs of the City in the long-term,

although West Area Specific Plan project does not directly trigger the need for a new facility. Additional staff and equipment for fire and police services will be warranted.

Mitigation measures have been incorporated into the project that require payment of impact fees to the City and other public agencies to ensure that the West Area Specific Plan project does not have adverse financial impacts on these agencies. The West Area Specific Plan includes land for schools and parks to ensure the increased demand for these services is met within the Plan Area.

Under the Reduced Land Area Project Alternative, the development area would be reduced by 20 percent. Residential and non-residential development would be reduced under the Reduced Land Area Project Alternative; therefore, the demand for police, fire and other public services would be reduced. This alternative would still result in development of public facilities (i.e. schools and parks) and would be required to pay the appropriate public safety impact fees. Overall, this alternative would have a slightly reduced impact to public services when compared to the proposed project.

Transportation and Circulation

Implementation of the West Area Specific Plan would cause an increase in traffic on roadway segments, intersections and ramp junctions that would cause traffic operations to degrade to an unacceptable level of service. Mitigation measures have been incorporated into the project to reduce these traffic impacts to a less than significant level. In some cases, the cumulative traffic conditions on roadway segments, intersections and ramp junctions are anticipated to degrade to an unacceptable level of service. The applicants will be required to make certain traffic improvements and pay traffic impact fees, but some of these cumulative impacts will remain significant and unavoidable.

Under the Reduced Land Area Project Alternative, the development area would be reduced by 20 percent. Residential and non-residential development would be reduced under the Reduced Land Area Project Alternative; therefore, traffic generated in the Plan Area would be reduced. This alternative would still result in new traffic improvements on the City's roadway system to accommodate the new traffic generated. It would also still result in payments of traffic impact fees into the City's CIP program that would be used for the roadway system. Existing deficiencies in the traffic system would receive some benefit of improvements to improve existing deficiencies; however, there would still be significant and unavoidable cumulative impacts to this topic under this alternative. Overall, this alternative would have less of an overall traffic impact than the proposed project.

Utilities

Implementation of the West Area Specific Plan could result in potentially significant impacts to the utility systems including wastewater, water, storm water drainage, and solid waste providers. Mitigation measures have been incorporated into the project to ensure that capacity is available and any impacts from increased demand are reduced.

Under the Reduced Land Area Project Alternative, the development area would be reduced by 20 percent. The total quantity of infrastructure installed would be reduced, but the demand for wastewater and solid waste services would be approximately the same as the proposed project, given that the number of residential and non-residential users of such utilities would remain the same under this alternative as in the proposed project. That is, it is expected that this alternative would generate approximately 1.0 MGD of wastewater and approximately 48,922 lbs/day of solid waste, similar to the proposed project, since this alternative would generate approximately the same number of residents and workers as the proposed project.

Separately, the total storm drainage runoff under this alternative would be reduced compared to the proposed project, due to the reduction in impervious surfaces.

This alternative would not save as much groundwater when compared to the proposed project. The amount of total consumptive water usage reduced by this alternative when compared to the existing uses in the Plan Area would be approximately 1,666 AFY, compared with the approximately 2,078 AFY estimated to be saved by the proposed project. That is, buildout this alternative would save approximately 412 AFY less water than buildout of the proposed project. This would increase risks to the groundwater basin associated with seawater intrusion, when compared to the proposed project.

Although this alternative would save less groundwater than the proposed project, generate a similar amount of solid waste, and demand a similar amount of water, this alternative would reduce impacts to stormwater compared to the project. Overall, the demand for utilities would be reduced under this alternative when compared to the proposed project.

REDUCED RESIDENTIAL INTENSITY/DENSITY PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be developed with a reduction in the overall residential intensity/density while maintaining the approximate overall project footprint. For the purposes of discussion, this option considers a 25 percent reduction in the intensity/density of the residential components of the project while maintaining the approximately 797-acre project footprint. This would result in fewer residential lots, but larger lot sizes. This alternative would result in up to 3,255 residential units. This alternative would retain the approximately 571,500 square feet of mixed commercial uses, the five proposed schools (three elementary, one middle, and one high school), and the same acreage of parks and detention basins as the proposed project.

Air Quality

As a result of development in Monterey County the North Central Coast Air Basin (NCCAB) would continue to experience increases in criteria pollutants. Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. The County has a national designation of unclassified or attainment for all criteria pollutants.

The West Area Specific Plan would result in increased emissions primarily from area source and mobile source emissions associated with project implementation. The Monterey Bay Air Resources District (MBARD) has established operations related emissions thresholds of significance and it was determined that annual unmitigated emissions of ROG, NOx, and PM_{10} exceed the MBARD thresholds of significance. Even with basic mitigation incorporated into the model, the West Area Specific Plan project would exceed the thresholds of significance for these criteria pollutants.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2012-2015 Air Quality Management Plan*. As is currently proposed, the West Area Specific Plan is expected to be built out under a staged approach, and all mitigation would be applicable throughout all stages of the buildout process. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance and it was determined that the West Area Specific Plan would have a *cumulatively considerable contribution* and *significant and unavoidable* impact on the region's air quality.

Under the Reduced Residential Intensity/Density Project Alternative, there would be a 25 percent reduction in the intensity/density of the residential portions of the Plan Area, with an overall decrease in residential density.

It was assumed that overall criteria pollutant emissions under this alternative would be reduced by approximately 25% when compared to the proposed project, consistent with the reduction in the intensity/density of the residential portions of the Plan Area under this alternative. However, as shown in Table 5.0-4, project operational activities under this alternative would still exceed the threshold of significance and generate a significant and unavoidable impact for ROG, NOx, and PM_{10} at buildout.

TABLE 5.0-4: ESTIMATED OPERATIONAL EMISSIONS OF THE REDUCED DENSITY/INTENSITY ALT. AT FULL BUILDOUT

	ROG		***NOx***		***PM_{10}***		***SOx***	
Threshold	**≤ 137 lbs/day**		**≤ 137 lbs/day**		**≤ 82 lbs/day**		**≤ 150 lbs/day**	
Category	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated
Reduced Density/Intensity Alternative								
Area	878.2	184.8	23.6	19.0	126.3	2.8	1.7	0.2
Energy	3.8	3.8	33.5	33.5	2.6	2.6	0.2	0.2
Mobile	37.8	36.1	215.2	207.8	152.7	130.6	1.6	1.4
Total	**919.8**	**224.7**	**272.3**	**260.3**	**281.7**	**136.0**	**3.5**	**1.7**
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**
Proposed Project								
Area	1,170.9	246.4	31.5	25.3	168.4	3.7	2.3	0.2
Energy	5.1	5.1	44.7	44.7	3.5	3.5	0.3	0.3
Mobile	50.4	48.1	286.9	277.0	203.6	174.1	2.1	1.8
Total	**1,226.4**	**299.6**	**363.1**	**347.0**	**375.6**	**181.3**	**4.6**	**2.2**
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**

SOURCE: CALEEMOD (V.2016.3.2)

Although less compact development generally increases overall per capita vehicle miles travelled (VMT), the smaller number of residential units under this alternative as compared with the proposed project would reduce overall air quality emissions, including under area sources, mobile sources, and energy sources. As such, this impact would be reduced when compared to the proposed project.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the West Area Specific Plan project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The West Area Specific Plan project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The West Area Specific Plan project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation were developed to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance, and that there be a no net loss of wetlands (1:1 minimum replacement ratio). The permit process ensures that minimization and compensation is incorporated into the activity. It has been found in this EIR that with the implementation of mitigation measures that project would not have substantial adverse effects, directly or indirectly, on protected wetlands and jurisdictional waters.

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

The Specific Plan Area is used predominantly for active agricultural production, which generally prohibits most overland wildlife movement due to the lack of suitable vegetative cover. The exception is the irrigation and roadside ditches that drain irrigation runoff. This network of irrigation ditches throughout the Specific Plan Area provides some aquatic linkage and potential movement corridors for special-status species documented in the vicinity, including CTS and CRLF, which are rare within the Bioregion. The roadside ditches located along Boronda Road and San Juan Grade Road also provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not

disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris.

Development of the proposed project would eliminate any movement habitat through the Specific Plan Area, along with any upland habitat adjacent to the movement corridors. This permanent loss of movement habitat was determined to be a significant and unavoidable impact. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this loss of movement/migration habitat. Given the rareness of CTS and CRLF in the Bioregion, the incremental loss of movement habitat from the proposed project, when considered alongside all past, present, and probable future projects (inclusive of all communities within the Bioregion), is a cumulatively considerable contribution and significant and unavoidable impact.

Under the Reduced Residential Intensity/Density Project Alternative, an equivalent amount of habitat would be removed as under the proposed project, and a similar level of ground disturbing activities would occur as compared with the proposed project. Therefore, there would be an approximately equal potential for impacts to biological resources under this alternative as compared with the proposed project.

Cultural Resources

No cultural resources were identified within the West Area Specific Plan Area, according to maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and three previous cultural resource inventories, which have examined the area. As with most projects in the region that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and/or historical resource or human remains. Implementation of the mitigation measures incorporated into this EIR would reduce impacts associated with unknown cultural resources where they to be found.

The Reduced Residential Intensity/Density Project Alternative would result in a similar level of ground disturbing activities and would have a similar potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. While the West Area Specific Plan is not anticipated to result in significant impacts to cultural resources with mitigation, the Reduced Residential Intensity/Density Project Alternative would result in equal potential for impacts to cultural resources.

Greenhouse Gases and Climate Change

Given the size and scope of development of the West Area Specific Plan, both construction and operational GHG emissions generated by development of the West Area Specific Plan are expected to have a significant impact on the environment. The overall annual GHG emissions associated with the West Area Specific Plan would be reduced with mitigation. However, even with mitigation applied, the West Area Specific Plan would exceed the construction and operational thresholds established for the proposed project. However, with mitigation, the West Area Specific Plan would not conflict with the applicable GHG-related plans, policies, and

regulations. Nevertheless, the West Area Specific Plan would have an individual and cumulative impact related to greenhouse gases and climate change that is significant and unavoidable.

Under the Reduced Residential Intensity/Density Project Alternative, there would be a 25 percent reduction in the intensity/density of the residential portions of the Plan Area. It was assumed that overall GHG emissions under this alternative would be reduced by approximately 25% when compared to the proposed project, consistent with the reduction in the intensity/density of the residential portions of the Plan Area under this alternative. Estimated mitigation operational GHG emissions at Plan Area buildout are shown in Table 5.0-5. As shown, total operational emissions would be reduced by approximately 25% under this scenario, as compared to the proposed project. However, Plan Area operational activities under this alternative would be expected to generate a significant and unavoidable impact on operational greenhouse gases.

TABLE 5.0-5: REDUCED INTENSITY/DENSITY ALT. GHG EMISSIONS (MITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Reduced Intensity/Density Alternative						
Area	0	810.7	810.7	0.1	0	816.5
Energy	0	11,038.7	11,038.7	0.7	0.2	11,127.7
Mobile	0	19,712.5	19,712.5	0.8	0	19,733.8
Waste	1,382.6	0	1,382.6	81.7	0	3,425.3
Water	87.0	283.8	370.8	9.0	0.2	660.5
Total	**1,469.6**	**30,633.6**	**33,315.3**	**92.3**	**0.5**	**35,763.7**
Proposed Project						
Area	0	1,080.9	1,080.9	0.1	<0.1	1,088.6
Energy	0	14,718.3	14,718.3	0.9	0.3	14,836.9
Mobile	0	26,283.3	26,283.3	1.1	0	26,311.7
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1
Water	116.0	378.4	494.4	12.0	0.3	880.6
Total	**1,959.5**	**40,844.8**	**44,420.4**	**123.1**	**0.6**	**47,684.9**

SOURCES: CALEEMOD (V.2016.3.2)

With a total projected service population of 12,803 under this alternative (this is equivalent to a 25% smaller residential population but the same number of workers, when compared to the proposed project), this alternative would generate approximately 2.79 MT CO_2e/service population/year in the mitigated scenario (in Year 2035). This value are above the derived per capita GHG threshold of 1.94 MT CO_2e/service population/year for Year 2035, but lower than the per service population estimate for the proposed project of 2.84 MT CO_2e/service population/year (in Year 2035). Therefore, this impact would be slightly reduced when compared to the proposed project.

The slight reduction does not necessarily mean that the Reduced Residential Intensity/Density Project Alternative represents a better long-term policy outcome for climate than the proposed project. California has a large housing need, and new housing will have to be built somewhere, if not on the project site. As the California Supreme Court explained, "[g]iven the reality of growth, some greenhouse gas emissions from new housing and commercial developments are inevitable.

The critical CEQA question is the cumulative significance of a project's greenhouse gas emissions, and from a climate change point of view it does not matter where in the state those emissions are produced." (*Center for Biological Diversity v. California Dept. of Fish and Wildlife* (2015) 62 Cal.4th 204, 220-221.)

Hazards and Hazardous Materials

The Plan Area is currently agricultural land, used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. Several small clusters of buildings located on the northern, western, and eastern edges of the Plan Area include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the site has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase 1 Environmental Site Assessment (ESA) identified the following chemicals in connections with the Project site: OCPs, arsenic, PCBs, and TPH. Additionally, the West Area Specific Plan includes components which would likely use a variety of hazardous materials including: paints, cleaners, and cleaning solvents.

There would be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by Environmental Health Division of the County of Monterey Health Department. However, implementation of the mitigation measures identified within this EIR would minimize the potential for an impact.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential components would be reduced by 25 percent as compared with the proposed project. Similar to the proposed project, new development would introduce new sensitive receptors into an area that contains land that has historically utilized chemicals for agricultural production. Any negative health effects associated with the residuals of these chemicals would be alleviated through compliance with state and federal regulations that require remediation when above certain thresholds. There would be a long-term potential for hazards associated with use and generation of household and commercial hazardous wastes, although compliance with state and federal regulations would be required. Overall, given the reduction in the intensity-density of this alternative as compared with the proposed project, it is expected that the Reduced Residential Intensity/Density Project Alternative would have a slightly reduced impact to this topic relative to the proposed project.

Hydrology and Water Quality

Implementation of the West Area Specific Plan has the potential to result in the violation of water quality standards and waste discharge of pollutants into surface waters during both construction and long-term operations. Construction operations could result in temporary increases in runoff, erosion, sedimentation, soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The long-term

operation of the West Area Specific Plan could result in long-term impacts to surface water quality from urban stormwater runoff and could enter groundwater or surface water systems. Additionally, the proposed project would result in new impervious surfaces that could reduce rainwater infiltration and groundwater recharge. Mitigation measures incorporated into the project would reduce potential water quality impacts to a less than significant level. The West Area Specific Plan would not place persons or structures in a flood hazard zone.

Under the Reduced Residential Intensity/Density Project Alternative, potential water quality impacts from construction and operation would be slightly reduced. Under this alternative, the intensity/density of the residential uses would be reduced by 25 percent when compared with the proposed project, although the footprint would remain the same. This would result in fewer residential lots, but larger lot sizes. Since the residential lot sizes under this alternative would be larger when compared with the proposed project, there would be less impervious surface, and therefore there would be a greater chance of groundwater recharge under this alternative. As such, potential impacts related to hydrology and water quality would be reduced under the Reduced Intensity/Density Alternative when compared to the proposed project.

Noise

Some existing noise-sensitive receptors located near the Plan Area are currently exposed to exterior traffic noise levels exceeding the 60 dB L_{dn} exterior noise level standard for residential uses. In some locations, the noise levels are predicted to increase to levels that would trigger a new exceedance of the 60 dB L_{dn} exterior noise level standard, or exceed the FICON allowable increase criteria. A mitigation measure has been incorporated into the project to ensure that the project applicant consider repaving affected roadway segments, which is anticipated to reduce traffic noise levels along affected roadways.

The proposed project has the potential to expose new sensitive receptors to excessive noise. Several mitigation measures have been incorporated into the project to ensure that the potential noise impacts to new sensitive receptors is mitigated. For instance, there are measures that require sound walls and/or landscaped berms as a form of attenuation for traffic noise. There are also measures that address stationary sources (i.e. generators, mechanical equipment, etc.) to ensure that they do not adversely affect sensitive receptors. Lastly, there are measures that address business operations (i.e. loading docks, truck routes, etc.) to ensure that they do not adversely affect sensitive receptors.

The proposed project has the potential to increase noise levels and vibration levels associated with construction activities. Mitigation measures have been incorporated into the project to require construction activities that limit construction to the least noise sensitive times of the day/week, and to ensure that all equipment would be fitted with factory-equipped mufflers.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent when compared with the proposed project. As a result of less development, noise levels associated with traffic, stationary sources, and construction would be expected to be reduced under this alternative. Despite this reduction in

the size of intensity of development under this alternative, it is expected that some noise levels associated with traffic, stationary sources, and construction would still generate a significant and unavoidable impact. As such, this alternative would have less impact relative to the proposed project.

Population and Housing

The City anticipates growth within the community over time, and has responded to the anticipated growth by establishing Future Growth Areas (FGAs). The FGA was established through a community process that focused on allowing new development to specific areas of the city that have been determined to have adequate infrastructure and resources to accommodate the growth. The Plan Area is within the North of Boronda FGA, and West Area Specific Plan is a planning document that implements the City's intent to focus new development, and the growth that goes along with the new development, into the FGA. The West Area Specific Plan would not displace substantial numbers of existing housing and/or substantial numbers of people, but would instead provide new housing consistent with the City's General Plan. The West Area Specific Plan does not divide the community, but rather, it is an extension of the existing community.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent when compared with the proposed project. Development of housing would still occur under this alternative, but fewer units would be built. Growth would still be anticipated to occur within the region, but it would not be fully accommodated in the North of Boronda FGA which has undergone extensive planning efforts by the City and community for over a decade. This would not be consistent with the FGA and General Plan. The City would need to look to other undeveloped areas of the region to develop for new housing which would be expected to have environmental impacts that have not yet been assessed but could well be worse than those of the West Area Specific Plan, particularly with respect to prime agricultural land, which is abundant in the region. The lower density of this alternative would also not meet the minimum number of residential units required for New Urbanism principals that are established in the General Plan for the Plan Area. Overall, this alternative would have a greater impact when compared to the proposed project.

Public Services

New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The West Area Specific Plan project incorporates sites for new schools and parks. A new fire station will be built within the Central Area Specific Plan to accommodate buildout of the North of Boronda FGA, including the Plan Area. The Plan Area is currently served by Station 6 located at 45 East Bolivar Street. The City has indicated that a new public safety facility is needed to meet the needs of the City in the long-term, although West Area Specific Plan project does not directly trigger the need for a new facility. Additional staff and equipment for fire and police services will be warranted.

Mitigation measures have been incorporated into the project that require payment of impact fees to the City and other public agencies to ensure that the West Area Specific Plan project does not

have adverse financial impacts on these agencies. The West Area Specific Plan includes land for schools and parks to ensure the increased demand for these services is met within the Plan Area.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent; therefore, the demand for police, fire and other public services would be reduced. This alternative would still result in development of public facilities (i.e. schools and parks) and would be required to pay the appropriate public safety impact fees. Overall, this alternative would have a slightly reduced impact to public services when compared to the proposed project.

Transportation and Circulation

Implementation of the West Area Specific Plan would cause an increase in traffic on roadway segments, intersections and ramp junctions that would cause traffic operations to degrade to an unacceptable level of service. Mitigation measures have been incorporated into the project to reduce these traffic impacts to a less than significant level. In some cases, the cumulative traffic conditions on roadway segments, intersections and ramp junctions are anticipated to degrade to an unacceptable level of service. The applicants will be required to make certain traffic improvements and pay traffic impact fees, but some of these cumulative impacts will remain significant and unavoidable.

Under the Reduced Residential Intensity/Density Project Alternative, the intensity/density of the residential uses would be reduced by 25 percent; therefore, traffic generated in the Plan Area would be reduced. This alternative would still result in new traffic improvements on the City's roadway system to accommodate the new traffic generated. It would also still result in payments of traffic impact fees into the City's CIP program that would be used for the roadway system. Existing deficiencies in the traffic system would receive some benefit of improvements to improve existing deficiencies; however, there would still be significant and unavoidable cumulative impacts under this alternative. Overall, this alternative would have less of an overall traffic impact than the proposed project.

Utilities

Implementation of the West Area Specific Plan could result in potentially significant impacts to the utility systems including wastewater, water, storm water drainage, and solid waste providers. Mitigation measures have been incorporated into the project to ensure that capacity is available and any impacts from increased demand are reduced.

Under the Reduced Intensity/Density Alternative, the Plan Area would be developed with a reduction in the overall residential intensity/density while maintaining the approximate overall project footprint as in the proposed project. For the purposes of discussion, this option considers a 25 percent reduction in the intensity/density of the residential components of the project while maintaining the approximately 797-acre project footprint. This would result in fewer residential lots, but larger lot sizes. This alternative would result in up to 3,255 residential units. This alternative would retain the approximately 571,500 square feet of mixed commercial uses, the

five proposed schools (three elementary, one middle, and one high school), and the same acreage of parks and detention basins as the proposed project.

The total quantity of infrastructure installed would not be reduced, but the demand for wastewater and solid waste services would be less than would be required for the proposed project. For example, is expected that this alternative would generate approximately 0.8 MGD of wastewater and approximately 37,777 lbs/day of solid waste, smaller than would be generated by the proposed project, since this alternative would generate fewer residents when compared to the proposed project. Estimated solid waste generation is shown in Table 5.0-6, below.

TABLE 5.0-6: ESTIMATED SOLID WASTE GENERATION FOR THE REDUCED RESIDENTIAL INTENSITY/DENSITY ALT.

LAND USE	*GENERATION FACTOR[1]*	*PROJECT*	*ESTIMATED SOLID WASTE (LBS/DAY)*
Reduced Intensity/Density Alternative			
Retail/Services	6 lb./1,000 s.f./day	571,000 s.f.	3,426 lbs
Residential	10 lb./unit/day	3,255 units	32,255
Schools	0.5 lb./student/day	4,191 students	2,096
TOTAL			**37,777**
Proposed Project			
Retail/Services	6 lb./1,000 s.f./day	571,000 s.f.	3,426 lbs
Residential	10 lb./unit/day	4,340 units	43,400
Schools	0.5 lb./student/day	4,191 students	2,096
TOTAL			**48,922**

[1] CalRecycle

Separately, the total storm drainage runoff under this alternative would be approximately the same when compared to the proposed project, due to the project footprint remaining the same for this alternative when compared to the proposed project. Additionally, this alternative would save approximately the same amount of groundwater when compared to the proposed project, since the project footprint would remain the same for this alternative as compared to the proposed project.

Overall, the demand for wastewater and solid waste services would be less than would be required for the proposed project, and the amount of storm drainage runoff would be approximately the same. Therefore, demand for utilities would be slightly reduced under this alternative when compared to the proposed project.

SMALLER-SCALE PROJECT ALTERNATIVE

Under this alternative, the Plan Area would be reduced by approximately 33 percent and the proposed residential and non-residential uses would also be reduced by approximately 33 percent. For the purposes of discussion, this alternative assumes that approximately 264 acres of land along the entire eastern boundary of the Plan Area would be removed and remain as undeveloped agricultural land. The resultant Plan Area under this alternative would be approximately 533 acres in size, and include up to 2,908 residential units, up to 382,905 square feet of commercial/mixed use building area, and up to 119 acres of public facilities (including two elementary schools, a high school, a middle school, open space (including supplemental

detention/retention basins) and up to 8 parks). The number of residential units under this alternative would not meet the minimum of 3,553 residential units as provided within the City of Salinas General Plan. The residential densities under this alternative would be similar to the proposed Project.

Air Quality

As a result of development in Monterey County the North Central Coast Air Basin (NCCAB) would continue to experience increases in criteria pollutants. Monterey County has a state designation of nonattainment for ozone and PM_{10}, and is either unclassified or attainment for all other criteria pollutants. The County has a national designation of unclassified or attainment for all criteria pollutants.

The West Area Specific Plan would result in increased emissions primarily from area source and mobile source emissions associated with project implementation. The Monterey Bay Air Resources District (MBARD) has established operations related emissions thresholds of significance and it was determined that annual unmitigated emissions of ROG, NOx, and PM_{10} exceed the MBARD thresholds of significance. Even with basic mitigation incorporated into the model, the West Area Specific Plan project would exceed the thresholds of significance for these criteria pollutants.

The MBARD's *CEQA Air Quality Guidelines* provides a list of mitigation measures that would help the proposed project comply with the MBARD's *2012-2015 Air Quality Management Plan*. As is currently proposed, the West Area Specific Plan is expected to be built out under a staged approach, and all mitigation would be applicable throughout all stages of the buildout process. However, even with the application of these and other mitigation measures, operational emissions levels would remain above the defined thresholds of significance and it was determined that the West Area Specific Plan would have a *cumulatively considerable contribution* and *significant and unavoidable* impact on the region's air quality.

Under the Smaller-scale Project Alternative, the overall size of the project would be scaled down by approximately 33 percent as compared with the proposed project. This would reduce Plan Area operational emissions by an approximately equivalent amount (33%) as compared to the proposed project. However, as shown in Table 5.0-7, project operational activities under this alternative would still exceed the threshold of significance and generate a significant and unavoidable impact for ROG, NOx, and PM_{10} at buildout.

TABLE 5.0-7: ESTIMATED OPERATIONAL EMISSIONS OF THE SMALLER-SCALE ALT. AT FULL BUILDOUT

	ROG		*NOx*		*PM_{10}*		*SOx*	
Threshold	≤ 137 lbs/day		≤ 137 lbs/day		≤ 82 lbs/day		≤ 150 lbs/day	
Category	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated	Unmitigated	Mitigated
Smaller-scale Alternative								
Area	780.6	164.3	21.0	16.9	112.3	2.5	1.5	0.1
Energy	3.4	3.4	29.8	29.8	2.3	2.3	0.2	0.2
Mobile	33.6	32.1	191.3	184.7	135.7	116.1	1.4	1.2
Total	**817.6**	**199.7**	**242.1**	**231.3**	**250.4**	**120.9**	**3.1**	**1.5**
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**
Proposed Project								
Area	1,170.9	246.4	31.5	25.3	168.4	3.7	2.3	0.2
Energy	5.1	5.1	44.7	44.7	3.5	3.5	0.3	0.3
Mobile	50.4	48.1	286.9	277.0	203.6	174.1	2.1	1.8
Total	**1,226.4**	**299.6**	**363.1**	**347.0**	**375.6**	**181.3**	**4.6**	**2.2**
Threshold Exceeded?	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**

SOURCE: CALEEMOD (V.2016.3.2)

Nevertheless, overall air quality emissions under this alternative would be reduced compared to the proposed project, due to the smaller size of this alternative, including for area sources, mobile sources, and energy sources. As such, this impact would be reduced when compared to the proposed project.

Biological Resources

There are various biological resources, including habitat, that occurs throughout the region. The Plan Area is intensively cultivated and provides little to no habitat for most special status species. Nevertheless, there remains a potential that special status species could occupy the Plan Area from time to time. Mitigation measures incorporated into the West Area Specific Plan project are intended to avoid, minimize, and compensate for direct and indirect effects to biological resources, including special status species and their habitats.

The West Area Specific Plan project will eliminate the onsite irrigation ditches, which provide some, but relatively little habitat quality. The West Area Specific Plan project is anticipated to eliminate the roadside ditches located along East Boronda Road and San Juan Grade Road. These ditches also provide some, but relatively little habitat quality. Mitigation measures were developed to ensure that any fill activities are authorized by the appropriate regulatory agencies prior to disturbance, and that there be a no net loss of wetlands (1:1 minimum replacement ratio). The permit process ensures that minimization and compensation is incorporated into the activity. It has been found in this EIR that with the implementation of mitigation measures that project would not have substantial adverse effects, directly or indirectly, on protected wetlands and jurisdictional waters.

Wildlife movement includes migration (i.e., usually movement one way per season), inter-population movement (i.e., long-term dispersal and genetic flow), and small travel pathways (i.e., daily movement within an animal's territory). While small travel pathways usually facilitate

movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

The Specific Plan Area is used predominantly for active agricultural production, which generally prohibits most overland wildlife movement due to the lack of suitable vegetative cover. The exception is the irrigation and roadside ditches that drain irrigation runoff. This network of irrigation ditches throughout the Specific Plan Area provides some aquatic linkage and potential movement corridors for special-status species documented in the vicinity, including CTS and CRLF, which are rare within the Bioregion. The roadside ditches located along Boronda Road and San Juan Grade Road also provide some aquatic linkage and potential movement corridors for CTS. The margins of the ditches provide some opportunities for refugia given that they are not disced/disturbed as frequently as the cultivated areas. There is potential refugia habitat in crevices, and/or debris.

Development of the proposed project would eliminate any movement habitat through the Specific Plan Area, along with any upland habitat adjacent to the movement corridors. This permanent loss of movement habitat was determined to be a significant and unavoidable impact. While the City has evaluated urban development in the Plan Area extensively through the General Plan and FGA process, and subsequently determined that urban development in this location is appropriate, the physical change is not reversible and there are no mitigation measures that can fully mitigate this loss of movement/migration habitat. Given the rareness of CTS and CRLF in the Bioregion, the incremental loss of movement habitat from the proposed project, when considered alongside all past, present, and probable future projects (inclusive of all communities within the Bioregion), is a cumulatively considerable contribution and significant and unavoidable impact.

Under the Smaller-scale Project Alternative, an area of about 264 acres would not be developed, and fewer ground disturbing activities would occur. It is still anticipated that the drainage ditches along Boronda would be eliminated (i.e. fill activity). The 264 acres would remain open to migration, foraging, nesting, and other uses by wildlife. The balance of the Plan Area would be developed and no longer available for migration, foraging, nesting, and other uses by wildlife. This would still be a significant and unavoidable impact, and would be cumulatively considerable.

When compared to the Specific Plan, potential for impacts to biological resources would be reduced under the Reduced Land Area Project Alternative proportionate to the reduction in developed area.

Cultural Resources

No cultural resources were identified within the West Area Specific Plan Area, according to maps and files maintained by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), and three previous cultural resource inventories, which have examined the area. As with most projects in the region that involve ground-disturbing

activities, there is the potential for discovery of a previously unknown cultural and/or historical resource or human remains. Implementation of the mitigation measures incorporated into this EIR would reduce impacts associated with unknown cultural resources where they to be found.

The Smaller-scale Project Alternative would result in a reduced level of ground disturbing activities and would therefore have slightly less potential to disturb or destroy cultural, historic, and archaeological resources, as well as paleontological resources. While the West Area Specific Plan is not anticipated to result in significant impacts to cultural resources with mitigation, this alternative would result in slightly less potential for impacts to cultural resources.

Greenhouse Gases and Climate Change

Given the size and scope of development of the West Area Specific Plan, both construction and operational GHG emissions generated by development of the West Area Specific Plan are expected to have a significant impact on the environment. The overall annual GHG emissions associated with the West Area Specific Plan would be reduced with mitigation. However, even with mitigation applied, the West Area Specific Plan would exceed the construction and operational thresholds established for the proposed project. However, with mitigation, the West Area Specific Plan would not conflict with the applicable GHG-related plans, policies, and regulations. Nevertheless, the West Area Specific Plan would have an individual and cumulative impact related to greenhouse gases and climate change that is significant and unavoidable.

The Smaller-scale Project Alternative would reduce the level of development by approximately 33 percent as compared with the proposed project. This would reduce Plan Area operational GHG emissions by an approximately equivalent amount (33%) when compared to the proposed project. Estimated mitigation operational GHG emissions at Plan Area buildout for this alternative are shown in Table 5.0-8. As shown, total operational emissions would be reduced by approximately 33% under this scenario, as compared to the proposed project. However, Plan Area operational activities under this alternative would be expected to generate a significant and unavoidable impact on operational greenhouse gases.

TABLE 5.0-8: SMALLER-SCALE PROJECT ALT. GHG EMISSIONS (MITIGATED METRIC TONS/YEAR)

	Bio- CO_2	*NBio- CO_2*	*Total CO_2*	*CH_4*	*N_2O*	*CO_2e*
Smaller-scale Alternative						
Area	0	720.6	720.6	0.1	0	725.7
Energy	0	9,812.2	9,812.2	0.6	0.2	9,891.3
Mobile	0	17,522.2	17,522.2	0.7	0	17,541.1
Waste	1,229.0	0	1,229.0	72.6	0	3,044.7
Water	77.3	252.3	329.6	8.0	0.2	587.1
Total	**1,306.3**	**27,229.9**	**29,613.6**	**82.1**	**0.4**	**31,789.9**
Proposed Project						
Area	0	1,080.9	1,080.9	0.1	<0.1	1,088.6
Energy	0	14,718.3	14,718.3	0.9	0.3	14,836.9
Mobile	0	26,283.3	26,283.3	1.1	0	26,311.7
Waste	1,843.5	0	1,843.5	108.9	0	4,567.1

Water	116.0	378.4	494.4	12.0	0.3	880.6
Total	**1,959.5**	**40,844.8**	**44,420.4**	**123.1**	**0.6**	**47,684.9**

SOURCES: CALEEMOD (V.2016.3.2)

With a total projected service population of 11,190 under this alternative (this is equivalent to a 33% reduction in both residential and worker population, when compared to the proposed project), this alternative would generate approximately 2.84 MT CO_2e/service population/year in the mitigated scenario (in Year 2035). This value is above the derived per capita GHG threshold of 1.94 MT CO_2e/service population/year for Year 2035. Additionally, this emissions per capita value would be the same as those generated by the proposed project. Therefore, this impact would be equal when compared to the proposed project.

Hazards and Hazardous Materials

The Plan Area is currently agricultural land, used extensively for the cultivation of lettuce, cauliflower, broccoli, and strawberries. Several small clusters of buildings located on the northern, western, and eastern edges of the Plan Area include residences, barns, warehouses, and storage yards. These structures have supported the agricultural operations and some have been used or are currently being used to temporarily store fertilizers, pesticides, herbicides and other materials normally associated with ongoing agricultural cultivation.

Due to the long-term use of the land for agricultural purposes, the site has the potential for certain environmental conditions related to pesticide and herbicide application that could have caused these chemicals to be present in the soil. The Phase 1 Environmental Site Assessment (ESA) identified the following chemicals in connections with the Project site: OCPs, arsenic, PCBs, and TPH. Additionally, the West Area Specific Plan includes components which would likely use a variety of hazardous materials including: paints, cleaners, and cleaning solvents.

There would be a risk of release of these materials into the environment if they are not stored and handled in accordance with best management practices approved by Environmental Health Division of the County of Monterey Health Department. However, implementation of the mitigation measures identified within this EIR would minimize the potential for an impact.

The Smaller-scale Project Alternative would reduce the level of development by approximately 33 percent and the potential for exposure to hazardous materials, or a release of hazardous materials would be reduced proportionately. Ongoing pesticide use would occur within the area to remain in agriculture, and this would have the potential to generate negative health effects on new residents in the development. Similar to the proposed project, new development would introduce new sensitive receptors into an area that contains land that has historically utilized chemicals for agricultural production. Any negative health effects associated with the residuals of these chemicals would be alleviated through compliance with state and federal regulations that require remediation when above certain thresholds. There would be a long-term potential for hazards associated with use and generation of household and commercial hazardous wastes, although compliance with state and federal regulations would be required. While the West Area Specific

Plan is not anticipated to result in significant impacts associated with hazards and hazardous materials, the Smaller-scale Project Alternative would result in slightly less potential for impacts.

Hydrology and Water Quality

Implementation of the West Area Specific Plan has the potential to result in the violation of water quality standards and waste discharge of pollutants into surface waters during both construction and long-term operations. Construction operations could result in temporary increases in runoff, erosion, sedimentation, soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The long-term operation of the West Area Specific Plan could result in long-term impacts to surface water quality from urban stormwater runoff and could enter groundwater or surface water systems. Additionally, the proposed project would result in new impervious surfaces that could reduce rainwater infiltration and groundwater recharge. Mitigation measures incorporated into the project would reduce potential water quality impacts to a less than significant level. The West Area Specific Plan would not place persons or structures in a flood hazard zone.

Under the Smaller-scale Project Alternative, potential water quality impacts from construction and operation would be reduced. Under this alternative, the overall level of development (including the size of the site and the overall development area per use) would be reduced by approximately 33 percent. An area of approximately 264 acres that would be developed as part of the proposed project would not be developed as part of this alternative. The areas that would not be developed would remain under agricultural production, and while they would have better recharge in those areas, they would continue to require intensive groundwater pumping for the agricultural production. The higher amount of groundwater pumping under this alternative would result in a greater impact on the Salinas Valley Ground Water basin, when compared to the proposed project. There would still be some benefit on the Salinas Valley Ground Water basin under this alternative because 66 percent of the land area would be converted into a use that would not require intensive groundwater pumping.

There are some instances where the 264 acres of Plan Area that remains undeveloped would have greater discharges of certain pollutants (such as erosion, sedimentation, pesticides release, etc.) when compared to the proposed project. Additionally, overall, while the potential to result in the violation of water quality standards would be reduced under this alternative when compared with the proposed project, overdraft conditions would worsen in the Salinas Valley Ground Water basin under this alternative when compared to the proposed project. As such, potential impacts related to hydrology and water quality would be increased under the Smaller-scale Project Alternative when compared to the West Area Specific Plan.

Noise

Some existing noise-sensitive receptors located near the Plan Area are currently exposed to exterior traffic noise levels exceeding the 60 dB L_{dn} exterior noise level standard for residential uses. In some locations, the noise levels are predicted to increase to levels that would trigger a new exceedance of the 60 dB L_{dn} exterior noise level standard, or exceed the FICON allowable increase criteria. A mitigation measure has been incorporated into the project to ensure that the

project applicant consider repaving affected roadway segments, which is anticipated to reduce traffic noise levels along affected roadways.

The proposed project has the potential to expose new sensitive receptors to excessive noise. Several mitigation measures have been incorporated into the project to ensure that the potential noise impacts to new sensitive receptors is mitigated. For instance, there are measures that require sound walls and/or landscaped berms as a form of attenuation for traffic noise. There are also measures that address stationary sources (i.e. generators, mechanical equipment, etc.) to ensure that they do not adversely affect sensitive receptors. Lastly, there are measures that address business operations (i.e. loading docks, truck routes, etc.) to ensure that they do not adversely affect sensitive receptors.

The proposed project has the potential to increase noise levels and vibration levels associated with construction activities. Mitigation measures have been incorporated into the project to require construction activities that limit construction to the least noise sensitive times of the day/week, and to ensure that all equipment would be fitted with factory-equipped mufflers.

Under the Smaller-scale Project Alternative, the overall level of development would be reduced by 33 percent as compared with the proposed project. As a result of less development, noise levels associated with traffic, stationary sources, and construction would be expected to be reduced under this alternative. Despite this reduction in the size of intensity of development under this alternative, it is expected that some noise levels associated with traffic, stationary sources, and construction would still generate a significant and unavoidable impact As such, this alternative would have less impact relative to the proposed project.

Population and Housing

The City anticipates growth within the community over time, and has responded to the anticipated growth by establishing a Future Growth Area (FGA). The FGA was established through a community process that focused on allowing new development to specific areas of the city that have been determined to have adequate infrastructure and resources to accommodate the growth. The Plan Area is within the North of Boronda FGA, and West Area Specific Plan a planning document that implements the City's intent to focus new development, and the growth that goes along with the new development, into the FGA. The West Area Specific Plan would not displace substantial numbers of existing housing and/or substantial numbers of people, but would instead provide new housing consistent with the City's General Plan. The West Area Specific Plan does not divide the community, but rather, it is an extension of the existing community.

Under the Smaller-scale Project Alternative, the overall level of development would be reduced by 33 percent as compared with the proposed project. Development of housing would still occur under this alternative, but fewer units would be built. Growth would still be anticipated to occur within the region, but it would not be fully accommodated in the FGA which has undergone extensive planning efforts by the City and community for over a decade. This would not be consistent with the FGA and General Plan. The City would need to look to other undeveloped areas of the region to develop for new housing which would be expected to have environmental

impacts that have not yet been assessed but could well be worse than those of the West Area Specific Plan, particularly with respect to prime agricultural land, which is abundant in the region. Overall, this alternative would have a greater impact when compared to the proposed project.

Public Services

New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The West Area Specific Plan project incorporates sites for new schools and parks. A new fire station will be built within the Central Area Specific Plan to accommodate buildout of the North of Boronda FGA, including the Plan Area. The Plan Area is currently served by Station 6 located at 45 East Bolivar Street. The City has indicated that a new public safety facility is needed to meet the needs of the City in the long-term, although West Area Specific Plan project does not directly trigger the need for a new facility. Additional staff and equipment for fire and police services will be warranted.

Mitigation measures have been incorporated into the project that require payment of impact fees to the City and other public agencies to ensure that the West Area Specific Plan project does not have adverse financial impacts on these agencies. The West Area Specific Plan includes land for schools and parks to ensure the increased demand for these services is met within the Plan Area.

Under the Smaller-scale Project Alternative, the overall level of development and the number of residential/non-residential uses would be reduced by 33 percent; therefore, the demand for police, fire and other public services would be reduced. This alternative would still result in development of public facilities (i.e. schools and parks) and would be required to pay the appropriate public safety impact fees. Overall, this alternative would have a slightly reduced impact to public services when compared to the proposed project.

Transportation and Circulation

Implementation of the West Area Specific Plan would cause an increase in traffic on roadway segments, intersections and ramp junctions that would cause traffic operations to degrade to an unacceptable level of service. Mitigation measures have been incorporated into the project to reduce these traffic impacts to a less than significant level. In some cases, the cumulative traffic conditions on roadway segments, intersections and ramp junctions are anticipated to degrade to an unacceptable level of service. The applicants will be required to make certain traffic improvements and pay traffic impact fees, but some of these cumulative impacts will remain significant and unavoidable.

Under the Smaller-scale Project Alternative, the overall level of development and the number of residential/non-residential uses would be reduced by 33 percent; therefore, traffic generated in the Plan Area would be reduced. This alternative would still result in new traffic improvements on the City's roadway system to accommodate the new traffic generated. It would also still result in payments of traffic impact fees into the City's CIP program that would be used for the roadway system. Existing deficiencies in the traffic system would receive some benefit of improvements to improve existing deficiencies; however, there would still be significant and unavoidable

cumulative impacts. Overall, this alternative would have less of an overall traffic impact than the proposed project.

Utilities

Implementation of the West Area Specific Plan could result in potentially significant impacts to the utility systems including wastewater, water, storm water drainage, and solid waste providers. Mitigation measures have been incorporated into the project to ensure that capacity is available and any impacts from increased demand are reduced.

Under the Smaller-scale Project Alternative, the Plan Area would be reduced by approximately 33 percent and the proposed residential and non-residential uses would also be reduced by approximately 33 percent. For the purposes of discussion, this alternative assumes that approximately 264 acres of land along the entire eastern boundary of the Plan Area would be removed and remain as undeveloped agricultural land. The resultant Plan Area under this alternative would be approximately 533 acres in size, and include up to 2,908 residential units, up to 382,905 square feet of commercial/mixed use building area, and up to 119 acres of public facilities (including two elementary schools, a high school, middle school, open space (including supplemental detention/retention basins) and up to 8 parks).

The total quantity of infrastructure installed would be reduced, and the demand for wastewater, stormwater, and solid waste services would be less than would be required for the proposed project. For example, is expected that this alternative would generate approximately 0.7 MGD of wastewater and approximately 33,473 lbs/day of solid waste, less than what would be generated by the proposed project, since this alternative would generate fewer residents when compared to the proposed project. Estimated solid waste generation is shown in Table 5.0-9, below.

TABLE 5.0-9: ESTIMATED SOLID WASTE GENERATION FOR THE SMALLER-SCALE ALTERNATIVE

LAND USE	*GENERATION FACTOR[(1)]*	*PROJECT*	*ESTIMATED SOLID WASTE (LBS/DAY)*
Smaller-scale Alternative			
Retail/Services	6 lb./1,000 s.f./day	382,905 s.f.	2,297 lbs
Residential	10 lb./unit/day	2,908 units	29,080
Schools	0.5 lb./student/day	4,191 students	2,096
TOTAL			**33,473**
Proposed Project			
Retail/Services	6 lb./1,000 s.f./day	571,000 s.f.	3,426 lbs
Residential	10 lb./unit/day	4,340 units	43,400
Schools	0.5 lb./student/day	4,191 students	2,096
TOTAL			**48,922**

[(1)] CalRecycle

Separately, the total storm drainage runoff under this alternative would be reduced by approximately 33% when compared to the proposed project, due to the project footprint being reduced by 33% when compared to the proposed project.

However, this alternative would not save as much groundwater when compared to the proposed project. The amount of total water usage reduced by this alternative when compared to the

existing uses in the Plan Area would be approximately 1,389 AFY, compared with the approximately 2,078 AFY estimated to be saved by the proposed project. That is, buildout this alternative would save approximately 689 AFY less water than buildout of the proposed project. This would increase risks to the groundwater basin associated with seawater intrusion, when compared to the proposed project. However, in general, the demand for utilities would be reduced under this alternative when compared to the proposed project.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project (No Build) Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the proposed project.

Table 5.0-10 presents a comparison of the alternative project impacts with those of the West Area Specific Plan. As shown in the table, the No Project Alternative is the environmentally superior alternative because it results in the least adverse environmental impacts when compared to the proposed project. However, as required by CEQA, when the No Project (No Build) Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. The Smaller-scale Project Alternative is the next best alternative. It ranks equal or better than the proposed project for every environmental issue. In addition, in aggregate, the Reduced Land Area Project Alternative, and the Reduced Residential Intensity/Density Project Alternative rank higher than the proposed project. It should be noted that none of alternatives meet all of the project objectives, as shown in Table 5.0-1. Additionally, the reduced number of residential units in the Reduced Residential Intensity/Density Alternative would be inconsistent with the General Plan standards for the Plan Area, and would not meet the minimum number of residential units required for New Urbanism.

In conclusion, the Smaller-scale Project Alternative is the environmentally superior alternative.

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TABLE 5.0-10: COMPARISON OF ALTERNATIVE PROJECT IMPACTS TO THE WEST AREA SPECIFIC PLAN

ENVIRONMENTAL TOPIC	*PROPOSED PROJECT*[1]	*NO PROJECT (NO BUILD) ALTERNATIVE*	*REDUCED LAND AREA PROJECT ALTERNATIVE*	*REDUCED RESIDENTIAL INTENSITY/DENSITY ALTERNATIVE*	*SMALLER-SCALE PROJECT ALTERNATIVE*
SECTION 3.1 - AIR QUALITY (AQ)					
AQ Impact 3.1-1	LS	Equal	Greater	Greater	Greater
AQ Impact 3.1-2	SU	Less	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-3	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-4	LS	Less	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-5	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-6	LS/MM	Slightly Greater	Slightly Less	Slightly Less	Slightly Less
AQ Impact 3.1-7	CC & SU	Slightly Less	Slightly Less	Slightly Less	Slightly Less
SECTION 3.12- BIOLOGICAL RESOURCES (BIO)					
BIO Impact 3.2-1	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-2	LS/MM	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-3	LS/MM	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-4	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-5	LS/MM	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-6	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-7	LS/MM	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-8	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-9	S&U	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-10	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-11	LS	Less	Slightly Less	Equal	Slightly Less
BIO Impact 3.2-12	CC & SU	Less	Slightly Less	Equal	Slightly Less
SECTION 3.3 - CULTURAL RESOURCES (CLT)					
CLT Impact 3.3-1	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
CLT Impact 3.3-2	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
CLT Impact 3.3-3	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
CLT Impact 3.3-4	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
CLT Impact 3.3-5	LS & LCC	Slightly Less	Slightly Less	Slightly Less	Slightly Less
SECTION 3.4 - GREENHOUSE GASES AND CLIMATE CHANGE (GHG)					
GHG Impact 3.4-1	S&U	Less	Slightly Less	Slightly Less	Equal
GHG Impact 3.4-2	LS/MM	Slightly Less	Slightly Less	Slightly Less	Slightly Less
GHG Impact 3.4-3	LS	Slightly Less	Slightly Less	Slightly Less	Slightly Less
GHG Impact 3.4-4	CC & SU	Less	Less	Less	Less

Environmental Topic	*Proposed Project*[1]	*No Project (No Build) Alternative*	*Reduced Land Area Project Alternative*	*Reduced Residential Intensity/Density Alternative*	*Smaller-Scale Project Alternative*
Section 3.5 - Hazards and Hazardous Materials (HAZ)					
HAZ 3.5-1	LS/MM	Slightly Less	Slightly Less	Equal	Slightly Less
HAZ 3.5-2	LS/MM	Slightly Less	Slightly Less	Equal	Slightly Less
HAZ 3.5-3	LS & LCC	Slightly Less	Slightly Less	Equal	Slightly Less
Section 3.6 - Hydrology and Water Quality (HYD)					
HYD Impact 3.6-1	LS & LCC	Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-2	LS & LCC	Slightly Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-3	LS & LCC	Greater	Slightly Greater	Slightly Less	Slightly Greater
HYD Impact 3.6-4	LS	Slightly Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-5	LS	Slightly Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-6	LS	Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-7	LS	Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-8	LS & LCC	Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-9	LS & LCC	Slightly Less	Slightly Less	Slightly Less	Slightly Less
HYD Impact 3.6-10	LS & LCC	Greater	Slightly Greater	Slightly Less	Slightly Greater
HYD Impact 3.6-11	LS & LCC	Less	Slightly Less	Slightly Less	Slightly Less
Section 3.7 - Noise (NOI)					
NOI Impact 3.7-1	SU	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-2	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-3	LS	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-4	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-5	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-6	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-7	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
NOI Impact 3.7-8	CC & SU	Less	Slightly Less	Slightly Less	Slightly Less
Section 3.8 - Population & Housing (POP)					
POP Impact 3.8-1	LS	Greater	Slightly Greater	Slightly Greater	Slightly Greater
POP Impact 3.8-2	LS & LCC	Greater	Slightly Greater	Slightly Greater	Slightly Greater
Section 3.9 - Public Services (PS)					
PS Impact 3.9-1	LS/MM	Less	Equal	Slightly Less	Slightly Less
PS Impact 3.9-2	LS	Slightly Less	Equal	Slightly Less	Slightly Less
PS Impact 3.9-3	SU	Less	Equal	Slightly Less	Slightly Less
PS Impact 3.9-4	SU	Less	Equal	Slightly Less	Slightly Less
PS Impact 3.9-5	LS	Less	Equal	Slightly Less	Slightly Less

Environmental Topic	*Proposed Project*[1]	*No Project (No Build) Alternative*	*Reduced Land Area Project Alternative*	*Reduced Residential Intensity/Density Alternative*	*Smaller-Scale Project Alternative*
PS Impact 3.9-6	CC & SU				
Section 3.10 - Transportation and Circulation (TC)					
TC Impact 3.10-1	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-2	LS/MM	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-3	CC & SU	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-4	CC & SU	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-5	NI	Less	Slightly Less	Slightly Less	Slightly Less
TC Impact 3.10-6	LS	Less	Equal	Equal	Equal
TC Impact 3.10-7	LS	Less	Slightly Greater	Slightly Less	Slightly Greater
TC Impact 3.10-8	LS/MM	Less	Slightly Greater	Slightly Less	Slightly Greater
Section 3.11 - Utilities (UTL)					
UT Impact 3.11-1	LS	Less	Less	Less	Less
UT Impact 3.11-2	LS/MM	Less	Equal	Less	Less
UT Impact 3.11-3	LS	Less	Equal	Less	Less
UT Impact 3.11-4	LS & CC	Less	Equal	Less	Less
UT Impact 3.11-5	LS	Less	Equal	Slightly Less	Slightly Less
UT Impact 3.11-6	LS	Equal	Equal	Less	Equal
UT Impact 3.11-7	LS & LCC	Less	Slightly Less	Slightly Less	Slightly Less
UT Impact 3.11-8	LS	Less	Less	Slightly Less	Less
UT Impact 3.11-9	LS & CC	Less	Less	Equal	Less
UT Impact 3.11-10	LS	Less	Equal	Less	Less
UT Impact 3.11-11	LS & CC	Less	Equal	Less	Less

[1]*The significance determinations contained in the second column of this table refer only to the significance of the proposed project, and not necessarily to the potential significance determinations of each of the alternatives.*

Notes: Greater/Slightly Greater = Greater impact than that of the West Area Specific Plan; Less/Slightly Less = Less impact than that of the West Area Specific Plan; Equal = No Substantial Change in impact from that of the West Area Specific Plan.

NI = No Impact; LS = Less than significant Impact; LS/MM = Less than Significant with Mitigation ; S & U = Significant and Unavoidable; CC & SU = Cumulatively Considerable and Significant and Unavoidable; LS & LCC = Less than Significant and Less than Cumulatively Considerable

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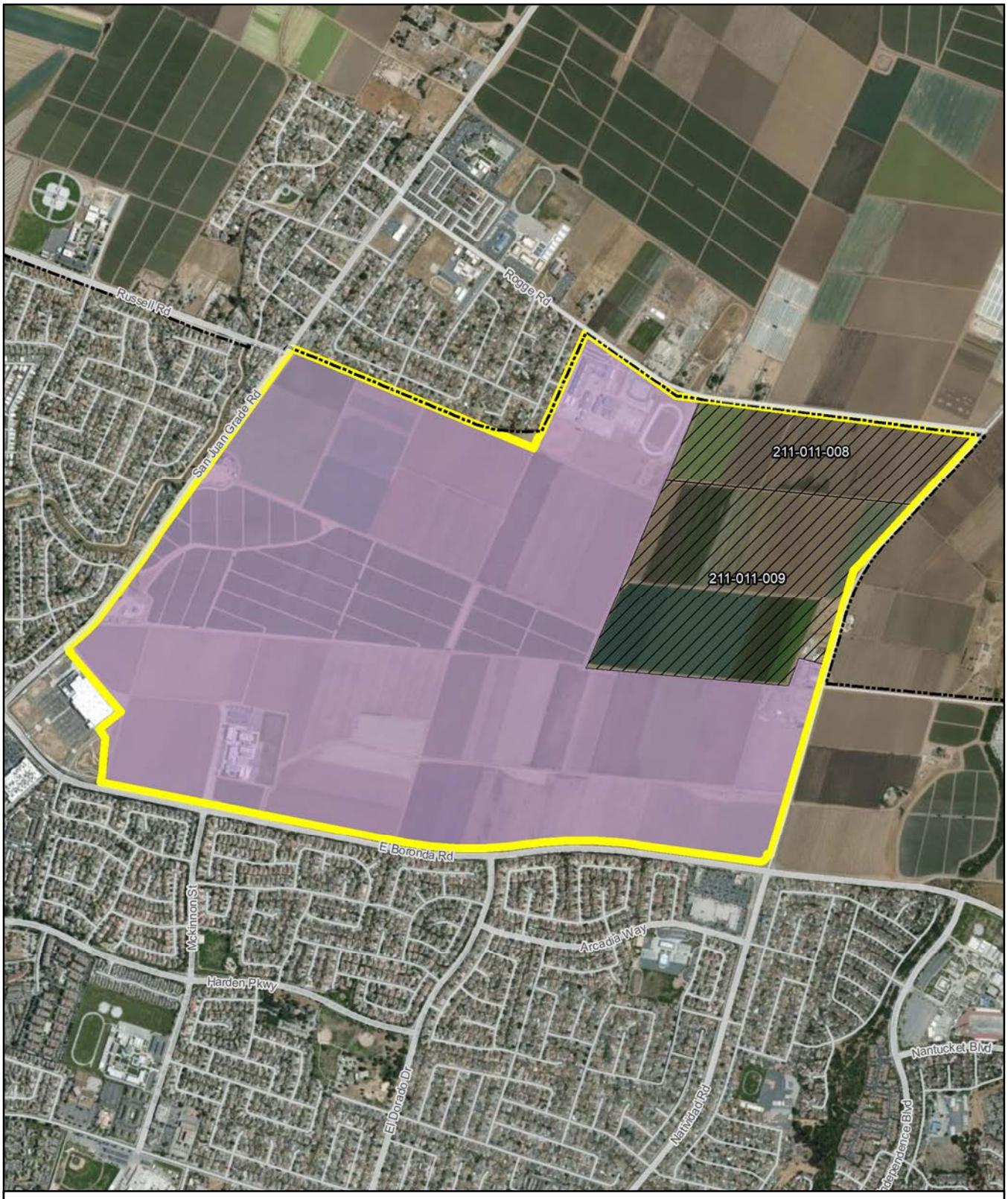

Legend

- City of Salinas
- West Area Specific
- Reduced Land Area
- Area Excluded from West Area Specific Plan under the Reduced Land Area Alternative

N

0 500 1,000

Feet

1:18,000

Sources: Monterey County GIS. Map date: June 20, 2016.
Boundary update: February 25, 2019.

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 5.0-1: Reduced Land Area Alternative

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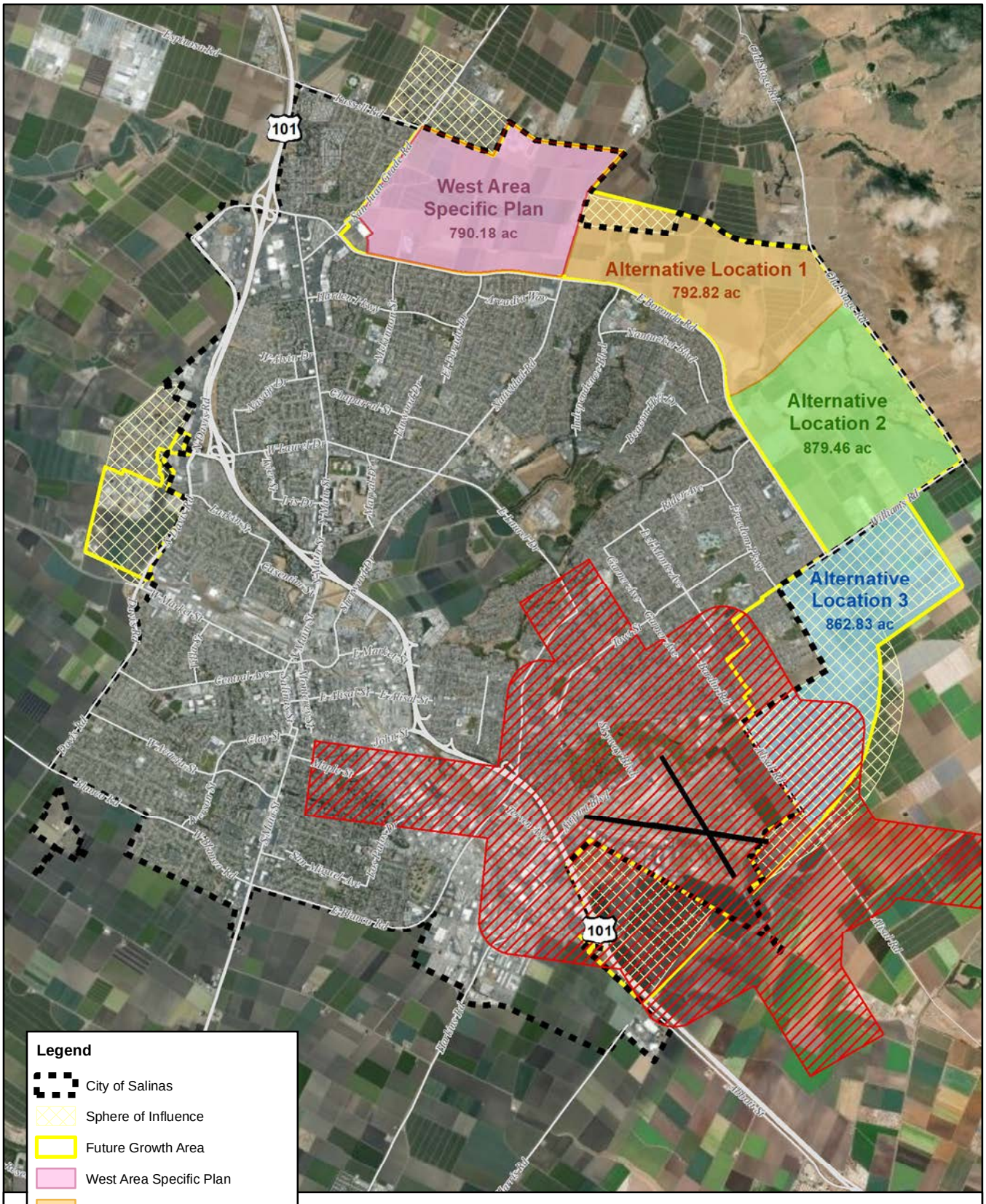

CITY OF SALINAS WEST AREA SPECIFIC PLAN EIR

Figure 5.0-2: Alternative Project Locations Considered but Rejected

Sources: Monterey County GIS, City of Salinas GIS. Map date: February 25, 2016.
Boundary revision: February 25, 2019.

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