
APPENDIX A

Notice of Preparation and Initial Study

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NOTICE OF PREPARATION

To: Interested Persons

From: County of Merced
Community and Economic Development Department
2222 'M' Street, Merced, CA 95340
(209) 385-7654

Contact: Brian Guerrero, Planner III

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Oliveira Dairy Expansion project (Conditional Use Permit No. CUP16-005)

Merced County will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the proposed Oliveira Dairy Expansion project as described in the attached Initial Study. We need to know the views of interested persons, agencies, and organizations as to the scope and content of the environmental information to be included in the EIR. Agencies should comment only on the environmental resources that are within the agency's statutory responsibilities in connection with the proposed project.

The project description, location, and the probable environmental effects are contained in the attached materials. A copy of the Initial Study and all project related documents can be obtained at the Community and Economic Development Department, 2222 "M" Street, Merced, CA 95340. It is also available for download from the Merced County Planning Department website at:

<http://www.co.merced.ca.us/index.aspx?nid=414>

Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but **not later than 30 days** after receipt of this notice.

Please send your response to Brian Guerrero, Planner III, at the Merced County address shown above. If an organization or agency, please include the name of a contact person so that we have the ability to contact you further during the EIR preparation process.

Project Title: Oliveira Dairy Expansion


Project Location: Merced Merced
nearest city *County*

Project Applicant: Oliveira Dairy
4235 Oak Avenue
Merced, CA 95340

Date:

8/14/18

Signature:


Brian Guerrero, Planner III

cc: State Clearinghouse

PROJECT DESCRIPTION / LOCATION

The Oliveira Dairy is located on 22± acres of an existing farm totaling approximately 290 acres in unincorporated Merced County. The project site is located on the southwest corner of West Oak Avenue and North Gurr Road in the Merced area of the County. The project cropland application area consists of 249± acres located on portions of seven parcels. Conditional Use Permit CUP16-005 proposes to expand the existing dairy so that the modified dairy would house 2,900 mature cows and 1,500 support stock. This would represent an increase of 2,182 animals from existing numbers.

The proposed project would include the construction of supporting buildings and structures, including two new shade barns, two new freestall barns, and a new milking parlor. With construction of the proposed facilities, approximately seven acres of cropped acreage would be converted to active dairy facilities. The remaining 242± acres would continue to be cropped with dairy feed crops.

POTENTIAL AREAS OF ENVIRONMENTAL IMPACT

An initial evaluation of the proposed Oliveira Dairy Expansion project indicates that the project has the potential to result in significant adverse effects on the environment for the following issue areas:

- Air Quality and Odors
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Greenhouse Gas Emissions and Energy
- Nuisance Insects
- Hydrology, Water Quality, and Soil Erosion

The Environmental Impact Report will evaluate the impacts associated with these issue areas. In addition to the above, the Oliveira Dairy Expansion EIR will also include an analysis of project alternatives and cumulative effects.

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INITIAL STUDY AND ENVIRONMENTAL EVALUATION

Project Title: Oliveira Dairy Expansion
Conditional Use Permit No. CUP16-005

Project Location: 4235 Oak Avenue
Merced, CA 95340

Lead Agency Name and Address: Merced County
Community and Economic Development Department
2222 'M' Street
Merced, CA 95340

Contact Person and Phone Number: Brian Guerrero, Planner III
Phone: (209) 385-7654

General Plan Designation: Agricultural (Merced County General Plan)

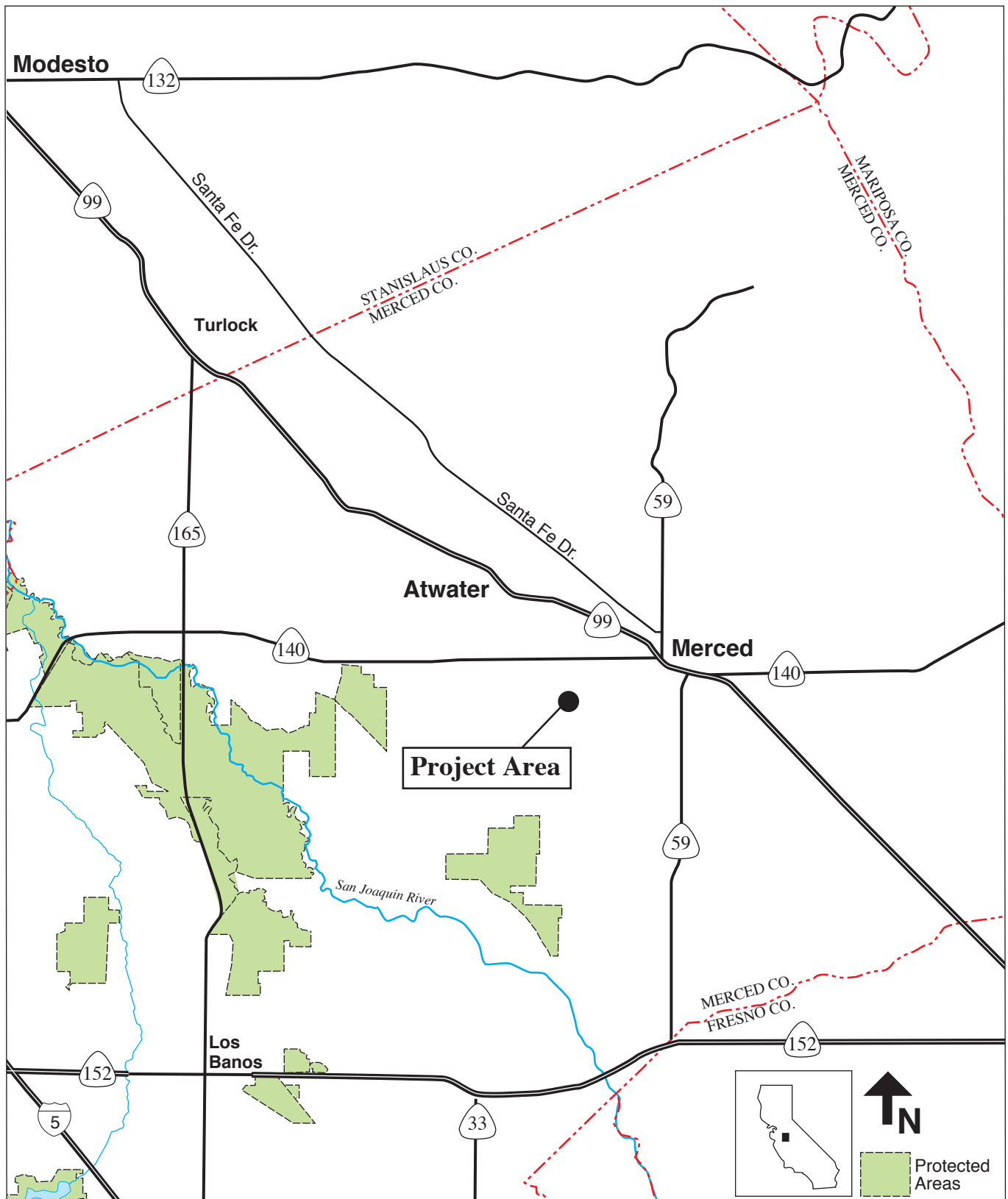
Zoning: A-1 (General Agricultural; Merced County)

1. DESCRIPTION OF PROJECT

The project under evaluation in this Initial Study (IS) is the expansion of an existing dairy facility located in rural Merced County west of the City of Merced.

LOCATION

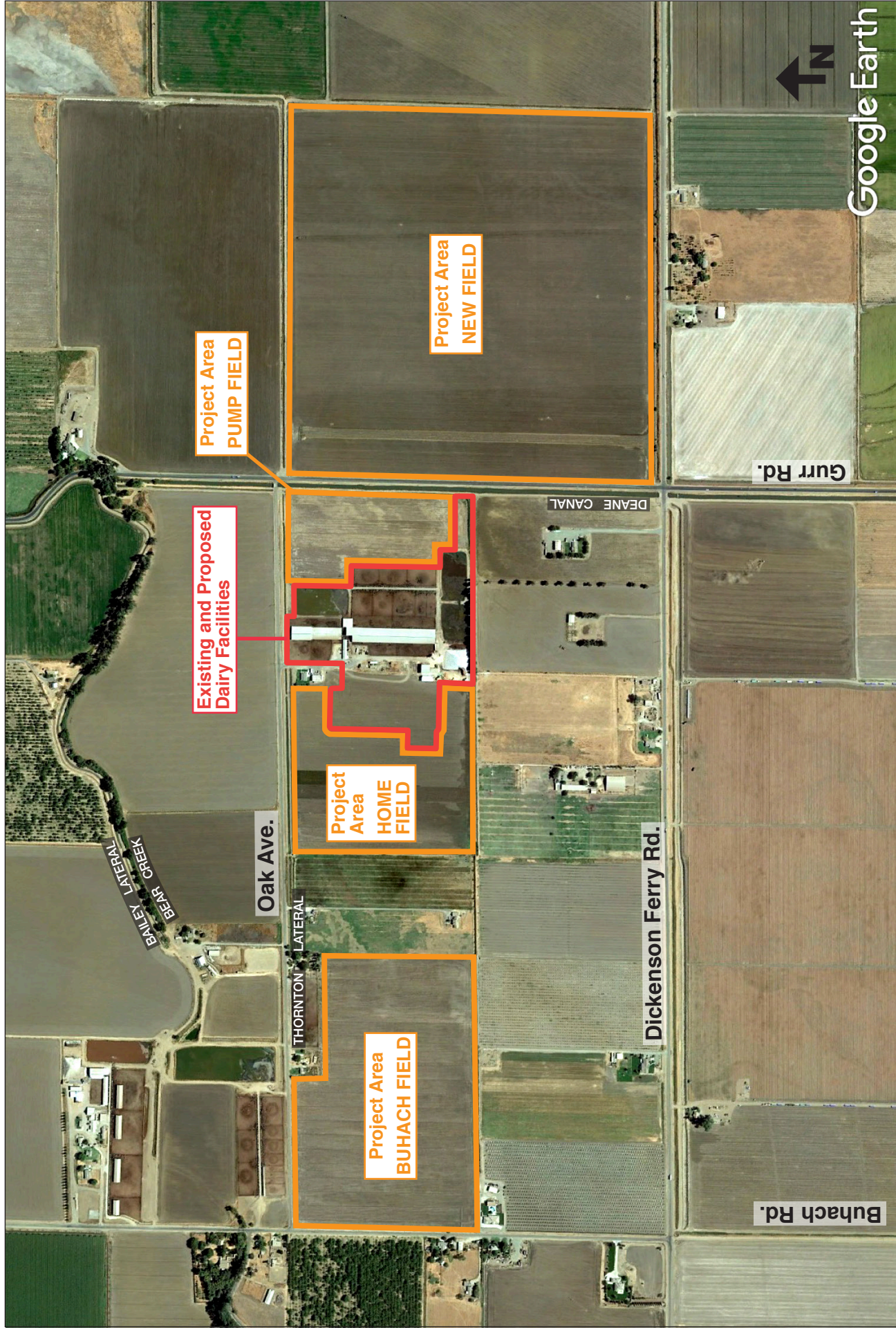
The Oliveira Dairy is located on 22± acres of an existing farm totaling approximately 290 acres in unincorporated Merced County. The project site is located on the southwest corner of West Oak Avenue and North Gurr Road in the Merced area of the County. The project's location is within the central California region (see Figures 1 and 2). The project cropland application area consists of 249± acres located on portions of seven parcels (see Figure 2 for application areas, and Figure 3 and Table 1 for Merced County Assessor's Parcel Numbers [APN]). The project site is located in Section 32, Township 7 South, Range 13 East, Mount Diablo Base and Meridian; 37°16'47.91"N, 120°33'51.48" W.



SOURCE: Planning Partners, 2017

Oliveira Dairy Expansion Project CUP16-005

Figure 1
Regional Location

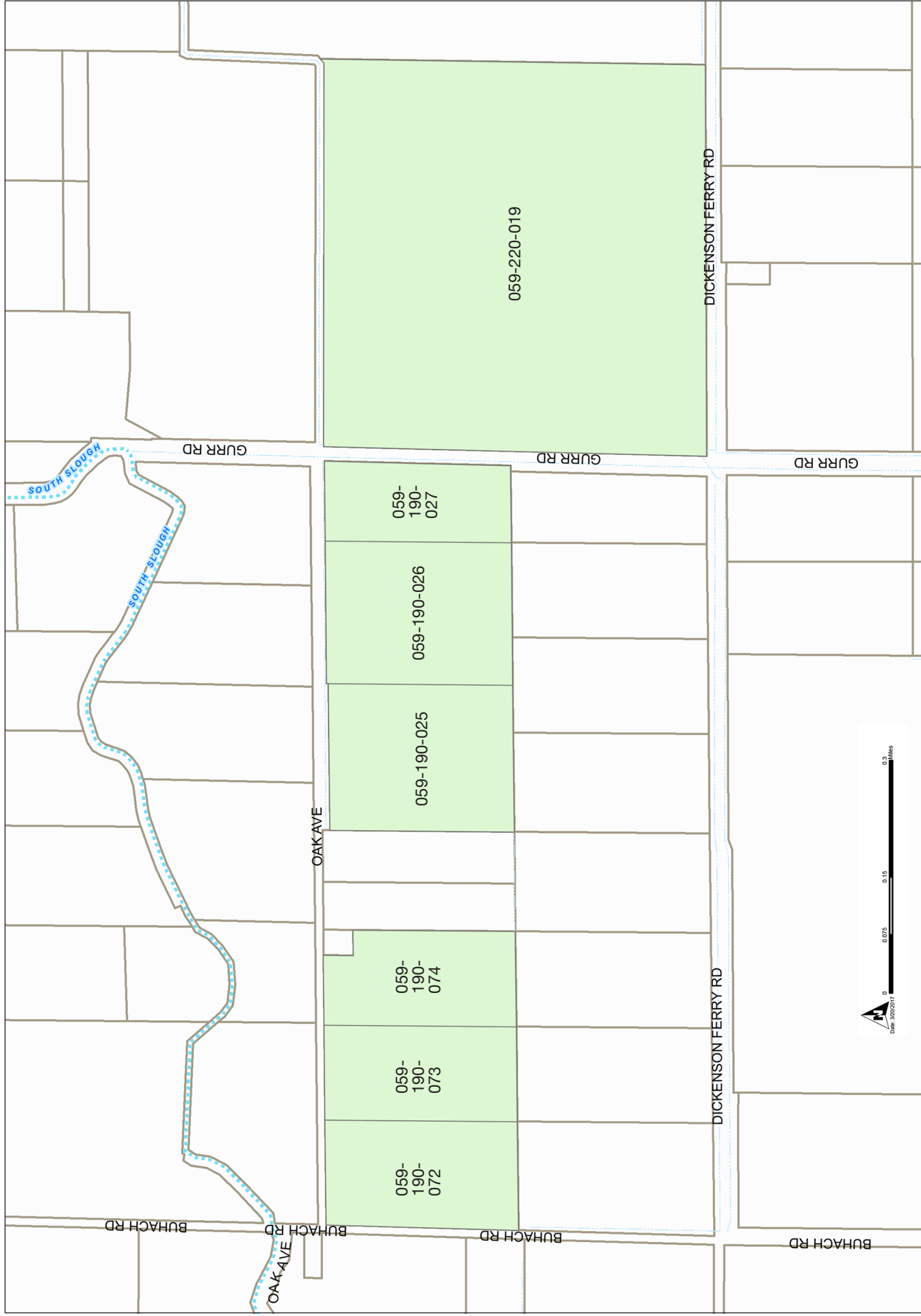


Oliveira Dairy Expansion Project CUP 16-005

Figure 2

Project Location

SOURCE: Sousa Engineering 2016; Planning Partners 2017



SOURCE: Source: Merced County GIS 2017

Oliveira Dairy Expansion Project CUP16-005
Figure 3
 Project Site Merced County Assessor Parcel Numbers

Table 1 Oliveira Dairy Project Parcels, Acreage, and Use

Field Name	APN	Gross Acres	Cropped Acres *	Use	Nutrients Applied	Irrigation Source
Dairy	059-190-026	28		Active Dairy Facilities		
Home Field	059-190-026		7**	Oats/Corn/Sudangrass Silage	WW/DM	MID/Well
	059-190-025	29	29**	Oats/Corn/Sudangrass Silage	WW/DM	MID/Well
Pump Field	059-190-027	15	13	Oats/Corn/Sudangrass Silage	WW/DM	MID/Well
Buhach Field	059-190-072	22	52	Oats/Corn/Sudangrass Silage	WW/DM	MID/Well
	059-190-073	19				
	059-190-074	19				
New Field	059-220-019	158	148	Oats/Corn/Sudangrass Silage	WW/DM	MID/Well
Total		290	249***			

APN = Assessor's Parcel Number. WW = wastewater. DM = Dry Manure. MID = Merced Irrigation District

* Approximate acreage. Cropped acreage is based on the Existing Conditions Nutrient Management Plan dated 08/17/2016. Nutrients may not be applied to the gross acreage of the parcel listed, but only the cropped acreage listed.

** Construction of the proposed facilities would result in the conversion of seven acres of cropland in Home Field that is located within the dairy facility parcel (APN 059-190-026). Cropped acreage in Home Field would be reduced from 36 acres to 29 acres with implementation of the proposed expansion.

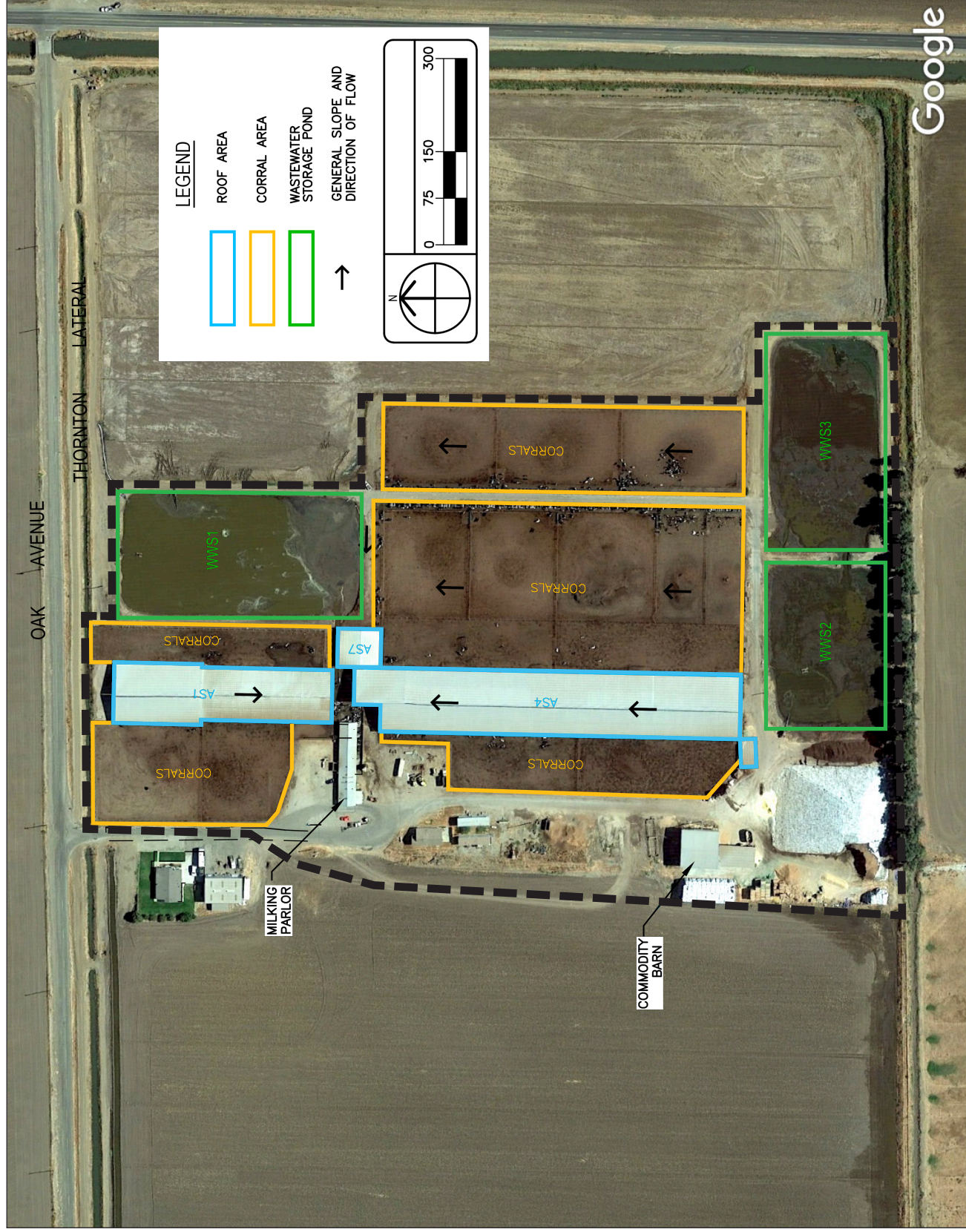
*** Total cropped acreage would be reduced from 249 acres to 242 acres with implementation of the proposed expansion.

Source: Project Applicant, March 2017; Proposed Conditions Nutrient Management Plan (2/12/16); Merced County GIS March 2017.

EXISTING CONDITIONS

The existing dairy facilities include approximately 104,100 square feet of buildings that are located on a ±22-acre portion of APN 059-190-026 (with several corrals and a portion of an existing wastewater storage pond located in APN 059-190-027 (see Figure 4). The facilities include:

- freestall barns
- shade structure
- feed storage area
- maternity barn
- three wastewater storage ponds
- open corrals
- milking parlor
- manure storage area
- commodity barn
- hay barn



SOURCE: Sousa Engineering 2016; Planning Partners 2017

Oliveira Dairy Expansion Project CUP 16-005

Figure 4
Existing Dairy Facilities

Approximately 249± acres of the project area are currently used for the production of crops and the application of manure process water and/or solid manure¹ (see Figure 5). Field application of dry manure and wastewater would include surface irrigation and broadcast spreading/incorporation. The remaining project acres consist of field roads and ancillary farm uses.

As established at the time of Initial Study preparation (April 2017), there are approximately 1,063 milk cows and 158 dry cows with 997 support stock, totaling 2,218 animals at the dairy². The predominant breed of cows housed at the dairy is Holstein. Dry manure and almond shells are used for animal bedding.

The existing facility consists of flush and scrape systems that are used to collect and process wastewater and solid manure. Animal wastes from freestall and other concrete-surfaced areas are flushed with recycled water to an on-site waste management system that consists of one settling basin and two wastewater storage ponds (retention pond). The area of active dairy facilities has been graded to direct corral runoff to the existing waste management system. Stormwater runoff from impervious surfaces is routed to the wastewater ponds. Stormwater from all roofed areas is routed to a nearby field, except for stormwater from the commodity barn roof, which is routed to a wastewater pond. Recycled water is used to clean the milk parlor floor and is the source of sprinkler pen water.

Dry manure is removed from corrals three times a year. The wastewater ponds are cleaned as sludge accumulates and solids are typically removed with an excavator or slurry removal equipment, being careful not to disturb the soil liner. Manure is stored at the dairy in stockpiles before use as bedding or fertilizer. Dry manure is currently applied to all fields. As reflected in the Nutrient Management Plan (NMP), approximately 3,800 tons of solid manure (approximately 80 percent of dry manure) is exported and applied to off-site fields not owned by the dairy operator.

Wastewater is mixed with irrigation water supplied by Merced Irrigation District (MID) canal surface water or three dairy farm groundwater irrigation wells (well locations are shown on Figure 5) and applied to cropland (see Table 1). Receiving fields are graded to guide excess applied irrigation water to an existing tailwater return system. Most collected tailwater is retained by berms; for the Pump Field, tailwater is returned to the storage pond.

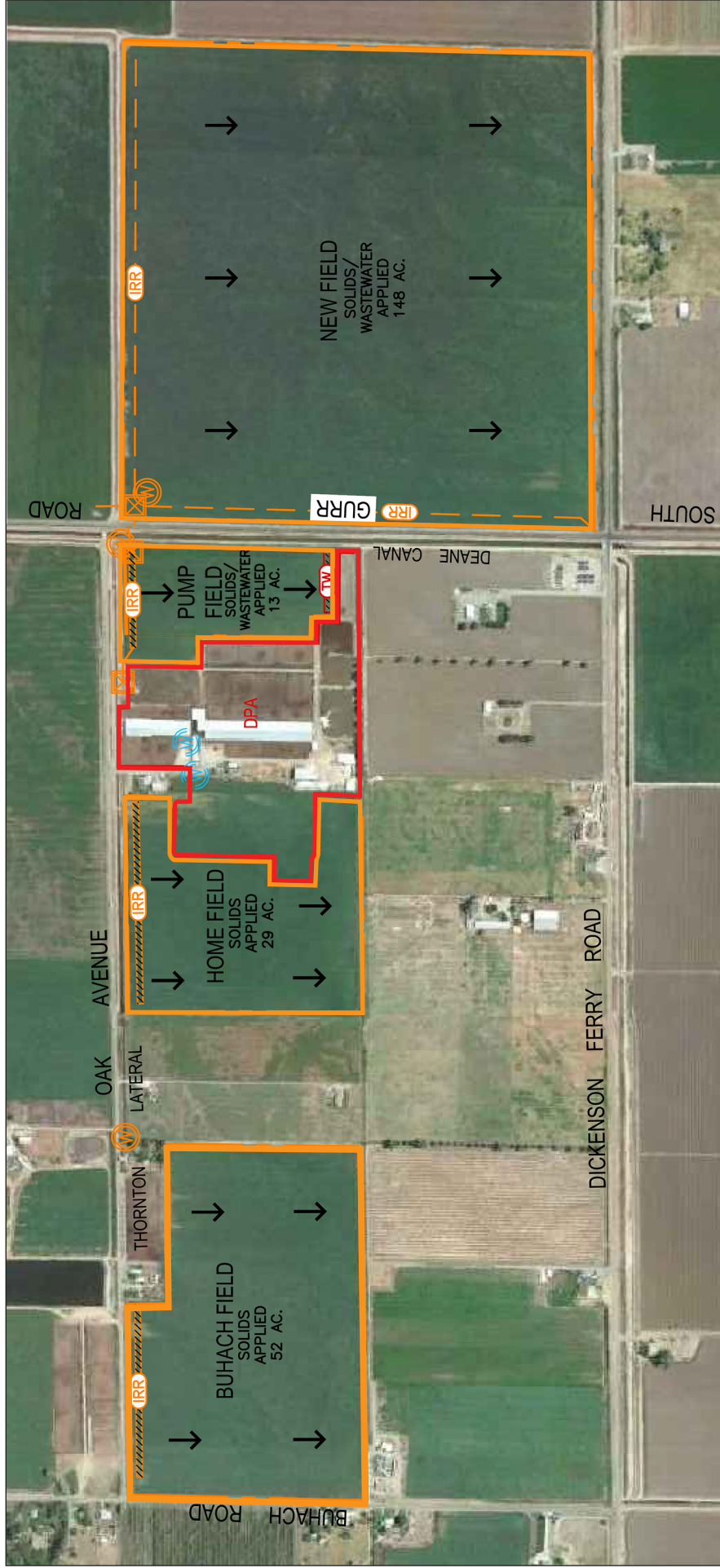
Most of the crops grown on site are used for dairy feed crops and supplement imported grain and hay. Crops include oats silage-soft dough, corn silage, and sudangrass silage. Feed is stored in two silage piles and in an on-site commodity barn.

Definition of the Project Site –

For the purposes of this Initial Study, the “project site” refers to the area of active dairy facilities. The larger project also includes cropland associated with the dairy farm. Throughout this document, “project area” refers to all parcels that are part of the project, including the active dairy facilities and dairy farm cropland.

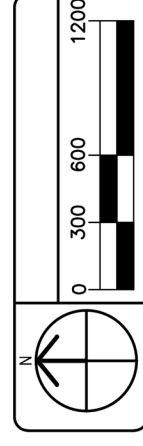
¹ While the details of cropland parcels may vary throughout operations, the disposal of wastewater and solid manure and the acreage necessary to properly dispose of manure liquids and solids would be accounted for in an updated project Nutrient Management Plan (NMP).

² There is an existing heifer facility on Buhach Field, west of the main production area, which would be eliminated with the proposed dairy expansion. Animals currently housed at the heifer facility would be transferred to the main dairy production area to be housed in proposed new structures.



LEGEND

- LAND APPLICATION AREA
- IRRIGATION LINE
- IRRIGATION DITCH
- IRRIGATION CONTROL BOX
- IRRIGATION WELL
- TAILWATER DITCH
- DOMESTIC WELL
- GENERAL SLOPE AND DIRECTION OF FLOW



The operators of the Oliveira Dairy farm currently use a monthly pest control service, primarily for the on-site residences. There is one diesel generator on site.

There are three residences occupied by employees and one residence occupied by the dairy owner located at the dairy facility³. Domestic water is delivered to the site by two on-site water wells (see Figure 5 for well locations). Sewer service is provided by on-site septic systems.

Operations at the dairy are 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. Night lighting at the facility includes fluorescent lighting mounted on the milking parlor and animal shelters. The dairy currently employs a staff of approximately seven workers.

Currently, heavy trucks (milk tankers, commodity deliveries) and other vehicles serve the project site. Existing daily trips by all classes of vehicles are estimated at 24 average daily trips (ADT), with approximately 5 heavy truck trips. All trips currently access the site via Oak Avenue. State Route (SR) 140 to the north, SR 99 to the northeast, and SR 59 to the east provide regional access to the site. The dairy provides on-site parking areas for employees and visitors.

The project site is located within Flood Zone A, an area subject to inundation by the 100-year storm but for which a Base Flood Elevation (BFE) has not been established.

SURROUNDING LAND USES AND SETTING

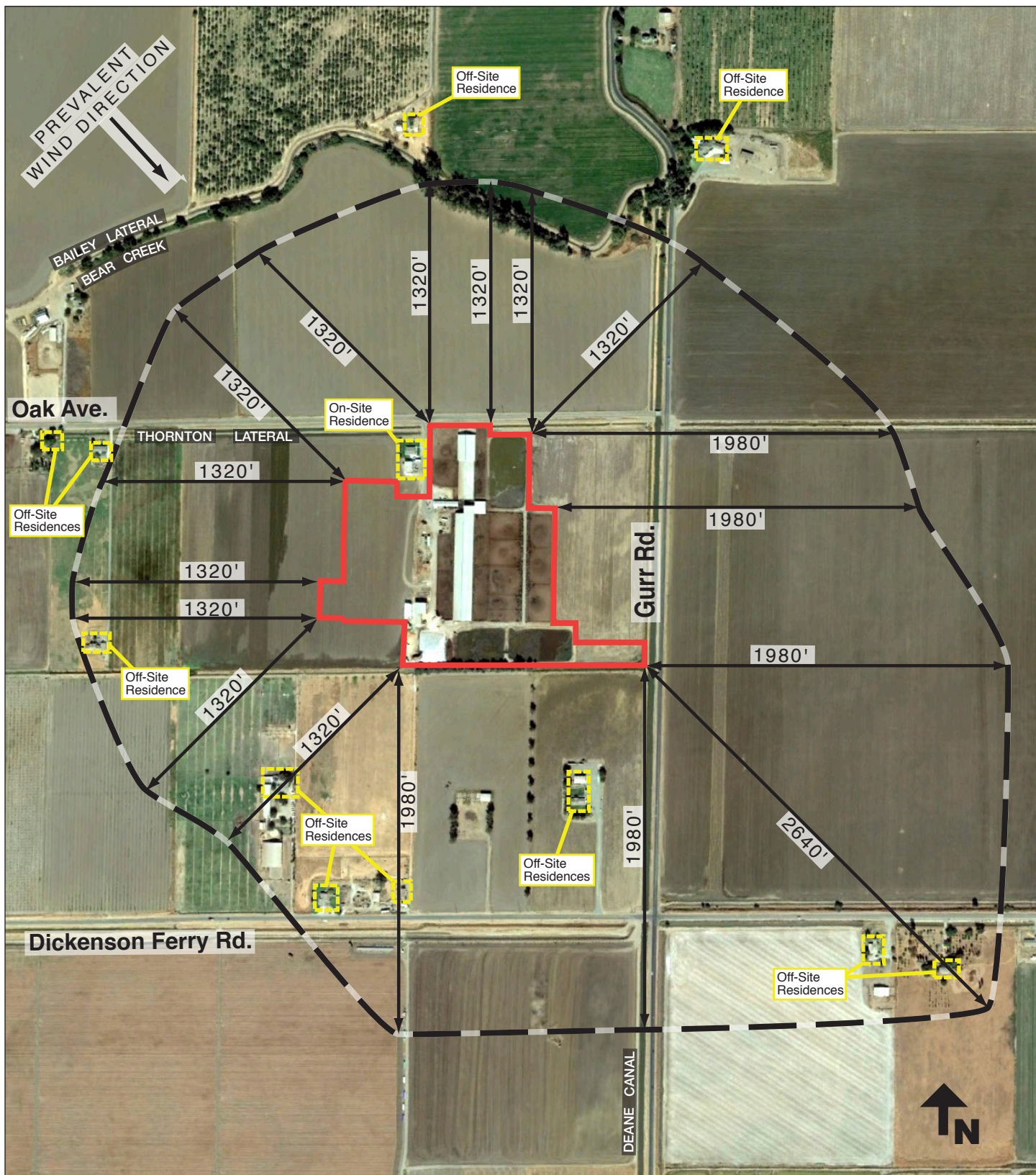
There are off-site single-family residences surrounding the project site and located within the windshed of the dairy (defined as an area of 1,320 feet upwind to 2,640 downwind of the periphery of the animal facility) (see Table 2 and Figure 6). The closest off-site residences are located approximately 610 and 700 feet south of active dairy facilities.

Table 2 Surrounding Land Uses at the Oliveira Dairy			
Location	Land Use	General Plan	Zoning
ON SITE	Dairy / Agriculture / Residences	Agricultural	General Agricultural A-1
NORTH	Agriculture	Agricultural	General Agricultural A-1
EAST	Agriculture	Agricultural	General Agricultural A-1
SOUTH	Agriculture / Residences / Animal Confinement Facility	Agricultural	General Agricultural A-1
WEST	Agriculture / Residences	Agricultural	General Agricultural A-1

Source: Project Site Visit, April 12, 2017; Project Applicant, April 2017.

South Slough, a tributary of Bear Creek, is located approximately 0.25 miles north of the project site. The City of Merced (city limits) is located approximately two miles east of the active dairy facilities. The project site is located 1.25 miles north of the Grasslands Area Focus Boundary, and 2.25 miles north of the Grasslands Ecological Area.

³ There are two additional residences (one single-family home and one mobile home) associated with project area fields, but because operations at these fields would not change, for the purposes of this analysis, these residences are not discussed further.



SOURCE: Planning Partners 2017

Oliveira Dairy Expansion Project CUP16-005

Figure 6
Active Dairy Facilities and Nearby Residences Located in the Windshed

Project details such as adjacent land uses and cropping patterns could change over the course of evaluation, and from those existing at the time of this Initial Study. These changes, however, would consist of agricultural and ancillary uses consistent with the 2030 Merced County General Plan, and would not affect the analysis contained in this Initial Study.

PROJECT PERMITTING HISTORY

Merced County records indicate there are several permits on file for the project site. In June 1992, AP 203 was issued to re-establish the dairy for 287 total animal units. There is also a permit for a second residence on file. The NMP indicates that the facility has been in operation since 1970.

To allow for the expansion of the dairy, the applicant has submitted an application for issuance of a new Conditional Use Permit (CUP16-005) from the County. It is this action that is the subject of this Initial Study. The Central Valley Regional Water Quality Control Board (CVRWQCB) and the San Joaquin Valley Air Pollution Control District (SJVAPCD) both regulate the existing dairy. As responsible agencies, they will be required to use the County's environmental document in their consideration of the proposed dairy expansion.

The CVRWQCB regulates the existing dairy under the Reissued Waste Discharge Requirements General Order for Existing Milk Cow Dairies (Order R5-2013-0122). Coverage under the General Order for Existing Milk Cow Dairies requires approval and implementation of a NMP for the application of waste to land application areas, and a Waste Management Plan (WMP) to ensure proper compliance with the General Order. As established by the Report of Waste Discharge (ROWD) submitted for the existing dairy to the CVRWQCB in October 2005, the State-permitted herd size for the dairy is 600 milk and dry cows combined⁴, with regulatory review required for expansions of greater than 15 percent above this value (690 milk and dry cows combined). The existing herd currently exceeds the ROWD herd limit number. The project applicant submitted a Report of Waste Discharge for the proposed dairy expansion in February 2016. To permit the proposed expansion, the CVRWQCB would be required to issue Individual Waste Discharge Requirements (WDR) for the operation.

The Permit to Operate (PTO) issued by the San Joaquin Valley Air Pollution Control District (SJVAPCD) on file for the dairy facility (expiration date 03/31/2018) allows 910 milk cows, not to exceed a combined total of 1,040 mature cows (milk and dry). An Authority to Construct (ATC) application would be required to modify the PTO from the SJVAPCD for the proposed herd expansion and the modification of existing facilities.

PROJECT CHARACTERISTICS

The project sponsor has applied for a new Conditional Use Permit (CUP16-005) from Merced County to expand the existing dairy so that the modified dairy would house 2,500 milk cows and 400 dry cows (see Table 3). This would represent an increase of 2,182 animals from existing numbers.

⁴ The CVRWQCB regulates only mature cows (milk and dry) and does not establish any limits on calves, heifers, and other support stock.

Table 3 Existing and Proposed Herd at the Oliveira Dairy

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo.)	Calves (4-6 mo.)	Calves (0-3 mo.)	Mature Bulls	Total Animals
Existing	1,063	158	467	344	0	186	0	2,218
Proposed	2,500	400	375	375	375	375	0	4,400
Change	1,437	242	-92	31	375	189	0	2,182

Note: This evaluation considers maximum buildout.

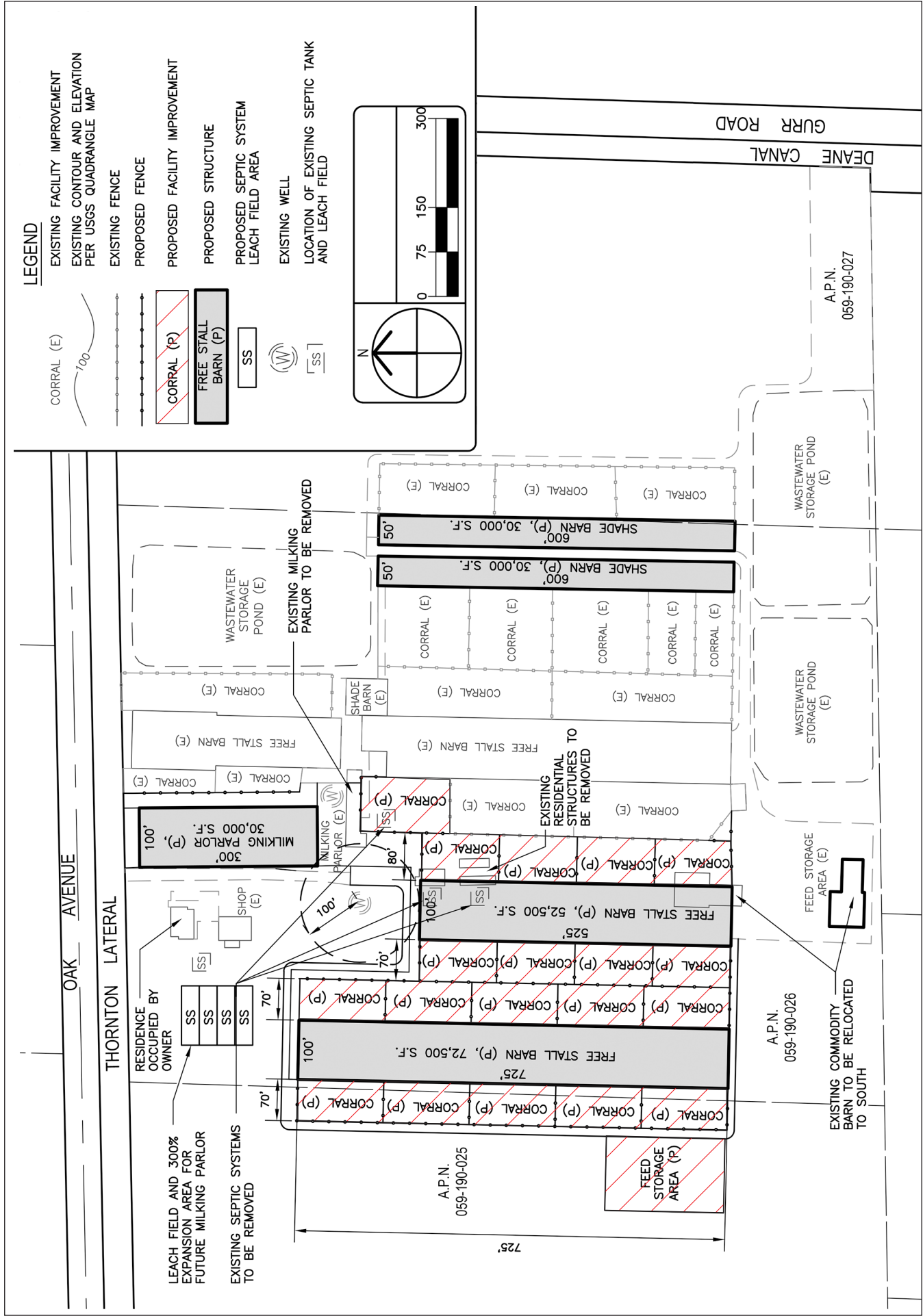
Source: Project Applicant, April 2017; Existing Conditions Nutrient Management Plan (08/17/2016); Proposed Conditions Nutrient Management Plan (02/12/2016)

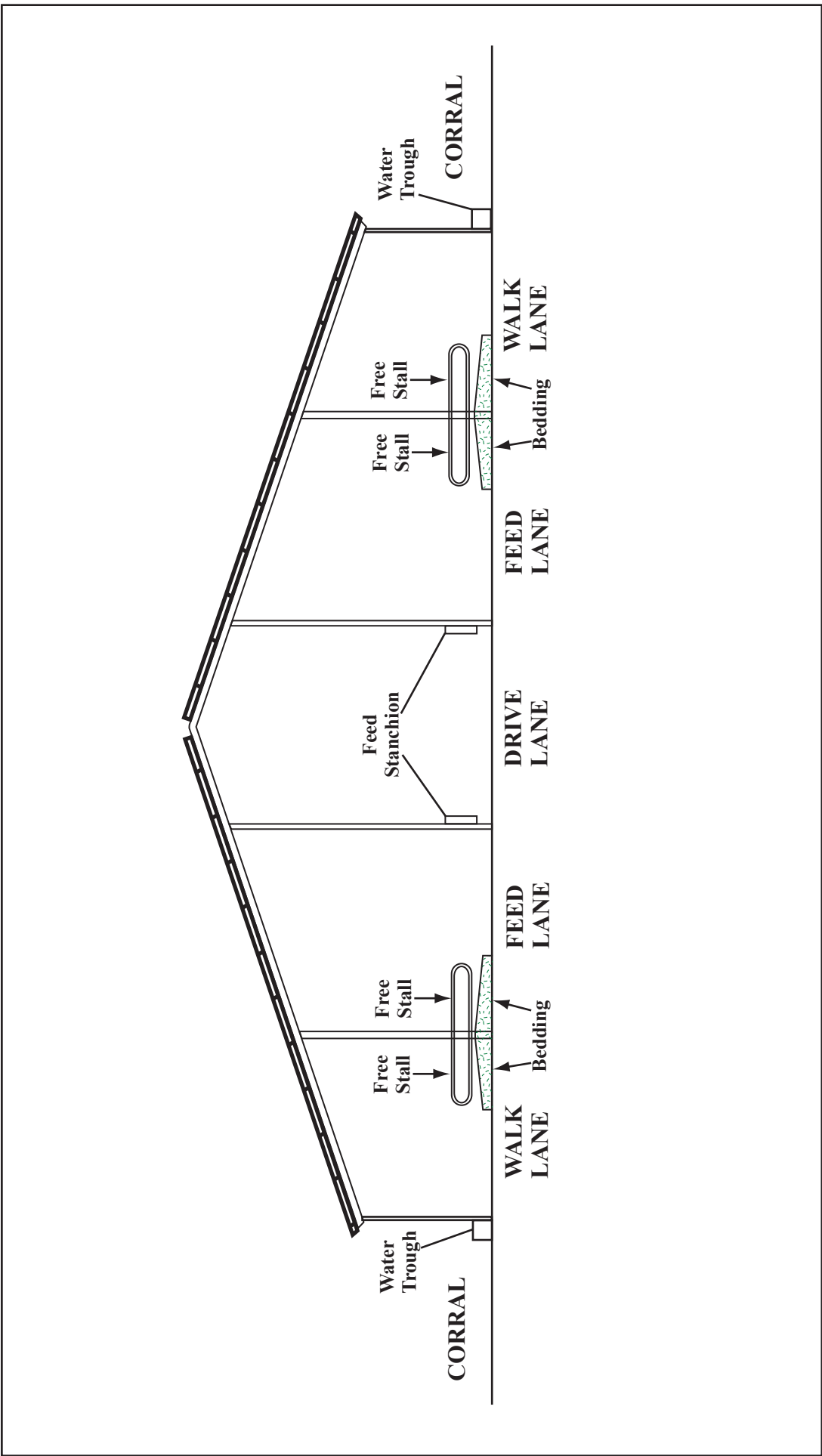
The proposed project would include the construction of supporting buildings and structures, including two new shade barns, approximately 30,000 square feet each; two additional freestall barns, approximately 52,500 square feet and 72,500 square feet; and a new milking parlor, approximately 30,000 square feet. The existing commodity barn would be relocated to an area south on the site. The existing milking parlor and three residences would be removed, for a total of 6,400 square feet of building to be removed. With implementation of the proposed dairy expansion, new structures would consist of approximately 215,000 square feet of construction, for a total of 312,700 square feet of building structures (see Figure 7).

With construction of the proposed facilities, approximately seven acres of cropped acreage would be converted to active dairy facilities. The remaining 242± acres would continue to be cropped with dairy feed crops. Field application of dry manure and wastewater would include surface irrigation and broadcast spreading/incorporation. The number of silage piles would increase from two to four. See Figure 7 for the proposed dairy site plan and Figure 2 for the layout of the dairy fields. Figure 8 shows a cross-section of a freestall dairy barn and Figure 9 illustrates the processes that occur at a dairy farm.

Animal wastes from freestall and other concrete-surfaced areas would continue to be flushed to an on-site waste management system, except for solid manure within corral areas, which would continue to be scraped. Liquid manure would continue to be directed to the settling pond and then treated in the wastewater storage ponds.

Stormwater runoff from roofed areas would continue to be routed to the wastewater pond or adjacent field. Wastewater would continue to be mixed with irrigation water and applied to the land.



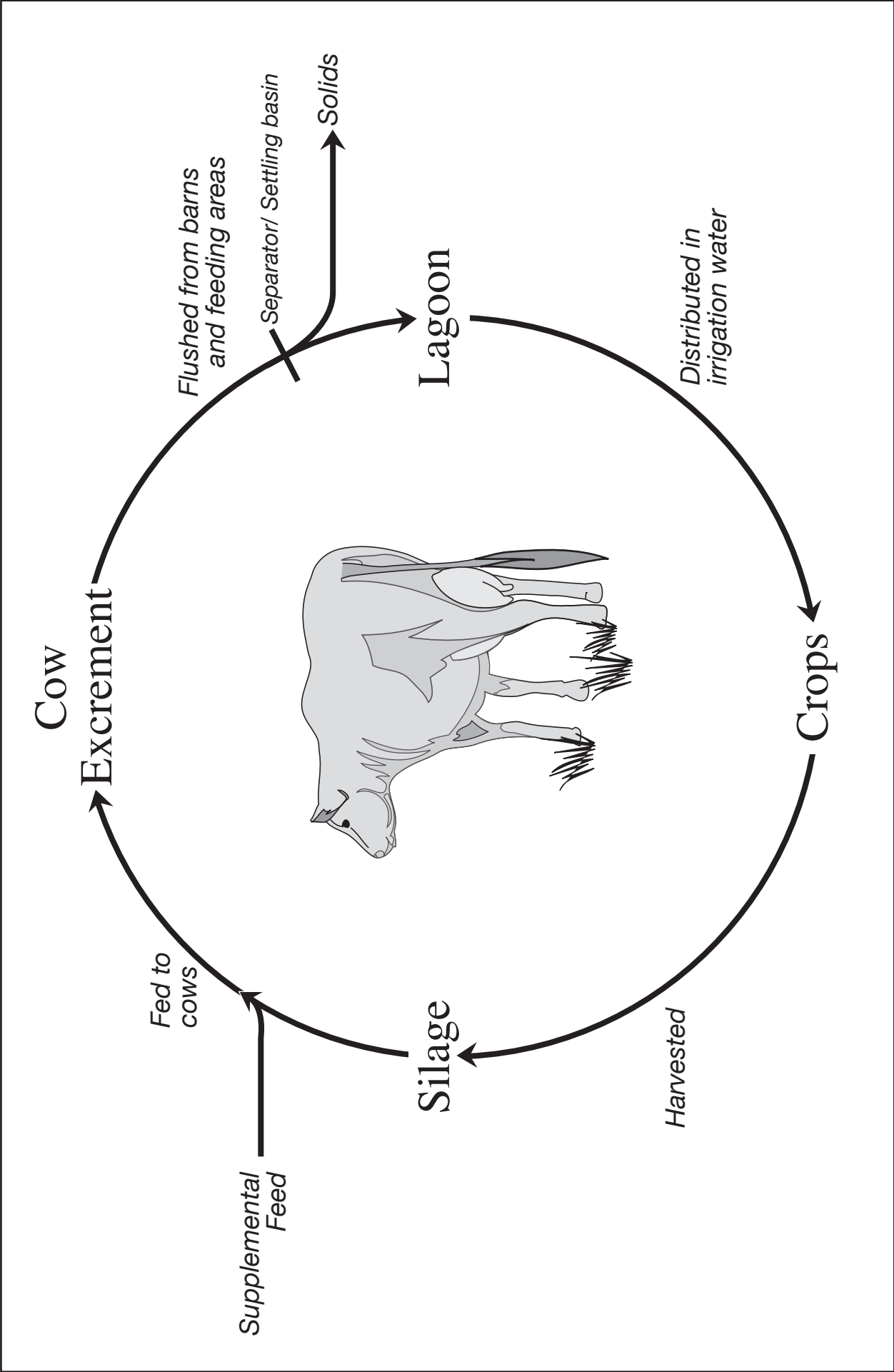


SOURCE: Planning Partners 2017

Oliveira Dairy Expansion Project CUP16-005

Figure 8

Freestall Dairy Barn – Schematic Cross-Section



SOURCE: Planning Partners 2017

Oliveira Dairy Expansion Project CUP16-005

Figure 9

Process Diagram

Solid manure that accumulates within corrals would continue to be removed three times per year. With the proposed dairy expansion, dry manure would continue to be stockpiled on site at the existing dry manure storage area. Dry manure would be used for bedding or sold and hauled off site weekly for use as fertilizer and soil amendments. As reported in the NMP, exported solid manure applied to off-site agricultural fields not owned by the project applicant would increase from 3,800 tons (currently) to 7,000 tons with the proposed expansion (approximately 90 percent of previously separated solids). In addition, 5,500,000 gallons of wastewater slurry would be exported from the facility and applied to adjacent off-site agricultural fields not owned by the project applicant⁵. While the exact location of these off-site cropland parcels may vary throughout operations, the disposal of manure at off-site locations and the acreage necessary to properly dispose of manure liquids and solids are accounted for in the project NMP.

The proposed dairy expansion would rely on existing utilities, including domestic water, stormwater, and electrical services. A septic system and leach field for the proposed milking parlor would be installed, and three existing septic systems associated with existing residences would be removed. While the project applicant anticipates new electrical service at the milk parlor, no additional utilities would be required.

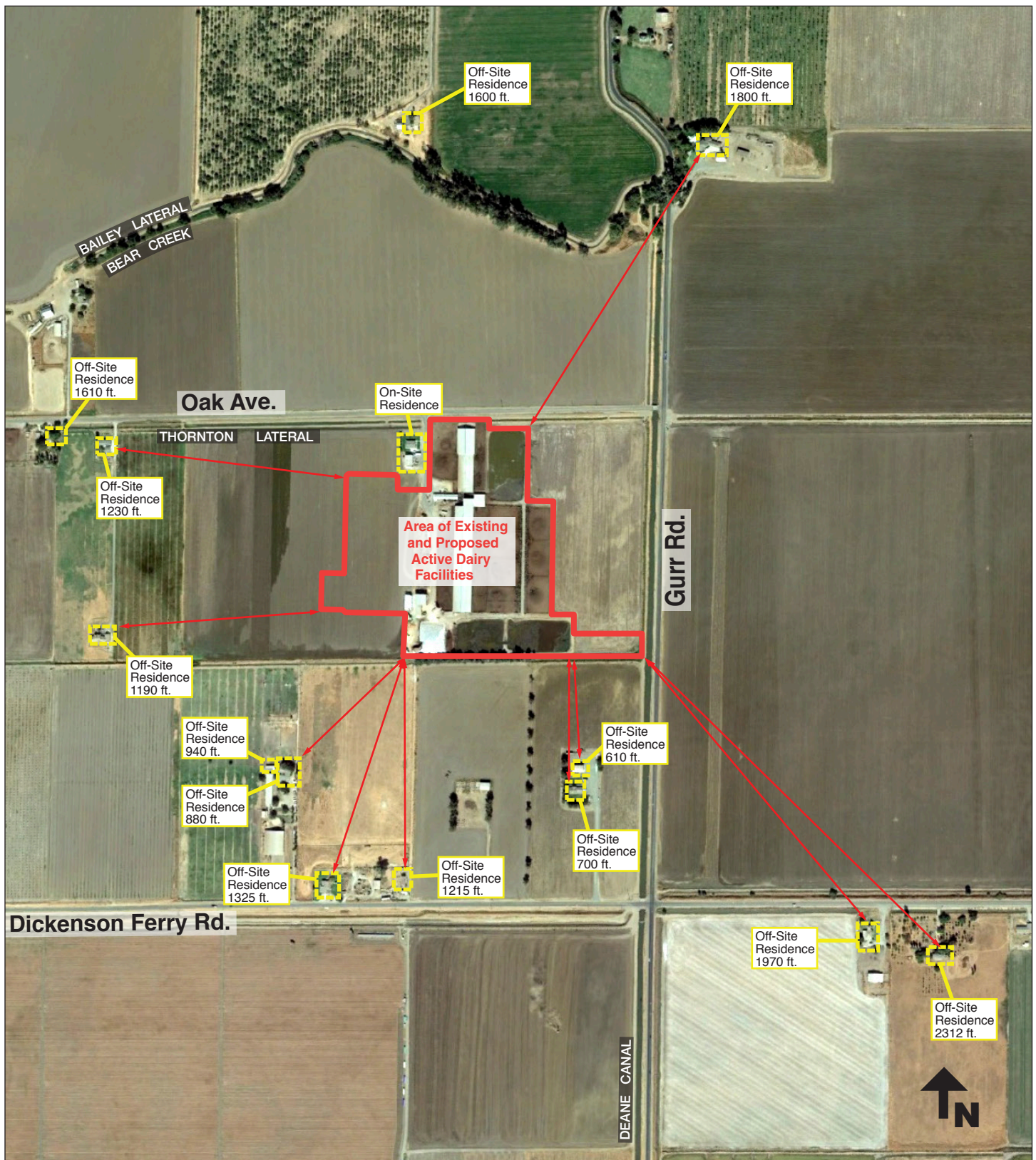
Operations at the dairy would continue to occur 24 hours per day, 365 days per year, with most operations concentrated during daylight hours. With implementation of the proposed project, the number of employees would increase from 7 to approximately 14 workers.

The closest off-site residences are located approximately 610 and 700 feet south of active dairy facilities. With the proposed expansion, distances to these residences would not be reduced (see Figure 10).

Circulation and Parking

The project site would continue to be served by heavy trucks (milk tankers, commodity deliveries), and other vehicles. Daily trips by all classes of vehicle are estimated to increase from approximately 24 to 40 average daily trips, with an increase of 16 daily trips, including 5 heavy truck trips per day (see Table 4). The majority of trips would consist of auto and light truck trips. All trips would continue to access Oak Avenue.

⁵ Although informal discussions with neighbors interested in receiving exported wastewater have occurred to date, there are no formal agreements currently in place (as of April 2017). A pipeline would be required to transport the wastewater and would be installed by the project applicant.



Oliveira Dairy Expansion Project CUP16-005

SOURCE: Planning Partners 2017

Figure 10

Distance of Nearest Off-Site Residences to Existing and Proposed Active Dairy Facilities

Table 4 Oliveira Dairy Expansion Project Trip Generation and Assignment

Trip Type/Purpose	Daily Trip Generation Factor	Type of Vehicle	Daily Trips		Local Route of Trip
			Existing	With Project	
Residential Dwellings (on site)	2/residence *See Note 1	Auto/Light Truck	8	2	Oak Ave
Employees (off-site)	2/employee *See Note 2	Auto/Light Truck	8	24	Oak Ave
Milk Tanker	*See Note 3	Heavy Truck	2	4	Oak Ave
Commodities transport from off site	*See Note 4	Heavy Truck	0.7	1.4	Oak Ave
Solid and liquid manure transport to off-site fields	*See Note 5	Heavy Truck	2.2	4.9	Oak Ave
Rendering Service	*See Note 6	Medium Truck	0.4	0.6	Oak Ave
Veterinarian	1/week	Light Truck	1.0	1.0	Oak Ave
Purveyor sales	2/facility office	Auto/Light Truck	2.0	2.0	Oak Ave
Total Auto/Light Truck Trips			19	29	
Total Medium Truck Trips			0.4	0.6	
Total Heavy Truck Trips			4.9	10.3	
Total Trips			24.3	39.9	

Notes: Trip Generation table based on Planning Partners assumptions and information obtained from project applicant.

1. There are four existing residences located on site, all of which are occupied by employees and the dairy owner. For a dairy farm operation, a trip generation factor of 2 trips per day was used for both on-site residences and off-site employees.
2. There are currently 7 employees. Since there are 3 employee residences on site, it is assumed there are 4 off-site employees driving to work per day. There would be 14 total employees with the proposed expansion. Since 3 existing employee residences would be removed, there would be 14 off-site employees driving to work per day.
3. There are 14 milk tanker truck trips to the dairy per week, and there would be 28 per week with the proposed expansion.
4. There are 5 commodity truck trips from off site per week, and there would be 10 with the proposed expansion.
5. Currently, there are approximately 400 diesel truck trips per application, once or twice per year to export dry manure to off-site fields. This analysis assumes a maximum of 800 trips total annually. Under proposed operations, there would be approximately 900 diesel truck trips per application, once or twice per year, to export dry manure to off-site fields, with a maximum of 1,800 trips total annually.
6. There are approximately 3 truck trips per week for rendering service. There would be 4 truck trips per week with the proposed expansion.

Source: Planning Partners 2017. Project Applicant April 2017.

PROJECT CONSTRUCTION AND PHASING

The proposed dairy expansion would be constructed in two phases. Phase 1 would include construction of the proposed milking parlor within one year of application approval. Phase 2 would include the remaining structures to be built concurrently with expansion of the herd and would likely occur within 10 years after completion of the milking parlor.

ESTABLISHING THE PROPER “BASELINE” FOR THE PROPOSED DAIRY EXPANSION

To determine whether an impact is significant, a “baseline” set of environmental conditions is required against which agencies can assess the significance of project impacts. As established by California Environmental Quality Act (CEQA) Guidelines Section 15125(a), the existing environmental setting, usually established at the time a Notice of Preparation is issued, should normally constitute the baseline. Therefore, “the impacts of a proposed project are ordinarily to be compared to the actual environmental conditions existing at the time of CEQA analysis, rather than to allowable conditions defined by a plan or regulatory framework” (*Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 158 Cal.App.4th 1336). Essentially, prior operating permits or permit levels do not in themselves establish a baseline for CEQA review of a new project.

As set forth in *Communities for a Better Environment v. South Coast Air Quality Management District*, a long line of California Court of Appeals decisions has upheld this line of reasoning. These decisions have included cases where a plan or project allowed for greater development or more intense activity than had so far actually occurred, as well as cases where actual development or activity had, by the time CEQA analysis was begun, already exceeded that allowed under the existing regulations.

In the case of the Oliveira Dairy Expansion project, existing permits from the SJVAPCD and CVRWQCB allow for conflicting cow numbers, including a maximum of 1,040 mature cows and 690 mature cows, respectively. However, in accordance with CEQA, the baseline herd to be used in this environmental analysis is the herd count at the time that the NOP is circulated, comprising a total of 2,218 animals, including 1,063 milk cows.

REQUIRED APPROVALS, OTHER PROCESSES, AND CONSULTATIONS

A listing and brief description of the regulatory permits and approvals required to implement the proposed project is provided below. This environmental document is intended to address the environmental impacts associated with all of the following decision actions and approvals.

Merced County and Other Local and Regional Agencies

Merced County

The County has the following permitting authority related to the proposed Oliveira Dairy Expansion project:

- Preparation and approval of an Environmental Impact Report - Merced County will act as the lead agency as defined by CEQA, and will have authority to determine if the Environmental Impact Report is adequate under CEQA.
- Approval of the Conditional Use Permit - Merced County will consider the proposed dairy project as a “Conditional Use Permit.” Conditional Use Permits are discretionary permits for uses of land that require special review to ensure that they are compatible with the neighborhood and surrounding land uses. They are considered more likely to affect surrounding land uses than uses permitted by right in a zoning district or those uses permitted under Administrative Permits.

- Building Permit - Merced County will require a building permit for the proposed dairy expansion project.
- Demolition Permit - Merced County will require a demolition permit for removal of existing residences.
- Hazardous Material Business Plan (HMBP) - The on-site storage of any hazardous material over threshold quantities (55 gallons; 200 cu. ft.; or 500 pounds) would require a HMBP to be filed with the Merced County Division of Environmental Health (DEH). Any quantity of hazardous waste generated on site also requires that a HMBP be filed.

San Joaquin Valley Air Pollution Control District

- Authority to Construct / Permit to Operate – The owner or operator of any facility or activity (including agricultural activities) that emits criteria air pollutants or their precursors above certain thresholds must first obtain an ATC from the SJVAPCD. All new sources exceeding thresholds will be required to apply for an ATC and PTO; this essentially is one permit that is issued in two steps. The applicant first obtains an ATC with specific conditions for implementation during construction; then an inspection is completed and, if all the conditions of the ATC are met during construction, the applicant is issued a PTO. Beyond the ATC and PTO, preparation of an air quality impact assessment (AQIA) would be required, in addition to compliance with other SJVAPCD regulations.
- Conservation Management Practices Plan – The owner or operator of any agricultural facility of 100 acres or more, or an animal confinement facility in excess of 500 mature cows (for a dairy operation), must have submitted a CMP plan to the SJVAPCD prior to June 30, 2004 for existing uses, and prior to operation for proposed uses. The project applicant may be required to submit a modification request to their existing CMP Plan based on their proposed dairy expansion. A CMP plan requires that farm operators implement dust reduction practices for each of the following categories: harvest; unpaved roads; unpaved equipment/vehicle yards; and, other. One CMP Plan must be submitted for each crop currently grown or that will be grown within the two-year time frame of each Plan.

State of California

State agencies have the following permitting authority related to the proposed Oliveira Dairy Expansion project:

State Water Resources Control Board

- General Construction Activity – The State Water Resources Control Board (SWRCB) has adopted a General Construction Activity Storm Water Permit for storm water discharges associated with any construction activity, including clearing, grading, excavation, reconstruction, and dredge and fill activities, that results in the disturbance of at least one acre of total land area.

Regional Water Quality Control Board - Central Valley Region

- **Waste Discharge Requirements** – The owner or operator of any facility or activity that discharges, or proposes to discharge, waste that may affect groundwater quality or from which waste may be discharged in a diffused manner (e.g., erosion from soil disturbance) must first obtain a WDR permit from the CVRWQCB. The CVRWQCB regulates discharges from dairies and other confined animal facilities according to the anti-degradation requirements of the Porter-Cologne Water Quality Control Act and the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. The project applicant has submitted a Report of Waste Discharge for the proposed dairy expansion. The CVRWQCB will be issuing Individual WDRs for the Oliveira Dairy Expansion.

Federal Government

It is anticipated that no permitting from federal agencies would be required.

APPLICATION OF THE 2030 MERCED COUNTY GENERAL PLAN, MERCED COUNTY ANIMAL CONFINEMENT ORDINANCE, AND MERCED COUNTY ZONING CODE

2030 Merced County General Plan

The 2030 Merced County General Plan guides economic development, land use, agriculture, transportation and circulation, public facilities and services, natural resource, recreation and cultural resources, health and safety, air quality, water, and other decisions. The General Plan is intended to provide for orderly growth, and to convey the community's values and expectations for the future. An EIR for the 2030 General Plan was certified and the General Plan was adopted by Merced County in December 2013. A Draft Background Report of existing environmental conditions within the County was finalized in December 2013 with certification of the General Plan EIR. The Background Report functions as the existing setting section for the General Plan EIR. The EIR, including the Background Report as updated, is used in this Initial Study and will be used in the proposed project EIR, along with other resources, to establish the existing setting for the proposed project. The General Plan EIR will serve as the first tier of environmental analysis for the proposed project, including the evaluation of countywide and cumulative impacts. The 2030 General Plan EIR, including the Background Report, is hereby incorporated by reference pursuant to State CEQA Guidelines Section 15150 as though fully set forth herein. A copy of the General Plan, General Plan EIR, and Background Report can be obtained at the Department of Community and Economic Development, 2222 "M" Street, Merced, CA 95340. These documents are also available for download from the Merced County General Plan website at:

<http://www.co.merced.ca.us/index.aspx?NID=1170>

Merced County Animal Confinement Ordinance and Zoning Code

On October 22, 2002, Merced County adopted revisions to the County's Animal Confinement Ordinance (ACO). Additional revisions to the Merced County ACO and Merced County Code Chapter 18.02.02 (Zoning Code Agricultural Zones) were adopted on February 8, 2005. (The Merced County ACO is included as a section of Title 18 Zoning of the Merced County Code.) The ACO regulates the design, construction, and operation of animal confinement facilities within the county. Because the Ordinance is regulatory rather than permissive, all existing and proposed animal

confinement facilities within the county are required to comply with the terms of the Ordinance, including the proposed Oliveira Dairy Expansion project.

Following is a summary of major ACO provisions. Copies of the complete text of the Ordinance are available from: the Merced County Division of Environmental Health, 260 East 15th Street, Merced, California 95341; the Merced County Community and Economic Development Department, 2222 'M' Street, Merced, California 95340, and on the County's Internet site at <http://www.qcode.us/codes/mercedcounty/>

Merced County's ACO provides environmental compliance regulations that affect dairies and other animal confinement facilities in Merced County. The ACO requires that all animal confinement facilities, existing and new, complete and implement a Comprehensive Nutrient Management Plan (CNMP). For existing animal confinement facilities, CNMPs must be completed by December 31, 2006, and for the construction of a new facility, or for modification or expansion of an existing animal confinement facility, the CNMP must be completed prior to construction. The purpose of the CNMP is to ensure a balance between manure/wastewater application and nutrient uptake by crops in order to minimize impacts to groundwater. Since adoption of the ACO, the CVRWQCB has issued new requirements for preparation of a NMP and WMP, which would serve in place of the CNMP as allowed by County Code Chapter 18.48.055K.

In addition to the CNMP, the ACO includes measures designed to increase protection of surface and groundwater resources. Both liquid and dry manure are regulated by the ACO under detailed management requirements. For example, the ACO prohibits the storage or application of manure (liquid or dry) within 100 feet of a surface water body or irrigation well unless adequate protection is provided. Dry manure storage and application is regulated to prevent groundwater or surface water contamination. In addition, the liquid manure management system must include provisions for appropriate cropland application and collection of tailwater from cropland irrigated with liquid manure. The ACO requires that all off-site discharge of drainage water from cropland application areas meet the discharge and receiving water standards of the appropriate irrigation or drainage district and the CVRWQCB.

The ACO also includes design and management provisions for the construction of retention ponds and settling basins to prevent groundwater contamination, obnoxious odors, or excessive fly or mosquito breeding. The retention pond provisions of the ACO apply only to new or expanding animal confinement facilities. The ACO measures for retention ponds and settling basins include capacity requirements, maintenance guidelines, size restrictions, and minimum design standards of 10⁻⁶ centimeters per second seepage velocity or less.

To prevent nuisances from odors or vectors, the ACO requires animal confinement facilities to implement both odor control measures and a vector control plan. The need for specific control measures is determined by the Merced County DEH on a site-specific basis. Additionally, the ACO prohibits the location of new animal confinement facilities within one-half mile of urban areas or areas zoned for residential uses, or concentrations of rural residences. To provide additional protection from the nuisances mentioned above, the ACO generally prohibits the location of animal confinement facilities within 1,000 feet of an off-site residence, unless written permission from the off-site resident or property owner is given.

To ensure compliance with the provisions of the ACO, the ACO requires routine inspections of animal confinement facilities by the Merced County DEH. Enforcement of the provisions contained in the revised ACO is conducted by Merced County DEH and the Community and Economic Development Department. In addition, the ACO includes penalties for any person who violates or fails to comply with the provisions of the ACO.

TIERING FROM BOTH THE 2030 MERCED COUNTY GENERAL PLAN EIR AND THE MERCED COUNTY ANIMAL CONFINEMENT ORDINANCE EIR

“Tiering” refers to the relationship between a program-level EIR (where long-range programmatic cumulative impacts are the focus of the environmental analysis) and subsequent environmental analyses such as this subject document, which focus primarily on issues unique to a smaller project within the larger program or plan pursuant to Section 15168 of the State CEQA Guidelines. Tiering focuses the environmental review on the project-specific significant effects that were not examined in the prior environmental review or are susceptible to substantial reduction or avoidance by specific revisions in the project, by the imposition of conditions, or by other means.

In the case of the Oliveira Dairy Expansion project, the environmental analysis will be tiered from both the EIR for the *2030 Merced County General Plan* and the EIR for the *Merced County Animal Confinement Ordinance Revision*. As the Merced County Animal Confinement Ordinance EIR was completed in 2002, the 2030 Merced County General Plan updates conclusions on the cumulative condition for all project types, including proposed and expanding dairy facility projects such as the Oliveira Dairy Expansion project. The tiering concept will be discussed more fully in the EIR for this project.

2. ENVIRONMENTAL ANALYSIS

PURPOSE AND LEGAL BASIS FOR THE INITIAL STUDY

As a public disclosure document, this Initial Study also provides local decision makers and the public with information regarding the environmental impacts associated with the proposed project. According to Section 15063 of the CEQA Guidelines, the purpose of an Initial Study is to:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration.
2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration.
3. Assist in the preparation of an EIR, if one is required by:
 - a. Focusing the EIR on the effects determined to be significant,
 - b. Identifying the effects determined not to be significant,
 - c. Explaining the reasons for determining that potentially significant effects would not be significant, and
 - d. Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

INITIAL ENVIRONMENTAL CHECKLIST

Following each major category in the Initial Study, there are four determinations by which to judge the project's impact. These categories and their meanings are shown below:

“No Impact” means that it is anticipated that the project will not affect the physical environment on or around the project area. It therefore does not warrant mitigation measures.

“Less-than-Significant Impact” means the project is anticipated to affect the physical environment on and around the project area, however to a less-than-significant degree, and therefore not warranting mitigation measures.

“Less than Significant with Mitigation Incorporated” applies to impacts where the incorporation of mitigation measures into a project has reduced an effect from “Potentially Significant” to “Less Than Significant”. In such cases, and with such projects, mitigation measures will be provided including a brief explanation of how they reduce the effect to a less-than-significant level.

“Potentially Significant Impact” means there is substantial evidence that an effect is significant, and no mitigation is possible.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, including several impacts that could result in a “Potentially Significant Impact” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources	X	Geology / Soils
X	Greenhouse Gas Emissions	X	Hazards & Hazardous Materials	X	Hydrology / Water Quality
X	Land Use / Planning		Mineral Resources		Noise
	Population and Housing		Public Services		Recreation
	Transportation / Traffic		Tribal Cultural Resources		Utilities / Service Systems
X	Mandatory Findings of Significance				

ENVIRONMENTAL SETTING AND EVALUATION OF POTENTIAL IMPACTS

Responses to the following questions and related discussion indicate whether or not the proposed project would have or would potentially have a significant adverse impact on the environment, either individually or cumulatively with other projects. All phases of project planning, implementation, and operation are considered. Mandatory Findings of Significance are located in Section XIX below.

However, for many environmental hazards, local agencies such as Merced County impose requirements to avoid or reduce hazards. Similarly, local agencies have the ability to impose conditions of project approval to avoid or reduce hazardous conditions.

I. AESTHETICS

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	_____	_____	_____	✓
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	_____	_____	_____	✓
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	_____	_____	✓	_____
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	_____	_____	✓	_____

ENVIRONMENTAL SETTING

The project site is currently in agricultural use (agricultural crops and an existing dairy) and is surrounded by agricultural uses and associated residences.

The site appearance is one of a developed animal confinement facility within a rural, agricultural setting. Viewers outside the project site are limited to motorists on perimeter roadways and residents of surrounding agricultural facilities and operations. Neither the project site nor the views to or from the site have been designated as an important scenic resource by Merced County or any other public agency (Merced County 2013a).

No state or locally designated scenic highway has been identified in the vicinity of the project site (Caltrans 2011).

ENVIRONMENTAL EVALUATION

Question a: No Impact. No designated scenic vista is visible from the project site, nor is the site visible from any nearby scenic vista. The dairy facilities are an existing use and are considered common to the area. Because the proposed dairy expansion would not affect a scenic vista, no impact would result with implementation of the project, and no mitigation would be required.

Question b: No Impact. No state- or locally-designated scenic highway is visible from the project site, nor is the site visible from any nearby designated scenic highway. The nearest designated State Scenic Highway, Route 5, is approximately 30 miles to the west of the project site. Because the project site is not located within the viewshed of a designated scenic highway, there would be no damage to scenic resources within a scenic highway. No impact would result with implementation of the dairy expansion project, and no mitigation would be required.

Question c: Less-than-significant Impact. Developed agricultural uses in the vicinity range from irrigated cropland to animal confinement facilities. Though the existing dairy facilities are visible from perimeter roads, their appearance is a common sight in rural areas of Merced County, and the visual effects of the animal confinement facilities are reasonable and expected in the context of the Agricultural land use designation. The proposed expanded facilities would appear similar to existing uses on the project site and in the project area, and would continue to be considered common and

appropriate to the region by most viewers. Since the proposed project is consistent with the existing and planned agricultural uses of the area, implementation of the project would not degrade the existing visual character of the site or surroundings. This would be a less-than-significant impact.

Question d: Less-than-significant Impact. Existing night lighting in the area of active dairy facilities includes “dusk to dawn” fluorescent lights mounted on the milking parlor and animal shelters. The proposed expansion could result in additional lighting of dairy facilities. While there are residences in the vicinity of active dairy operations, which are considered sensitive receptors for nighttime light and glare, County standards require that all new lighting be directed away from or be properly shaded to eliminate light trespass or glare within a project or onto surrounding properties. Compliance with County requirements would reduce any light and glare effects to less-than-significant levels.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agriculture use or conversion of forest land to non-forest use?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		✓	
		✓	
			✓
			✓
			✓

ENVIRONMENTAL SETTING

The project site consists of an active animal confinement facility and associated cropland and is surrounded by similar agricultural uses and associated residences. The project site is designated Agricultural by the 2030 Merced County General Plan and is zoned A-1 (General Agricultural). None of the project parcels are subject to a Williamson Act Contract. (Merced County 2018)

According to the California Department of Conservation's (DOC) Important Farmlands Map¹ of Merced County, the area of existing active dairy facilities is designated as Confined Animal Agriculture. As defined by DOC, this designation includes poultry facilities, feedlots, dairy facilities, and fish farms. The existing cropland areas associated with the project are designated as Prime Farmland and Farmland of Statewide Importance. (DOC 2018)

The Natural Resources Conservation Service (NRCS) provides agricultural ratings for soils in the project area in the Merced County Soil Survey. Predominant soils in the proposed project area as classified by the NRCS consist of the Burchell silty clay loam, Landlow silty clay loam, and Lewis silty clay loam soil types (see Table 5). Approximately 85 percent of the proposed area of active facilities is designated by the NRCS as Farmland of statewide importance; the balance is designated as Prime Farmland if irrigated. (NRCS 2017)

¹ The Important Farmland Map uses a classification system that combines technical soil ratings from the Natural Resources Conservation Service digital soil data and current land use. The minimum land use mapping unit is 10 acres unless specified.

Table 5 Oliveira Dairy Expansion Project On-Site Soil Types

Soil Map Name	Approx. % Project Site	CA Revised Storie Index Grade	Farmland Classification (NRCS/FMMP)
Burchell silty clay loam, 0 to 1 percent slopes	4.5%	4 - Poor	Prime farmland if irrigated (NRCS) Confined Animal Agriculture and Prime farmland if irrigated (FMMP)
Landlow silty clay loam, 0 to 1 percent slopes	80.4%	2 - Good	Farmland of statewide importance (NRCS) Confined Animal Agriculture and Farmland of Statewide Importance (FMMP)
Lewis silty clay loam, slightly saline-alkali, 0 to 1 percent slopes	5.1%	5 – Very Poor	Farmland of statewide importance (NRCS) Confined Animal Agriculture and Farmland of Statewide Importance (FMMP)

Note: Soil types shown are for the approximate area of existing and proposed active dairy facilities. The Storie Index is a well-known method of rating soils for agricultural potential. NRCS = Natural Resources Conservation Service; FMMP = Farmland Mapping and Monitoring Program

Source: United States Department of Agriculture Natural Resources Conservation Service 2017; California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program 2016.

There are no forest lands, timberland, or timberland zoned Timberland Production in Merced County (CDFW 2015).

ENVIRONMENTAL EVALUATION

Question a: Less-than-significant Impact. The area of existing dairy facilities is located on land that is classified as Confined Animal Agriculture, and is designated for agricultural use by the 2030 Merced County General Plan. The existing croplands associated with the dairy are also designated for agricultural use by the Merced County General Plan. The proposed dairy expansion would include the construction of new facilities on seven acres of existing cropland that is designated by the DOC's Farmland Mapping and Monitoring Program as Prime Farmland and Farmland of statewide importance. As a result, existing cropland would be converted to active dairy facilities. This proposed use, however, would represent a continuation of existing agricultural uses, and no conversion of agricultural soils to non-agricultural uses would occur. Because the project site would be maintained in agricultural use, construction of the proposed facilities would not convert Prime Farmland, Unique Farmland, or Farmland of statewide importance to a non-agricultural use, and a less-than-significant impact would result.

Question b: Less-than-significant Impact. The 2030 Merced County General Plan and Zoning Ordinance designate the project area for agricultural uses. None of the project parcels are under a Williamson Act Contract. The existing use, a dairy, is an agricultural use consistent with the General Plan and Zoning Ordinance. Adjacent properties are also primarily field crops and animal confinement facilities. No feature of the project would preclude or limit the agricultural use of the project site or adjoining parcels. Thus, the proposed project would be the continuation of an existing agricultural use consistent with County policies, and would not conflict with existing Williamson Act contracts or adjacent agricultural uses. A less-than-significant impact would result. For a discussion of compatibility with adjacent residential uses, see Section X, *Land Use and Planning* of this Initial Study.

Question c, d: No Impact. The project site is not zoned for forest land or timberland, and there are no forest resources located on the project site. Thus, there would be no loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

Question e: No Impact. The proposed dairy expansion project would not involve the development of any use inconsistent with the project site's agriculture zoning. Therefore, it would not result in the conversion of farmland to non-agricultural uses or forest land to non-forest uses, and no impact would occur.

III. AIR QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	✓			
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	✓			
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	✓			
d) Expose sensitive receptors to substantial pollutant concentrations?	✓			
e) Create objectionable odors affecting a substantial number of people?	✓			

Question a through e: Potentially Significant Impact. The proposed dairy expansion is anticipated to have potentially significant impacts from the following air emission sources that will be evaluated further in the EIR: construction-related emissions of reactive organic gases, nitrogen oxides and fugitive dust; operation-related emissions of carbon monoxide, ozone precursors, fugitive dust, and hazardous pollutants; and odors from project operations. An Air Quality Impact Assessment, including an Ambient Air Quality Analysis and Health Risk Assessment, will be prepared and will address emissions from: criteria pollutants; hydrogen sulfide, ammonia; particulate matter and its toxic components (e.g., aluminum, lead, manganese, nickel, etc.); and xylenes, formaldehydes, and carbon tetrachloride from Volatile Organic Compounds. The EIR will also address past and recent air quality violations, as applicable.

IV. BIOLOGICAL RESOURCES

Would the project:

- a) 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 the U.S. Fish and Wildlife Service?
- b) 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 the U.S. Fish and Wildlife Service?
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) 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?
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
✓			
✓			
✓			
✓			
✓			
✓			

ENVIRONMENTAL SETTING

Question a through f: Potentially Significant Impact. Construction of the proposed facilities and increased activities as a result of the proposed dairy expansion could result in impacts to special-status species and migratory birds. These would be potentially significant impacts that will be evaluated further in the EIR. A reconnaissance-level biological survey of the project site will be conducted to assess existing biological conditions and potential impacts.

V. CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	✓			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	✓			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	✓			
d) Disturb any human remains, including those interred outside of formal cemeteries?	✓			

ENVIRONMENTAL SETTING

Question a through d: Potentially Significant Impact. Cultural Resources investigations show that Native American tribes have historically established communities near rivers and streams in Merced County. The project site is located approximately 0.25 miles south of South Slough, a tributary of Bear Creek. Approximately 14.5 miles to the southwest, Bear Creek joins the San Joaquin River.

Implementation of the proposed project may result in site clearing, grading, and other ground disturbing activities that could adversely affect cultural resources. Significant cultural remains can also exist below the plow zone in Merced County, and construction activities in these undeveloped areas could unearth and potentially damage cultural resources. This would be a potentially significant impact that will be evaluated further in the EIR. A reconnaissance-level cultural resources survey of the project site will be conducted to determine existing archaeological and historical resource conditions and potential impacts.

VI. GEOLOGY AND SOILS

Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - ii) Strong seismic ground shaking?
 - iii) Seismic-related ground failure, including liquefaction?
 - iv) Landslides?
- b) Result in substantial soil erosion or the loss of topsoil?
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		✓	
		✓	
		✓	
		✓	
✓			
		✓	
		✓	
✓			

ENVIRONMENTAL SETTING**Geology**

The Oliveira Dairy project site is located within the Great Central Valley of California. The Central Valley is composed primarily of alluvial deposits from erosion of the Sierra Nevada Mountains located to the east and of the Coastal Ranges located to the west. The elevation of the project site is approximately 135-145 feet above mean sea level (MSL). The topography of the project site is generally flat, with varying agricultural field elevations.

Soils

The Natural Resources Conservation Service provides agricultural ratings for soils in the project area in the Merced County Soil Survey. Predominant soils in the proposed project area as classified by the NRCS consist of the Burchell silty clay loam, Landlow silty clay loam, and Lewis silty clay loam soil types (see Table 5). Soil properties can also influence the development of building sites,

including site selection, structural design, construction, performance after construction, and maintenance.

Soil properties that affect the load-supporting capacity of an area include depth to groundwater, ponding, subsidence, shrink-swell potential, and compressibility. The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments. The majority of the project site is comprised of the Landlow silty clay loam, 0 to 1 percent slopes soil type, which presents limitations for development (NRCS 2017). The Burchell silty clay loam and the Lewis silty clay loam soil types are found on the remaining portion of the project site. These soil types are very limited by flooding, depth to saturated zone, and shrink-swell potential (NRCS 2017).

Faults and Seismicity

The project site is not located within a mapped fault hazard zone, and there is no record or evidence of faulting on the project site (DOC 2017). The site is located in Seismic Damage Zone II, indicating a moderate severity level with moderate probable damage in the event of severe seismic activity (Merced County 2013c).

ENVIRONMENTAL EVALUATION

Question a.i: Less-than-significant Impact. The project site is not located within a mapped fault hazard zone, and there is no record or evidence of faulting on the project site (DOC 2017). Because no fault traces underlie the project site, no hazardous conditions would result from implementation of the project.

Question a.ii: Less-than-significant Impact. Should an earthquake occur in the vicinity of the proposed project site, it could result in moderate damage. Dairies are categorized as a low risk use that is considered suitable in all ground-shaking zones. Merced County additionally requires that all new construction comply with the seismic safety requirements of the California Building Standards Code (CBC). Compliance with the CBC would reduce risks on the project site from seismic ground shaking to levels considered acceptable for the State and region. Therefore, no hazardous conditions related to groundshaking would occur with the implementation of the project.

Question a.iii: Less-than-significant Impact. While the County has not recognized any specific areas subject to liquefaction hazard, there is the potential for occurrence where unconsolidated sediments and a high water table coincide (Merced County 2013c). Probable areas for liquefaction hazards include the county's wetland areas, areas with high groundwater (shallow), or areas near levees. A nearby well monitored by the California Department of Water Resources (DWR) indicates that groundwater levels in the area surrounding the project site varied from 40 to 70.5 feet below ground surface from 2011 to 2018 (DWR 2018). The project site is not noted for unstable geologic formations (DOC 2017; Merced County 2013c). Given the existing topography, the distance to active faults, and compliance with seismic safety requirements, the potential occurrence of seismic groundshaking, liquefaction, and landslides at this location are considered unlikely by the CBC. Therefore, potential geologic hazards such as ground failure and liquefaction would not result in hazardous conditions for the project.

Question a.iv: Less-than-significant Impact. The project site is generally flat and is not located near steep slopes with unstable soils that may be susceptible to landslides. Also, the greater project area is not noted for unstable geologic formations susceptible to landslides (DOC 2017). Therefore, the project would not be exposed to potential geologic hazards, including the risk of loss, injury, or death involving a landslide.

Question b: Potentially Significant Impact. Implementation of the proposed project could result in temporary soil erosion and the loss of top soil due to construction activities, including clearing, grading, and site preparation activities for the proposed active dairy facilities. The existing site is generally level and has been leveled for existing activities; therefore, the project's proposed dairy facilities would not significantly change the project site topography or ground surface relief.

Construction of the proposed dairy expansion would occur over an approximate seven-acre area, and stormwater runoff during the construction period could result in the erosion of on-site soils, and siltation and sedimentation of waterways draining the site. Construction activities disturbing one or more acres are required by the SWRCB to obtain a General Construction Activity Stormwater Permit, which would require the proposed project to implement a Storm Water Pollution Prevention Plan. Stormwater runoff during the construction period could result in erosion, siltation, and sedimentation of waterways draining the site. Project impacts due to surface drainage, soil erosion, and runoff will be evaluated further in the Hydrology and Water Quality chapter of the EIR.

Question c: Less-than-significant Impact. Construction of the proposed active dairy facilities such as the freestall barns could increase loads on the project site that could cause soil settlement. The project area is not noted for unstable geologic formations susceptible to landslide, ground failure, or subsidence² (DOC 2017; Merced County 2013c; Merced County 2013d). The topography surrounding the active dairy facilities and agricultural field elevations are generally level. Any potential effects from unstable or expansive soils would be minimized following compliance with the Merced County and CBC building standards and additional corrective engineering measures that would be required to be documented during the building permit process, including the submittal of a soils report. For these reasons, the proposed dairy expansion project would not result in soil instability and subsequent landslide, lateral spreading, liquefaction, or collapse. This would be a less-than-significant impact, and no mitigation would be necessary.

Question d: Less-than-significant Impact. Expansive soils are soils that expand when water is added, and shrink when they dry out. The project site soils have building limitations related to flooding, depth to saturated zone, and shrink-swell potential. The Merced County building code requires a soils report for most non-residential structures within Merced County, and additional corrective engineering measures are required as part of the design for the dairy facilities. Further, the proposed agricultural facilities would not be used for human habitation. Compliance with the CBC requirements and additional corrective engineering measures documented during the building permit process would reduce risks on the project site from geological hazards to levels considered acceptable for the State and region.

² Subsidence is the settling or sinking of land. In Merced County, this is generally resulting from groundwater extraction and drawing down of the groundwater table.

Question e: Potentially Significant Impact. The proposed dairy expansion would include the installation of a new septic system and leach field to serve the proposed milking parlor area; three existing septic systems associated with existing residences would be removed. The project site soil types (Burchell, Landlow, and Lewis silty clay loam) have a “very limited” suitability rating as septic tank absorption fields, and a potentially significant impact could result. The installation or modification of any on-site septic system would require compliance with Merced County performance standards and approval by the DEH (Chapter 18.41, *Performance Standards*). These standards would require that the septic system be properly sized and designed with respect to on-site soil capabilities, which would ensure the safe treatment and disposal of wastewater and the maintenance of groundwater quality. This topic will be further evaluated in the Hydrology and Water Quality chapter of the EIR for the project.

VII. GREENHOUSE GAS EMISSIONS

Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
✓			
✓			

Question a and b: Potentially Significant Impact. Construction and operation of the dairy expansion project would result in greenhouse gas emissions from direct and indirect sources. The proposed dairy expansion is anticipated to have potentially significant impacts from greenhouse gases (including methane) that will be evaluated further in the EIR for this project.

VII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) 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?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d) 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?				✓
e) 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?			✓	
f) 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?			✓	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
h) 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?				
i) Create significant nuisance conditions to the public or the environment through the generation of insects due to project operations?	✓			

ENVIRONMENTAL SETTING

Animal agriculture, such as a dairy, results in the production of copious amounts of manure. Animal wastes contain zoonotic pathogens, which are viruses, bacteria, and parasites of animal origin that cause disease in humans.

Standard dairy operation chemicals are used at the Oliveira Dairy, including diesel and gasoline fuel; milking parlor cleaners and disinfectants; pesticides; and other oils, lubricants, and fluids associated with heavy equipment. There is one diesel generator on site (Project Applicant 2017). A Hazardous

Materials Business Plan (HMBP) was completed for the facility and submitted to DEH in May 2017. Hazardous materials are stored in and near the milking parlor in plastic drums.

The operators of the Oliveira Dairy currently hire a pest control service to minimize the fly population at the milking parlor and dairy site residences. The service includes monthly visits. Any pest control beyond that is on an “as needed” basis at the owner’s request (Project Applicant 2018).

According to the records search of federal, state, and local environmental databases (pursuant to Government Code Section 65962.5), the project site does not contain any history of hazardous site contamination (CA DTSC 2018).

REGULATORY FRAMEWORK

Both federal and state laws include provisions for the safe handling of hazardous substances. The federal Occupational Safety and Health Administration (OSHA) administers requirements to ensure worker safety. Construction activity must also be in compliance with the California Occupational Safety and Health Administration regulations.

The Merced County Division of Environmental Health is the lead agency for the enforcement of State Hazardous Waste Control laws and regulations. The DEH maintains standards and guidelines relating to the proper handling and storage of hazardous materials. Facilities that handle and store considerable amounts of hazardous materials (55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gas) are required to implement a Hazardous Materials Business Plan. The HMBP must include the following: an inventory of all hazardous materials handled at the facility, floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures. The DEH also maintains minimum design standards relating to the operation and maintenance of on-site septic systems.

ENVIRONMENTAL EVALUATION

Question a, b: Less-than-significant Impact. Nutrient-rich process water would continue to be used to fertilize on-and off-site crops, thereby precluding the need for large amounts of chemical fertilizers and minimizing the potential risk of release within the project area and region. Similarly, dry manure would continue to be accumulated on site and used for bedding, or sold and hauled off site for use as fertilizer and soil amendments in place of chemical fertilizers.

Previous evaluations of dairy operations conducted by Merced County (Merced County Animal Confinement Ordinance Revision DEIR, February 2002; Vander Woude Dairy FEIR Staff Presentation to Planning Commission, March 30, 2004) indicate that the following activities and operations at dairies would not result in the release of hazardous substances to the environment:

Potential Source	Explanation	Information Source
Supplements in cattle feed	No complete exposure pathways	Animal Confinement Ordinance DEIR, February 2002, pps. 5-141 to 5-145
Genetically modified crops (grown as forage for dairy animals)	Cattle digestive process breaks down components in feeds, including protein into amino acids, and DNA into nucleic acids, that are then excreted; Unpublished research indicates no adverse effects on dung beetles from ingesting manure from cows feeding on Bt corn; Incomplete exposure pathway GENETICALLY MODIFIED CORN IS GROWN AT THE PROJECT SITE	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25
Recombinant Bovine Growth Hormone	bST is a complex protein that is immediately broken down into small, inactive amino acids and peptides and rendered ineffective when it enters a cows digestive system; Incomplete exposure pathway NOT USED AT THE DAIRY	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25
Antibiotics	Use of antibiotics is prohibited for the milking herd ANTIBIOTICS ARE USED ONLY ON SICK COWS ISOLATED FROM THE HERD	Vander Woude Dairy FEIR, January 2004, pps. 3-42 to 3-43; Staff Presentation to Planning Commission, March 30, 2004, slides 19 and 25

No proposed operation or facility of the Oliveira Dairy would alter the results of these previous evaluations regarding the release of hazardous substances to the environment from dairy operations.

Construction activities for the proposed project would involve the use, storage, transport, and disposal of oil, gasoline, diesel fuel, paints, solvents, and other hazardous materials. Construction activity must be in compliance with the California OSHA regulations. The proposed operations would continue to store and use diesel fuels and other chemicals commonly used for dairy operations. The storage of any hazardous material on site over threshold quantities (55 gallons; 200 cu. ft.; or 500 pounds) requires that a HMBP to be filed with the Merced County DEH. Any quantity of hazardous waste generated on site also requires that a HMBP be filed. Compliance with these requirements would reduce the risk of hazards related to the routine transport, use, or disposal of hazardous materials to a less-than-significant level. The risk of hazards to the public or to environmental conditions related to accident conditions would also be reduced to a less-than-significant level.

For a discussion of impacts to water quality as a result of increased export of dry manure and associated pathogens and residual contaminants, see Section IX, *Hydrology and Water Quality*.

Question c: No Impact. There are no existing or proposed schools within 0.25 miles of the project site. The nearest school, McSwain Union Elementary School, is located approximately 1.5 miles to the north of the proposed project (Google Earth 2018). Therefore, the dairy operations would not result in hazardous emissions or handle hazardous waste within 0.25 miles of an existing or proposed school, and no impact would result.

Question d: No Impact. The project site is not listed in the roll of hazardous waste sites maintained by the State of California and Merced County for county addresses pursuant to Government Code Section 65962.5 (DTSC 2018). No significant hazard to the public or the environment would result with project implementation.

Question e, f: Less-than-significant Impact. The Merced Regional Airport is approximately 2.25 miles to the east of the proposed project site. According to the Merced Regional Airport Land Use Compatibility Plan, the project site is located within Zone D, Other Overflight Area. It is the outermost overflight area of the airport (Merced ALUCP 2012). The ALUCP defines Zone D as a low-level risk area where the potential risk would be tall (larger than 150 feet) single objects. There are no private airfields located within two miles of the project vicinity. Because the proposed project would be located further than two miles from any public or private airport, and risk impacts are determined by the Merced ALUCP to be low, the project would not result in a safety hazard for people residing or working in the project area. This would be a less-than-significant impact.

Question g: Less-than-significant Impact. The proposed active dairy facilities within the project site are not located near a designated arterial roadway; such roadways are used as evacuation routes. The nearest designated arterial roadway is State Route 140, located approximately 1.75 miles to the north of the project site (Merced County 2013e). The proposed project does not include any modification of existing area roadways or intersections, and the project would not add significant amounts of traffic that would interfere with emergency response or evacuation. Therefore, the proposed project would result in a less-than-significant impact, and no mitigation would be necessary.

Question h: Less-than-significant Impact The Fire Hazard Severity Zone map for Merced County indicates that the project site and surrounding area is located in the Non-Wildland / Non-Urban Severity Zone (Merced County 2013f). The project site is designated as a Local Responsibility Area – Unzoned; it is located in an area not considered a fire risk (CAL FIRE 2008). Therefore, no hazard would occur related to risk of loss, injury, or death due to wildland fire with implementation of the proposed project.

Question i: Potentially Significant Impact. While the existing agricultural character of the project vicinity tends to minimize incompatibility to existing uses, implementation of the Oliveira Dairy Expansion project could introduce an additional source of flies and other insects in the area of the adjacent residences. In efforts to minimize agricultural nuisances, there is a required minimum setback between new or expanded confined animal facilities and individual off-site rural residences to 1,000 feet, and the construction of new off-site dwellings is prohibited within 1,000 feet of an existing animal confinement facility. For the Oliveira Dairy Expansion project, the closest off-site residences are located approximately 610 feet and 700 feet south of active dairy facilities on Dickenson Ferry Road (see Figure 6). Because of the proximity of adjacent residences, and because expanded operations at the dairy could result in an increase in nuisance intensity and frequency, the proposed project may be incompatible with existing uses in the project vicinity. This would be a potentially significant impact, and will be evaluated further in the EIR for this project.

IX. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	✓			
b) 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 pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	✓			
c) 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 which would result in substantial erosion or siltation on- or off-site?	✓			
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	✓			
e) 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?	✓			
f) Otherwise substantially degrade water quality?	✓			
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			✓	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	✓			
i) 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?	✓			
j) Inundation by seiche, tsunami, or mudflow?				✓

ENVIRONMENTAL SETTING

The existing facility consists of flush and scrape systems that are used to collect and process wastewater and solid manure. Animal wastes from freestall and other concrete-surfaced areas are flushed with recycled water to an on-site waste management system that consists of one settling basin and two wastewater storage ponds (retention ponds). The area of active dairy facilities has been graded to direct corral runoff to the existing waste management system. Stormwater runoff from impervious surfaces is routed to the wastewater ponds. Stormwater from all roofed areas is

routed to a nearby field, except for stormwater from the commodity barn roof, which is routed to a wastewater pond. Recycled water is used to clean the milk parlor floor and is the source of sprinkler pen water.

Dry manure is removed from corrals three times a year. The wastewater ponds are cleaned as sludge accumulates and solids are typically removed with an excavator or slurry removal equipment, being careful not to disturb the soil liner. Manure is stored at the dairy in stockpiles before use as bedding or fertilizer. Dry manure is currently applied to all fields. As reflected in the Nutrient Management Plan (NMP), approximately 3,800 tons of solid manure (approximately 80 percent of dry manure) is exported and applied to off-site fields not owned by the dairy operator.

Wastewater is mixed with irrigation water supplied by Merced Irrigation District (MID) canal surface water or three dairy farm groundwater irrigation wells (well locations are shown on Figure 5) and applied to cropland (see Table 1). Receiving fields are graded to guide excess applied irrigation water to an existing tailwater return system. Most collected tailwater is retained by berms; for the Pump Field, tailwater is returned to the storage pond.

Domestic water is delivered to the site by two on-site water wells. Sewer service is provided by on-site septic systems.

The Federal Emergency Management Agency (FEMA) provides information on flood hazards for communities based on its Flood Insurance Rate Maps. The project site is located in Flood Zone A, a Special Flood Hazard Area (SFHA) area determined to be subject to flooding by the 1 percent annual chance flood, but for which a Base Flood Elevation (BFE) has not been established (FEMA 2008).

ENVIRONMENTAL EVALUATION

Question a, e, and f: Potentially Significant Impact. Dairy facilities pose a number of potential risks to water quality, primarily related to the amount of manure and process water that they generate. Manure and process water from dairy facilities can contribute pollutants such as nutrients (nitrogen), ammonia, organic matter, sediments, pathogens, hormones, antibiotics, and total dissolved solids (salts). These pollutants, if uncontrolled, can cause several types of water quality impacts, including contamination of drinking water, impairment of irrigation systems, and impairment of surface waters. While the existing and proposed waste management systems would act to prevent groundwater contamination, the operation of the Oliveira Dairy Expansion project may result in degradation of groundwater resources and potential adverse effects to surface water quality. The proposed project includes a new OWTS for the milking parlor. The installation of a new OWTS could result in impacts to water quality. Solid manure exports to off-site fields would increase from 3,800 tons to approximately 7,000 tons of solid manure with the proposed dairy expansion, and 5,500,000 gallons of wastewater slurry would be exported from the facility and applied to adjacent off-site agricultural fields not owned by the project applicant. These factors could result in off-site impacts to water quality. These potentially significant impacts will be evaluated further in the EIR for the proposed project. The EIR will include a water quality characterization and impacts analysis based on water quality data available from both on-site and nearby wells, and nearby water wells.

Question b: Potentially Significant Impact. Groundwater from on-site groundwater wells and surface water resources currently provide water used for the dairy operation. The proposed expansion project includes the continued use of existing water resources. Water usage for the dairy could increase with the proposed dairy expansion. Project impacts to groundwater levels will be evaluated further in the EIR for the proposed project.

Question c and d: Potentially Significant Impact. The project involves the construction of additional dairy facilities both within the footprint of the existing facility, and within a seven-acre area immediately adjacent to existing facilities. Stormwater runoff during the construction period could result in erosion, siltation, and sedimentation of waterways draining the site. Project impacts due to surface drainage and runoff during construction will be evaluated further in the EIR for the proposed project.

Question g: Less-than-significant Impact. Although residences are located on the project site, the proposed project does not include the construction of any new residences. Therefore, no new housing would be placed within a 100-year flood hazard area.

Questions h and i: Potentially Significant Impact. The Federal Emergency Management Agency provides information on flood hazards for communities based on its Flood Insurance Rate Maps. According to FEMA (2008), the project site is located in Flood Zone A, a SFHA area determined to be subject to flooding by the 1 percent annual chance flood. The proposed project includes the construction of new structures in the area of existing facilities, as well as a seven-acre area immediately adjacent to active dairy facilities. This would place structures in an area determined to be subject to flooding by the 1 percent annual chance flood, and would expose people or structures to a significant risk of loss, injury or death involving flooding. These potentially significant impacts will be evaluated further in the EIR for the proposed project. The EIR will include analysis of proposed project in terms of compliance with the CVRWQCB's Reissued Waste Discharge Requirements General Order for Existing Milk Cow Dairies (Order R5-2013-0122), and with requirements of the Merced County Flood Ordinance.

Question j: No Impact. The proposed project site is located approximately 102 miles from the Pacific Ocean and distant from any large lakes, at an elevation of 135-145 feet above MSL (Google Earth Pro 2018). Mudslides and other forms of mass wasting occur on steep slopes in areas that contain susceptible soils or geology, typically as a result of an earthquake or high rainfall event. The project site is located on relatively flat ground. Therefore, the proposed project would not be exposed to hazards related to a seiche, tsunami, or mudslides, and no mitigation would be necessary.

X. LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	_____	_____	_____	_____✓_____
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	_____✓_____	_____	_____	_____
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	_____	_____	_____	_____✓_____

ENVIRONMENTAL SETTING

The land surrounding the project site and in the general vicinity is primarily developed for agricultural uses. Scattered rural residences are located in the general area of the project; most residences are associated with agricultural operations.

ENVIRONMENTAL EVALUATION

Question a: No Impact. Other than scattered rural residences, there is no established community in the immediate project area. The nearest established community is the City of Merced. The project site is located approximately two miles west of Merced city limits, and 4.5 miles to city center. Because the project would not divide a community, no adverse effects would result, and no mitigation would be necessary.

Question b: Less-than-significant Impact. Existing land uses on the project site include an existing dairy facility and irrigated cropland. There are several off-site residences located within the windshed of the dairy. The closest off-site residences are located approximately 610 and 700 feet south of active dairy facilities on Dickenson Ferry Road (see Figure 6). While the existing agricultural character of the vicinity would tend to minimize incompatibility to existing uses in the project vicinity, implementation of the dairy expansion project could introduce an additional source of odors, flies, and other insects in the area of these residences. (Potential adverse odor effects are evaluated in Section III, *Air Quality and Odors*, of this Initial Study.) Because of the proximity of the adjacent residences, the proposed project may be incompatible with existing uses in the project vicinity. This would be a potentially significant impact to be evaluated further in the EIR.

Question c: No Impact. Because the project site is not located in an area covered by an adopted Habitat Conservation Plan or Natural Community Conservation Plan, no conflict with any local conservation program would occur. No significant impact would result, and no mitigation would be necessary.

XI. MINERAL RESOURCES

Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
			✓
			✓

ENVIRONMENTAL SETTING

Mineral resources within Merced County consist of aggregate deposits located along the Merced River and adjacent existing and historic watercourses. According to the 2030 Merced County General Plan Background Report, the project site is not located in an area of sand and gravel resources (Merced County 2013g).

ENVIRONMENTAL EVALUATION

Question a, b: No Impact. No important mineral deposits, Mineral Resource Zones, or existing or previous mines are located in the area or on the project site. Because none of these resources and resource protection zones are located on the project site, no adverse effects would result, and no mitigation would be necessary.

XII. NOISE

Would the project result in:

- a) 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?
- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e) 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 expose people residing or working in the project area to excessive noise levels?
- f) For a project in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		✓	
		✓	
		✓	
		✓	
		✓	
		✓	

ENVIRONMENTAL SETTING

Potential noise impacts of a project can be categorized as those resulting from construction and those from operational activities. Construction noise would have a short-term effect; operational noise would continue throughout the lifetime of the project. During construction of the proposed dairy facilities, noise levels would increase temporarily. Operational noise associated with the expansion of the dairy facility would occur 24 hours per day, 365 days per year, with most operations concentrated during daylight hours.

Some land uses are considered more sensitive to noise levels than other uses. Sensitive land uses can include residences, schools, nursing homes, hospitals, and some public facilities, such as libraries. Sensitive land uses also may include areas that contain threatened or endangered biological species that are known to be sensitive to noise. Sensitive receptors in the project vicinity include off-site rural residences; the closest residences are located 610 and 700 feet to the south of active dairy facilities. With the proposed expansion, distances to these residences would not be reduced.

The noise level experienced at a sensitive receptor depends on the distance between the source and the receptor, the presence or absence of noise barriers and other shielding devices, and the amount of noise attenuation (lessening) provided by the intervening terrain. For line sources, such as vehicular traffic, noise decreases by about 3.0 to 4.5 A-weighted decibels (dBA)³ for every doubling of the distance from the roadway.

³ Decibel or dB: Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell. A-Weighting: A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

The Merced Regional Airport is approximately 2.25 miles to the east of the proposed project site. There are no private airports within a two-mile radius of the project site.

REGULATORY FRAMEWORK

The 2030 Merced County General Plan Noise Element provides a basis for local policies to control and abate environmental noise, and to protect the citizens of Merced County from excessive noise exposure (Merced County 2013). The County also enforces its Noise Ordinance (Chapter 10.60, *Noise Control*) in the County Code. This ordinance contains noise level standards for residential and non-residential land uses. Specifically, the County Code sets 65 dBA Ldn⁴ and 75 dB Lmax⁵ standards for residential property, with standards applicable to nonresidential properties 5 dB higher (Chapter 10.60.030).

According to County Code (Chapter 10.60.040), construction activities that include the operation of any tools or equipment used during construction, drilling, earth moving activities, excavating, or demolition are prohibited from 6:00 p.m. to 7:00 a.m. the following day on weekdays. They are also prohibited at any hour during weekend days or legal holidays, except for emergency work.

ENVIRONMENTAL EVALUATION

Question a through d: Less-than-significant.

Construction Noise

Construction of the Oliveira Dairy Expansion project may result in a temporary increase in ambient noise levels. The project would be constructed in two phases over a period of ten years.

Construction activities would be considered an intermittent noise impact throughout the construction period of the project. These activities could result in various effects on sensitive receptors, depending on the presence of intervening barriers or other insulating materials. While some construction would take place within the existing facility footprint, additional construction of proposed structures would covert approximately seven acres of cropland on the Home Field to active dairy facilities (see Figure 5).

Based on typical construction equipment noise emission levels (FHWA 2015), noise levels produced during construction could potentially exceed those determined to be acceptable for parcels not zoned for residential land use by the 2030 General Plan (80 dBA Lmax at the property line) (Merced County Code Section 18.41.070B). However, Merced County Code Section 18.41.070C(1) acknowledges there may be temporary, elevated noise levels during construction. No feature of the project would cause noticeable levels of ground borne vibration or noise. Because construction activities would be temporary and would not likely result in noise levels that exceed General Plan standards for agricultural areas, construction noise would be considered to be a less-than-significant impact, and no mitigation would be necessary.

⁴ Ldn = Day/night average sound level during 24-hour day weighted by a factor of three.

⁵ Lmax: The highest root-mean-square (RMS) sound level measured over a given period of time.

Operational Noise

Situated in a rural area removed from significant noise sources, the noise environment within the project site is dominated by traffic noise from trucks and vehicles on adjacent and private roadways, and operational noise from agricultural uses on the site and on adjacent farms. Existing operational noise is associated with on-site dairy operations, crop cultivation, and associated agricultural operations. Most noise events are associated with tractor and equipment operation. With project implementation, there would be little increase in existing ambient noise levels. No new large machinery or other noise-producing activities would occur, and no activities different from those currently occurring are proposed. However, some permanent increases associated with noise generated by additional vehicle and truck trips would occur. Generally, a doubling of traffic is necessary to result in a perceptible change in noise levels. Daily trips associated with the proposed project are estimated to increase from 24 average daily trips (ADT) to approximately 40 ADT. Since there is minimal traffic on Gurr Road, Oak Avenue, and W. Dickinson Ferry Road, traffic noise would not exceed noise levels determined to be acceptable for agriculture by the Merced County General Plan, even with the addition of new dairy traffic. Also, noise levels in the vicinity of the project site would comply with the Merced County Code noise standard of 70 dB Ldn for agricultural uses (Merced County Code Section 18.41.070C). This would be a less-than-significant impact, and no mitigation would be necessary.

Question e, f: Less than significant Impact. The Merced Regional Airport is approximately 2.25 miles to the east of the proposed project site. According to the Merced Regional Airport Land Use Compatibility Plan, the project site is located within Zone D, Other Overflight Area. It is the outermost overflight area of the airport (Merced ALUCP 2012). The ALUCP defines Zone D as an area where the noise impact is low (typically less than CNEL 55dB), and the risk level is low. There are no private airfields located within two miles of the project vicinity. Because the proposed project would be located further than two miles from any public or private airport, and noise impacts are determined by the Merced ALUCP to be low, people working at the dairy facility would not be exposed to adverse levels of noise due to aircraft over flight.

XIII. POPULATION AND HOUSING

Would the project:

- a) 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)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		✓	
		✓	
		✓	

ENVIRONMENTAL EVALUATION

Question a: Less-than-significant Impact. The Oliveira Dairy Expansion project site is located in an agricultural region developed with other animal confinement operations, including other dairies. It would not result in a new or different type of use for the area, nor does the project create or improve any infrastructure serving the site or region. The proposed project is consistent with Merced County land use plans, and no modification of land use and development policies would be necessary to accommodate the proposed dairy project.

The dairy currently employs a staff of 7 workers. With implementation of the proposed project, the number of employees would increase to approximately 14 workers. In March 2018, the labor force in Merced County totaled 116,800 persons, with an official unemployment rate of 10.2 percent (or 11,900 unemployed persons) (EDD 2018). The increased labor needs of the project can be accommodated by this existing workforce within Merced County and would not require the importation of workers. Similarly, any additional housing demands caused by project employees could be accommodated by existing and planned housing resources within Merced County.

The additional employees resulting from the proposed project would not result in a meaningful increase in the County's population; implementation of the project would not result in the exceedance of population projections or result in any significant growth inducing effects. The proposed dairy expansion project would not be expected to result in substantial new growth in the project vicinity. Therefore, the proposed project would not result in substantial direct or indirect growth inducement, and no adverse impacts would occur.

Question b, c: Less-than-significant Impact. There are four single-family residences located at the dairy site. One residence is occupied by the dairy owner, and the other three are occupied by employees. The proposed project would include the demolition of the three employee residences; no new housing is proposed. However, the level of direct loss or degradation of existing housing units would not be significant as compared to available housing units in Merced County: 84,406 units were available in 2016, the last year for which data is available (US Census Bureau 2018). Implementation of the project would not displace substantial numbers of people or existing housing units; this would be a less-than-significant impact, and no mitigation would be necessary.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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XIV. PUBLIC SERVICES

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 of any of the public services:

Fire protection?	_____	_____	✓	_____
Police protection?	_____	_____	✓	_____
Schools?	_____	_____	✓	_____
Parks?	_____	_____	✓	_____
Other public facilities?	_____	_____	✓	_____

ENVIRONMENTAL SETTING

Public services provided in the project area include fire, police, school, library, and park services.

There are no public facilities located within the immediate project vicinity. The closest fire station is the Franklin/Beachwood/McSwain Fire Station 61, located at 961 Gurr Road, approximately 1.5 miles to the north. The nearest school, McSwain Union Elementary School, is located approximately 1.5 miles to the north. The Merced County Sheriff's Department provides police protection in the unincorporated areas of Merced County; the Merced County Sheriff's Department is approximately 4.75 miles to the northeast. Three hospitals provide medical services to county residents; Mercy Medical Center in Merced is closest to the project site. Park services are discussed in more detail in *Section XV, Recreation*. Utility services are discussed in more detail in *Section XVII, Utilities and Service Systems*.

ENVIRONMENTAL EVALUATION

Question a: Less-than-significant Impact. Operation of the Oliveira Dairy Expansion project would include expansion of a large, developed use in an area without developed fire safety facilities. Because of this, fire risk and hazards could increase. Implementation of the proposed dairy expansion project would not include any additional developed uses. The project site is in an area with rural levels/standards of fire protection. In response to this common condition in agricultural areas of the county, the Merced County Fire Department generally imposes requirements for on-site water storage for fire protection. Compliance with measures as set forth by the Fire Department would be required as conditions of approval and would reduce fire risk and hazard to levels found acceptable by the Merced County Fire Department. Therefore, there would be no increase or change in the demand for fire service that would require the provision of new or physically altered fire facilities.

No feature of the project would result in the need for new or altered facilities for police protection, schools, parks, libraries, or health services. Because no new residences would be constructed, and needed employees would be drawn from the local labor pool, no substantial increase in population is expected to result from the proposed project. No feature of the proposed project would pose unusual police protection demands. Therefore, there would be no increase in the demand for public services such as police facilities, schools, parks, libraries, or health services that would require the construction of new facilities or physically altered facilities. This would be a less-than-significant impact, and no mitigation would be necessary.

XV. RECREATION

Would the project:

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
			✓
			✓

ENVIRONMENTAL EVALUATION

Question a, b: No Impact. No existing public recreational facilities are located on the project site or in the vicinity; the nearest parks are located over three miles to the northeast in the City of Merced. No substantial increase in population would occur with implementation of the proposed project. There would be no increase in the use of existing neighborhood or regional parks or other recreational facilities that would cause or accelerate the physical deterioration of such facilities. The proposed project does not include recreational facilities, nor does it require the construction or expansion of such facilities. No adverse physical effect would occur, and no mitigation would be necessary.

XVI. TRANSPORTATION/TRAFFIC

Would the project:

- a) 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?
- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
- c) 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?
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e) Result in inadequate emergency access?
- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		✓	
		✓	
			✓
		✓	
		✓	
			✓

ENVIRONMENTAL SETTING

Currently, heavy trucks (milk tankers, commodity deliveries) and other vehicles access the site. Existing daily trips are estimated at 24 ADT, including approximately 5 heavy truck trips. All trips currently access the site via Oak Avenue. State Route (SR) 140 to the north, SR 99 to the northeast, and SR 59 to the east provide regional access to the site. The Santa Fe Railroad runs on Union Pacific Railroad tracks approximately 4.25 miles to the east of the project site (Caltrans 2018). Private internal roads would continue to be used for agricultural operations, movement of harvested crops from the fields to the dairy, and movement of dry manure to the fields.

ENVIRONMENTAL EVALUATION

Question a, b: Less-than-significant Impact. The proposed dairy expansion would result in an increase from 24 to 40 average daily trips, an increase of 16 daily trips, including an additional 5 heavy truck trips per day (see Table 4 on page 18 of this Initial Study). Because of the existing low levels of traffic in the vicinity, and because minimal new trips would be generated by the proposed project expansion, congestion on nearby roadways would not increase. There would be no reduction of the existing Levels of Service on nearby roads, nor would the project conflict with any applicable

congestion management plan. Therefore, impacts due to increased roadway congestion would be less than significant, and no mitigation would be required.

Question c: No Impact. The proposed project would not result in the generation of air traffic. Because implementation of the proposed project would not increase air traffic levels, the proposed project would not result in a change in air traffic patterns. No impact would result, and mitigation would not be necessary.

Question d, e: Less-than-significant Impact. According to the 2030 Merced County Emergency Operations Plan, freeways and major county roads would be used as primary evacuation routes in the event of a natural hazard, technological hazard, or domestic security threat. No modifications to any existing roadway are proposed either during project construction or operation. Therefore, the project would not increase hazards due to any design feature. The Merced County Fire Department maintains standards for access roadways to provide for adequate emergency access. Project implementation would not interrupt emergency access to the dairy facility. Therefore, safety impacts from hazards due to design features or inadequate emergency access would be less than significant, and no mitigation would be required.

Question f: No Impact. Goal CIR-4 of the 2030 Merced County General Plan seeks to maintain and expand a safe, continuous, and easily accessible bicycle and pedestrian circulation system. The MCAG adopted a Regional Bikeway Plan in 2008; the intent of the plan is to connect to major destinations throughout the County as well as in local communities. According to the Draft Regional Transportation Plan (MCAG 2014), roads in the vicinity of the project do not include any infrastructure for bicycles or pedestrians. The project vicinity is not served by bus transit. Implementation of the proposed project would therefore have no effect on alternative modes of transportation, and it would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. No mitigation would be necessary.

Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
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XVII. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native America tribe, and that is:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 21010.1(k), or
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

✓

✓

Environmental Setting

A Tribal Sacred Lands search request was filed with the Native American Heritage Commission (NAHC). The search was completed with the conclusion that no tribal cultural resources are located on or in the vicinity of the proposed project site (NAHC 2018).

Records of the known cultural resources found in Sacramento County are included in the files of the Office of Historic Preservation, California Historical Resources Information System. The Central California Information Center (CCIC), housed at California State University, Stanislaus, locally administers these records. A cultural resources records search was conducted at the CCIC for the project site and surrounding area to determine its historic and cultural sensitivity (CCIC 2018). Based on the records search, there are no known prehistoric or historic archaeological resources on the project site or in its vicinity that have been reported to the CCIC.

Regulatory Setting

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to any California Native American tribes that have requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include Tribal Cultural Resources (TCR), the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Section 21074(a) of the Public Resource Code (PRC) defines TCRs for the purpose of CEQA as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
- b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
- c. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

“Substantial evidence” is defined in Section 21080 of the Public Resources Code as “fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.”

The criteria for inclusion in the California Register of Historical Resources (CRHR) are as follows [CCR Title 14, Section 4852(b)]:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; and/or
2. It is associated with the lives of persons important to local, California, or national history; and/or
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; and/or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity, which is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, Section 4852(c)].

Summary of Tribal Consultation

PRC Section 21080.3.1(b) requires culturally affiliated tribes who wish to be notified of proposed projects to register with the Lead Agency. Merced County has received no such requests for notification and/or consultation. However, Merced County has chosen to offer consultation to the four tribes identified by the NAHC as having a cultural affiliation in the area of the proposed project. Those tribes include Amah Mutsun Tribal Band, Dumna Wo-Wah Tribal Government, North Valley Yokuts Tribe, and Southern Sierra Miwuk Nation. On July 24, 2018, Merced County sent letters offering project consultation to these tribes. The letters provided a brief description of the proposed project and its location, the lead agency contact information, and a notification that each tribe has 30 days from receipt of the County’s letter to request consultation. The 30-day response period concludes on August 24, 2018.

Environmental Analysis

Question a, b: Less-than-significant Impact. The search for Tribal Sacred Lands resources conducted by the NAHC yielded negative results. Additionally, a CCIC Records Search for cultural resources found no prehistoric archaeological resources on the project site or in its vicinity that have been reported to the CCIC. In making an offer of consultation to identified tribes pursuant to PRC Section 21080.3.1, Merced County has met the initial requirements of AB 52. Because Merced County has initiated consultation with these tribes, and no known tribal cultural resources or other prehistoric cultural resources were identified that are listed or eligible for listing in a register of historic resources, a less-than-significant impact would result. No mitigation would be required.

Should one or more of the tribes request consultation on the project, a Tribal Cultural Resources chapter shall be added to the EIR being prepared for the project.

XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	_____	_____	_____	✓
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	_____	_____	_____	✓
c) 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?	_____	_____	✓	_____
d) Have sufficient water supplies available to serve the project from existing water entitlements and resources, or are new or expanded entitlements needed?	_____	_____	✓	_____
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	_____	_____	_____	✓
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	_____	_____	✓	_____
g) Comply with federal, state, and local statutes and regulations related to solid waste?	_____	_____	✓	_____

ENVIRONMENTAL SETTING

There are four single-family residences located at the dairy facility. With implementation of the proposed project, three of the residences would be removed. Domestic water is delivered to the site by two on-site water wells. Sewer service is provided by four on-site septic systems. With implementation of the proposed project, three of the on-site septic systems would be removed. A new septic system and leach field for the proposed milking parlor would be installed. The proposed dairy expansion would rely on existing utilities, including domestic water, stormwater, and electrical services. While the project applicant anticipates new electrical service at the proposed milking parlor, no additional utilities would be required. Solid waste collection and disposal are provided by private service.

ENVIRONMENTAL EVALUATION

Because confined animal facilities, including dairies, would not require additional public facilities beyond those typically provided in agricultural areas, implementation of the proposed dairy expansion project would not be expected to increase the demand for public facilities beyond the levels provided and planned for by public utilities.

Question a, b, and e: No Impact. Although the proposed dairy expansion would involve the construction of a septic system for the new milking parlor, there would be no change or impact to community-based wastewater treatment systems. Therefore, no impacts related to wastewater disposal or treatment would occur. For a discussion of dairy wastewater disposal and compliance with CVRWQCB requirements, see Section IX, *Hydrology and Water Quality*.

Question c: Less-than-significant Impact. The project site receives minimal off-site storm runoff. All stormwater generated at the project site from existing and proposed areas with impermeable surfaces is, and would continue to be, collected and routed to the existing wastewater pond or adjacent field. All stormwater generated by the project would be collected and maintained within the project applicant's larger property. Therefore, no adverse effects to storm drainage are expected, and no needs for, or modifications to, storm drainage systems in the project vicinity are necessary. For more information regarding storm drainage, see Section IX, *Hydrology and Water Quality*, above.

Question d: Less-than-significant Impact. Three on-site wells and MID surface water resources currently provide groundwater used for irrigation. The proposed project includes the continued use of existing water resources. Water usage for the dairy could increase with the proposed dairy expansion. This would be a potentially significant impact to be evaluated further in the Hydrology and Water Quality EIR chapter for the proposed project. For additional information regarding the project's water use and supplies, see Section IX, *Hydrology and Water Quality*, above.

Question f, g: Less-than-significant Impact. Implementation of the proposed project would not require extra stops for solid waste removal since business uses on the site would be unchanged and no additional generation of solid waste would be expected. Disposal of manure is outside of the normal waste stream, and is provided by the project applicant. Since the manure is used to fertilize agricultural fields, there would be no effect on landfill capacity or Merced County's adopted Integrated Waste Management Plan. The provision of solid waste collection service to serve the proposed project would be subject to the normal tariffs and requirements of the service provider, and would not result in the need for any major new systems or substantial alterations to these utility systems. A less-than-significant impact would occur, and no mitigation would be necessary.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	✓			
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	✓			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	✓			

Question a, b: Potentially Significant Impact. As discussed in this Initial Study, the proposed Oliveira Dairy Expansion project has the potential to exceed SJVAPCD thresholds for criteria air emissions; affect global climate change due to greenhouse gas emissions; impact biological and cultural resources; degrade water quality during construction and operations, require increased water supplies, flood risks, and stormwater runoff; have soils incapable of adequately supporting the use of septic tanks; and result in odor and nuisance insect conditions. These would be potentially significant impacts to be evaluated further in the EIR for the Oliveira Dairy Expansion project. Should one or more of the Native American tribes that have received notification from the County request consultation on the project, that would also be a potentially significant impact to be evaluated further in the EIR.

In addition, the proposed project may contribute to cumulative effects in these areas. The project has been determined not to have significant project level effects for any additional environmental issue. Therefore, implementation of the project would not contribute to any cumulative effects in these other areas. Because of potential cumulative impacts to the areas listed above, such impacts will be evaluated further in the EIR for the proposed project.

Question c: Potentially Significant Impact. Because of the potential environmental impacts identified in this Initial Study, the proposed Oliveira Dairy Expansion project may have the potential to cause substantial adverse effects on human beings. This would be a potentially significant impact to be evaluated further in the EIR for the proposed project.

3. PREPARERS OF THE INITIAL STUDY

Lead Agency

Merced County
Community and Economic Development Department
2222 M Street
Merced, CA 95340
(209) 385-7654

Brian Guerrero, Planner III

Environmental Consultant

Environmental Planning Partners, Inc.
3110 Gold Canal Drive, Suite D
Rancho Cordova, CA 95670-6164
(916) 852-8830

Robert D. Klousner – President, Principal in Charge
Raadha Jacobstein – Professional Planner, Project Manager
Mary Wilson - Assistant Planner
Dale Nutley – Graphic Artist
Mary Wilson – Document Preparation

4. LITERATURE CITED

The following documents were referred to as information sources during preparation of this document. They are available for public review at the web addresses shown after the listing. All documents without an Internet address are available at the County of Merced, Community and Economic Development Department 2222 'M' Street, Merced, California 95340.

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DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project applicant. A NEGATIVE DECLARATION will be prepared.

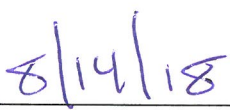
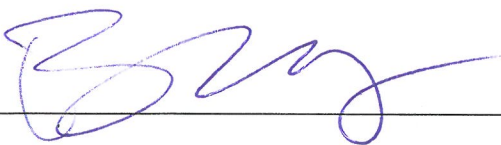
X I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date



Brian Guerrero, Planner III
Merced County
Community and Economic Development Department

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