

**BIOLOGICAL RESOURCE ANALYSIS  
STERLING SENIOR COMMUNITIES  
(APNs 144-040-11 and 21)  
CITY OF COTATI, SONOMA COUNTY, CALIFORNIA**

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**Prepared for**

Townsend Capital Partners, LLC  
1101 Fifth Avenue, Suite 150  
San Rafael, California 94901

Attention: Mr. Steve Monahan

**Prepared by**

Monk & Associates, Inc.  
1136 Saranap Avenue, Suite Q  
Walnut Creek, California 94595

Contact: Mr. Geoff Monk

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## **ATTACHMENTS**

Attachment A. Stamped Jurisdictional Map for the Reds Project Site in Cotati, California dated May 21, 2018 from the U.S. Army Corps of Engineers.

Attachment B. Letter of Jurisdiction Determination dated May 21, 2018 from the U.S. Army Corps of Engineers.

Attachment C. Sterling Senior Communities Site Improvement Plans-Overall Site Plan prepared by Adobe Associates, Inc. dated October 1, 2018.

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## 1. INTRODUCTION

On behalf of Townsend Capital Partners, LLC (the applicant), Monk & Associates (M&A) has prepared this Biological Resources Analyses (report) for the proposed Sterling Senior Communities Project (formerly known as the Reds Project) (hereinafter the proposed project) in Cotati, Sonoma County, California (Figures 1, 2, and 3). The project is proposed to be constructed on a 5.63-acre site located west of Highway 101 in the City of Cotati (herein referred to as the project site). The project site is already partially developed with an occupied residence, and now abandoned second home, night club, and commercial garages with associated outbuildings. These structures would all be removed to accommodate this redevelopment project.

This report can be used by the City of Cotati for its California Environmental Quality Act (CEQA) review of the proposed project. It includes identification of “potentially significant” and “significant impacts” that could/would occur to sensitive biological resources as defined by the CEQA. It presents a regulatory section discussing the laws, regulations, and policies that protect sensitive biological resources. Finally, mitigation measures are presented for “potentially significant” and “significant” impacts to biological resources that upon implementation would reduce the significance of such impacts to levels regarded as less than significant pursuant to the CEQA.

## 2. PROJECT LOCATION AND SETTING

The 5.63-acre project site is located at the northwest corner of Gravenstein Highway and Alder Avenue (Figures 2 and 3). Cotati Large Animal Hospital lies directly to the west of the project site. To the south of the project site, across the Gravenstein Hwy, is Shamrock Materials, Inc., a commercial business specializing in stone and concrete building supplies. Ruderal (weedy) vegetation and (weedy) annual grassland with ranchette style housing occurs to the north of the project site. Beyond Alder Avenue to the northeast is a recently built residential townhouse development called the Cotati Cottages subdivision, and additional residential development is being reviewed for final approval for the property directly east of the project site.

Outside of existing structures on the property, the project site was previously farmed with cultivated lavender. Farming was abandoned during the recession leaving the farm buildings now empty. The existing landscaping around buildings includes horticultural species such as cottonwood (*Populus* sp.), black walnut (*Juglans hindsii*), Mexican fan palm (*Washingtonia filifera*), blackwood acacia (*Acacia melanoxydon*), cedar (*Thuja* sp.), English ivy (*Hedera helix*), and periwinkle (*Vinca major*). Additionally, there are scattered native oaks that occur on the project site as well (*Quercus garryana* and *Q. lobata*).

## 3. PROPOSED PROJECT

The proposed project includes the construction of the 101,377-square foot Sterling Senior Communities development and an additional 4,000 square foot commercial building which will house a Cannabis Dispensary called “Red’s Dispensary.” Red’s Dispensary was approved by City Council in June of 2018. Sterling Senior Communities will be comprised of two buildings: an assisted living facility and a memory care facility, which will encompass most of the project site. In total, the project will provide 116 car parking spaces, 16 bicycle parking spaces and 2

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motorcycle spaces as well along with associated infrastructure and landscaping for the proposed development. The proposed project meets a growing need for local assisted living facilities for an aging demographic within the Cotati, Rohnert Park, City of Santa Rosa, and City of Petaluma greater area as well as create local, well-paying jobs which will, in turn, contribute to the tax basis for the City.

## **4. ANALYSIS METHODS**

### **4.1 Background Research**

Prior to preparing this Biological Resource Analysis, M&A researched the most recent version of the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDDB), RareFind 3.2 application (CNDDDB 2017 for historical and recent records of special-status plants and wildlife known to occur in the region of the project site. All special-status species records were compiled in tables. M&A examined all known record locations for special-status species to determine if special-status species could occur on the project site or within an area of affect.

### **4.2 Site Investigation**

M&A biologists Mr. Geoff Monk and Ms. Christy Owens conducted a general survey of the project site on July 15, 2016 to record biological resources and to assess the likelihood of resource agency regulated areas on the project site. Other surveys of the site were also conducted as reported in the Wetland Delineation and Rare Plan Survey Methods below. During all surveys of the project site M&A recorded all plant and wildlife species. M&A then cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species.

### **4.3 Wetland Delineation**

On July 25, 2008, the Corps confirmed the extent of its jurisdiction on the project site (Corps File No. SPN-2007-400822-N). This jurisdictional map remained valid until July 25, 2010. On July 15, 2016 and April 24, 2017, M&A biologists Mr. Monk and Ms. Owens visited the project site to reexamine potential Corps-regulated areas. Delineation fieldwork was conducted in 2016 and again in 2017 after the wettest winter on record in more than 50 years. Mapped features on the project site were determined to meet jurisdictional criteria presented in the Corps' 1987 *Wetlands Delineation Manual* (Corps 1987) and the Corps' regional supplement for the Arid West Region (Corps 2008). A Request for Preliminary Jurisdictional Determination and the Preliminary Aquatic Resources Map was submitted to the Corps on August 18, 2017. On September 8, 2017, Ms. Roberta Morganstern from the Corps confirmed the extent of the Corps' jurisdiction on the project site.

On March 20, 2018, M&A biologist, Ms. Christy Owens, visited the project site again to examine potential Corps-regulated areas within potential offsite impact areas associated with City-required improvements to Highway 116 including acceleration and deceleration lanes. Ms. Owens mapped all features within the potential offsite impact areas that were determined to meet jurisdictional criteria presented in the Corps' 1987 *Wetlands Delineation Manual* (Corps 1987) and the Corps' regional supplement for the Arid West Region (Corps 2008). An amended

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Request for Preliminary Jurisdictional Determination and the Preliminary Aquatic Resources Map was submitted to the Corps on August 18, 2018 and confirmed by Ms. Roberta Morganstern of the Corps on May 21, 2018 verifying the extent of the Corps' jurisdiction within the expanded limits of delineation which includes the project site (Attachments A and B).

#### 4.4 Formal Rare Plant Surveys

Formal rare plant surveys were conducted on the project site in 2015 by Mr. Roy Buck, Senior Botanist with California Environmental Services, LLC. The surveys followed the rare plant survey methods required then by California Department of Fish and Game [now the CDFW] (CDFG 2000), California Native Plant Society (CNPS) published survey guidelines (CNPS 2001), and the United States Fish and Wildlife Service's (USFWS) for the Santa Rosa Plain (USFWS 2005a). Plant phenology (flowering periods) reference site surveys conducted by Mr. Buck confirmed that targeted rare plants were visible and in flower at the reference site on the dates of project site surveys. Specifically, Mr. Buck confirmed that Sonoma Sunshine (*Blennosperma bakeri*), Burke's goldfields (*Lasthenia burkei*), and Sebastopol meadowfoam (*Limnanthes vinculans*) were visible and in flower during the period that rare plant surveys were conducted on the project site. These plant phenology reference site surveys were conducted by Mr. Buck on: March 28, April 18, and May 3, 2015 at the Alton Lane Conservation Area. *No special-status plants were identified on the project site in 2015.*

On July 15, 2016 and on April 24, May 26 and June 15, 2017, M&A biologists Ms. Owens and Mr. Monk conducted formal rare plant surveys on the project site. Surveys conducted in 2016 were targeted for early and mid-summer blooming special-status plant taxa. All surveys were conducted according to USFWS-published survey guidelines for the Santa Rosa Plain as well as the CDFW- and CNPS-published survey guidelines. Following these guidelines, all surveys in 2017 were conducted in a timeframe when listed plants known from the Santa Rosa Plain were confirmed to be visible and in flower. Ms. Owens and Mr. Monk conducted reference site visits to confirm that Sonoma Sunshine (*Blennosperma bakeri*), Burke's goldfields (*Lasthenia burkei*), and Sebastopol meadowfoam (*Limnanthes vinculans*) were visible and in flower at the reference site during the period that rare plant surveys were conducted on the project site in 2017. These plant phenology reference site surveys were conducted by Mr. Monk and Ms. Owens on: April 24, May 26, and June 15, 2017 at Alton Lane Conservation Area. During all rare plant surveys on the project site, all plants observed were identified to a level necessary to determine rarity status. *No special-status plants were identified on the project site in 2016 or 2017.* All species observed during M&A's 2016 and 2017 rare plant surveys are included in Table 1.

One additional year of rare plant surveys will be conducted in the spring and early summer of 2019 according to USFWS-published survey guidelines for the Santa Rosa Plain as well as the CDFW- and CNPS-published survey guidelines. *These surveys will be conducted in accordance with new published-CDFW survey guidelines released as of March 18, 2018 and serve to bring the previous year's surveys up to date with new survey guidelines and fulfill the CDFW recommendation for yearly surveys of annual and short-lived perennial special-status plants in herbaceous plant communities to accurately document baseline conditions for the purposes of impact assessment.*

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#### 4.5 California Tiger Salamander Surveys

Circa 1995, M&A's principal biologist, Mr. Monk, confirmed that the California tiger salamander (*Ambystoma californiense*) was breeding in two seasonal pools on the now mostly-developed Sonoma Business Park project site located immediately east of the project site. Sonoma Business Park was mass-graded, and a master drainage plan was installed in 2001. At that time, the California Department of Fish and Game (CDFG)(now CDFW) designated the California tiger salamander as a "species of special concern." This salamander was not federally-listed until July 22, 2002 and it was not state-listed until August 19, 2010. All California tiger salamander habitat was removed by that grading project in 2001. All impacts to California tiger salamander were fully mitigated to the satisfaction of the USFWS and CDFG (now CDFW) by the Sonoma Business Park developer as part of the mass grading permit conditions from these agencies.

As part of the Sonoma Business Park development project, in a subsequent phase of the development in 2003/2004, the developer was required to salvage California tiger salamander presumed to be migrating from adjacent properties, including the project site, to the former (now developed) breeding pools on the Sonoma Business Park project site. This salvage was conducted under the assumption that all adult California tiger salamanders and their breeding habitat had been removed from the Sonoma Business Park project site when it was mass graded in June 2002. The recovery/salvage project was implemented under expectation that the balance of the Sonoma Business Park and the parcel to the north (then called the Nibe project site) and the project site (then called the Reds project site) would be developed under a master development project.

Mr. Jim Browning of the USFWS reviewed and approved the California tiger salamander salvage plan. On November 5, 2003, Mr. Dan Buford of the USFWS provided an email approval for M&A to construct and operate the California tiger salamander drift fence/pitfall trapping arrays as part of the salvage operation. The USFWS approved the translocation of salvaged (captured) California tiger salamanders under the condition that it would be completed under the direct supervision of Mr. Liam Davis and Mr. Bill Cox of the CDFW.

During the 2003/2004 trapping season, to conduct California tiger salamander salvage, M&A installed drift fence/trapping arrays prior to the onset of heavy seasonal rains. Approximately 4,220 linear feet of drift fence was constructed immediately to the west and the north of the Sonoma Business Park Project Site boundaries. One array was installed on the Nibe site to the north and one on the Reds site (on the project site) to the west of the Business Park project site. These arrays were expected to catch California tiger salamanders that could still be migrating to the two now developed pools on the Sonoma Business Park project site that had been removed in June of 2002. A total of 141 pitfall traps were installed in the drift fence arrays. A total of 82 adult California tiger salamanders were captured and about one third of these were translocated under the supervision and direction of Mr. Bill Cox of the CDFW to the Gobbi Bank site. The rest of the California tiger salamanders were likely located to the Alton Lane Conservation Preserve per information in an email of December 9, 2003 from Mr. Jim Browning to Wayne White, Cay Goude and Dan Buford at USFWS. In this email, Mr. Browning stated that he had

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just talked to Mr. Carl Wilcox (of the CDFW) and told him that USFWS was okay with CDFW's proposal to relocate the captured California tiger salamander to the Alton Lane Preserve.

In September 2007, M&A prepared and submitted a report to the USFWS and CDFG summarizing the salvage trapping effort titled *California Tiger Salamander (Ambystoma californiense) Survey and Salvage Summary of the "Nibe" and "Red's" Project Sites Santa Rosa, California September 20, 2007*. That report indicates that 12 of the adult California tiger salamanders that were captured on the Reds Project Site (the project site under discussion herein) in 2003/2004 winter and were surrendered to the CDFW for translocation.

## 5. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES

### 5.1 Topography and Hydrology

The project site is relatively flat with slight undulating topography. Just beyond the western border of the project site, an offsite incised drainage ditch, previously thought to be within the boundaries of the project site, receives large storm event sheet flows off surrounding properties including the western portion of the project site. This drainage ditch will not be modified by the proposed project. Large storm event sheet flows that collect in the offsite drainage ditch flow southward to a roadside ditch along the north side of Highway 116, that then conveys these large storm event (flashy) flows *westward* of the project site. The parallel roadside ditch was originally excavated in uplands when Highway 116 was constructed decades ago.

According to the Clean Water Rule (2015), ditches constructed in uplands that only flow episodically in response to storm events and those ditches associated with modes of transportation such as roadways are *not* protected pursuant to the Clean Water Act (CWA) and are categorically excluded by the Corps.

Nonetheless, the segment of roadside ditch along the frontage of the project site and in the offsite improvement areas along Highway 116 were investigated as part of both the 2016/2017 and the 2018 wetland delineations conducted by M&A of the project site and potential offsite impact areas, respectively. *The roadside ditch along the frontage of the Reds does not support wetland and showed no evidence of standing water or flow patterns and thus likely only conveys water during large storm events. It also does not drain from wetlands.* Thus, it was determined by the Corps on September 8, 2017 and again on May 21, 2018 (Attachments A and B), that the small roadside ditch along Highway 116 within the proposed limits of the project including offsite improvement areas, does not support any jurisdictional "wetlands" or "other waters."

The topography and slope on the north and eastern portion of the project site sheet flows eastward to a roadside ditch alongside Alder Avenue. There are two drain inlets in the bottom of this roadside ditch that intercept sheet water flows from the project site and deliver these storm water flows into the City of Cotati's storm drain system, which ultimately delivers stormwater flows to the Laguna de Santa Rosa, which empties into Mark West Creek, that ultimately flows to the Russian River.

There is a topographic depression located on the northern edge of the project site (W1 on Attachment A). This low area remains inundated and/or saturated throughout the winter and early spring. During large (episodic) storm events, W1 overflows and conveys water overland

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eastward where these flows enter a City of Cotati storm drain inlet along Alder Avenue that eventually conveys stormwaters into the Laguna de Santa Rosa, that drains into Mark West Creek, which flows into the Russian River.

## 5.2 Soils

The Soils Conservation Service (SCS), now called the Natural Resource Conservation Service (NRCS), mapped one soil type for the project site. The mapped soil unit is Haire Fine Sandy Loam, Hummocky, 0 to 5 percent slopes. The Haire Soil series consists of moderately well-drained soils that occur on nearly level to moderately steep hills, on old terraces, and alluvial fans. Slope ranges from 0 to 30 percent, and elevation ranges from 20 to 300 feet. These soils formed from alluvium derived from sedimentary rock. The vegetation in uncultivated areas consists of annual grasses and forbs. Permeability is very slow, and the hazard of erosion is slight. Haire soils are mainly used for dryland and irrigated pasture, but some areas are used for vineyards and rangeland. Typically, Haire soils have gray and grayish brown, neutral or slightly acid, light clay loam upper horizons. Haire fine sandy loam is found on undulating or hummocky terrain, with a clay subsurface layer. Soils typically have low fertility with an available water capacity at 6 to 8 inches. *Haire Fine Sandy Loam, Hummocky, 0 to 5 percent slopes is not a hydric (“wetland”) soil.*

The project site soils have been heavily altered by a combination of historical development and farming that occurred on the project site over past decades. While the northern half of the project site exhibits soils that meet the NRCS soil profile, the southern half of the project site exhibit gravelly loams that range from a few inches thick to greater than 12 inches. These currently or formerly developed soils overlay the Haire Soils that the NRCS mapped on the project site.

## 5.3 Plant Communities and Associated Wildlife Habitats

The project site has multiple buildings and a now abandoned residence with associated outbuildings. The landscaping around buildings includes horticultural species such as cottonwood (*Populus* sp.), black walnut (*Juglans hindsii*), Mexican fan palm (*Washingtonia filifera*), blackwood acacia (*Acacia melanoxylon*), cedar (*Thuja* sp.), English ivy (*Hedera helix*), and periwinkle (*Vinca major*). Additionally, there are scattered native oaks that occur on the project site as well (*Quercus garryana* and *Q. lobata*). Due to history of intensive site disturbance, only two distinct plant communities were identified on the project site: ruderal vegetation and seasonal wetland. Just beyond the western project boundary, the offsite incised appears to be regularly sprayed and thus has little vegetation present aside from a few individuals of petty spurge (*Euphorbia peplus*) and hairy willowherb (*Epilobium ciliatum*). Nomenclature used for plant names follows *The Jepson Manual, 2<sup>nd</sup> edition* (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (<http://ucjeps.berkeley.edu/interchange/index.html>). A complete list of plant species observed on the project site is presented in Table 1. Nomenclature for wildlife follows the CDFW’s *Complete list of amphibian, reptile, bird, and mammal species in California* (CDFW 2016) and any changes made to species nomenclature as published in scientific journals since the publication of the CDFW’s list. A complete list of wildlife species observed on the project site is presented in Table 2.

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### 5.3.1 RUDERAL

Ruderal (weedy) communities are assemblages of plants that thrive in waste areas, roadsides and other sites that have been disturbed by human activity. This community is typically dominated by introduced annual grasses and forbs that are highly adapted to high-intensity ongoing disturbance. The native, perennial bunchgrasses that dominated the native grassland prior to European settlement have now been largely displaced by these ruderal species.

A ruderal herbaceous community comprises the majority of the project site. Some of these non-native grass dominants found on the project site include Harding grass (*Phalaris aquatica*), wild oats (*Avena barbata*), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), Italian ryegrass (*Festuca perennis*), brome fescue (*Festuca bromoides*), hare barley (*Hordeum murinum* ssp. *leporinum*) and tall oatgrass (*Arrhenatherum elatius*). Common non-native forbs found on the project site include bristly ox-tongue (*Helminthotheca echioides*), bindweed (*Convolvulus arvensis*), Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*), purple salsify (*Tragopogon porrifolius*), Queen Ann's lace (*Daucus carota*), fennel (*Foeniculum vulgare*), prickly lettuce (*Lactuca serriola*), rough cat's ear (*Hypochaeris radicata*), spring vetch (*Vicia sativa*), wild radish (*Raphanus sativus*), cutleaf geranium (*Geranium dissectum*), mustards (*Brassica nigra*, *Hirschfeldia incana* and *Sisymbrium altissimum*) and clovers (*Trifolium incarnatum*, *Trifolium subterraneum*, *Trifolium dubium* and *Trifolium hirtum*). Due to past cultivation of lavender fields and grading disturbance, very few native, herbaceous taxa remain on the project site. The few native plant species found in the ruderal community includes California poppy (*Eschscholzia californica*), Spanish clover (*Acmispon americanus* ssp. *americanus*), willow herb (*Epilobium brachycarpum*), cleavers (*Galium aparine*), summer cottonweed (*Epilobium brachycarpum*) and creeping wildrye (*Elymus triticoides* ssp. *triticoides*).

Animals observed or expected to occur in ruderal habitats are typically those species adapted to human disturbance such as the following species observed on the project site: northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and black phoebe (*Sayornis nigricans*).

### 5.3.2 SEASONAL WETLAND

Seasonal wetlands are habitats that may appear dry in the summer and fall months but following the first winter rains, become saturated or hold water for a period of several weeks to months at a time. Seasonal wetlands may remain inundated for a prolonged period typically due to the presence of impervious soils and/or confining topography such as topographic low areas. Typically, these wetlands are dominated by a mix of native and non-native, hydrophytic plant species.

One seasonal wetland occurs in a slight topographic low area in the northern portion of the project site. M&A examined this wetland in the winter months in 2003/04. It pooled to a few inches deep before drying/draining and then refilling with successive larger storm events. A mix of common non-native and native upland and hydrophytic herbaceous species were observed within this seasonal wetland. Dominant species included annual semaphore grass (*Pleuropogon californicus*), Italian ryegrass, Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*),

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meadow foxtail (*Alopecurus pratensis*), pennyroyal (*Mentha pulegium*) and hawkbit (*Leontodon saxitilis*). Other associated species include brown-headed rush (*Juncus phaeocephalus ssp. paniculatus*), English plantain (*Plantago lanceolata*), prickly little sedge (*Carex echinata ssp. echinata*), tall flatsedge (*Cyperus eragrostis*), foothill clover (*Trifolium ciliolatum*), velvet grass (*Holcus lanatus*), curly leaved dock (*Rumex crispus*) and hairy cat's ear (*Hypochaeris radicata*).

Seasonal wetlands provide wildlife with a seasonal water source that allows animals to drink and forage in the water during the winter and spring months; however, the shallow, highly disturbed and highly ephemeral nature of the seasonal wetland on the project site make them nearly unavailable for wildlife use.

#### 5.4 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

The proposed project will not interfere with the movement of native wildlife. The project site is immediately north of Gravenstein Highway (Hwy 116) and west of Alder Avenue, both of which are pre-existing barriers to wildlife movement. Gravenstein Highway, in particular, is a heavily-used commuter route providing access from/to Highway 101 to the surrounding residential and commercial areas as well as being the primary commuter route to/from Sebastopol.

Cotati Large Animal Hospital lies directly to the west of the project site. To the south of the property, across the Gravenstein Hwy, is Shamrock Materials, Inc., a business specializing in stone and concrete building supplies. Ruderal (weedy) vegetation and (weedy) annual grassland with ranchette style housing occurs to the north of the project site. Beyond Alder Avenue to the northeast is a recently built residential townhouse development called the Cotati Cottages subdivision, and an additional residential development is being reviewed for final approval for the property directly east of the Reds project site. As such, development of the project site will not impact any significant or regional wildlife corridor. The project site is a formerly developed parcel that has been subjected to intense uses over the past 20 years. Overall, the project site is highly disturbed by grading and horticultural cultivation, developed with buildings or hard-packed, gravel-impregnated roadways and parking areas around buildings with remaining area cultivated as lavender fields. The project site does not have regional context between other open spaces and there virtually is nowhere that wildlife could be moving to/from except developed areas. While the project site may provide movement habitat for local mammals, most of these mammals are associated with development, such as house cats. The development of the project site will not adversely impact any significant or regional wildlife movement corridor.

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## 6. SPECIAL-STATUS SPECIES DEFINITION

### 6.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq.*; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- plants and animals that meet the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR §15380) that may include species not found on either State or Federal Endangered Species lists;
- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS' electronic *Inventory* (CNPS 2001). The California Department of Fish and Wildlife (CDFW) recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in EIRs. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);
- migratory nongame birds of management concern listed by U.S. Fish and Wildlife Service (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);
- animals that are designated as "species of special concern" by CDFW(2016);
- Animal species that are "fully protected" in California (Fish and Game Codes 3511, 4700, 5050, and 5515).
- Bat Species that are designated on the Western Bat Working Group's (WBWG) Regional Bat Species Priority Matrix as: "RED OR HIGH." This priority is justified by the WBWG as follows: "Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being

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implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.”

In the paragraphs below, we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as Endangered or Threatened under the FESA is protected from unauthorized “take” (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a Federal listed Endangered or Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as Threatened under the state Endangered Species Act (§2050 of California Fish and Game Code) is protected from unauthorized “take” (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to “take” a state listed Threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from CDFW prior to initiating the “take.”

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered “rare.” Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a “significant effect on the environment” (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an “Inventory” of special status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also state or federal listed species), CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other state and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the Fish and Game Code, and are eligible for state listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by CDFW and maintained on “watch lists.”

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Additionally, in 2006 CNPS updated their lists to include “threat code extensions” for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered “seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)”;
- .2 is “fairly endangered in California (20-80% of occurrences threatened)”;
- .3 is “not very endangered in California (less than 20% of occurrences threatened or no current threats known).”

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA’s definition of “rare” or “endangered.” Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the white-tailed kite and golden eagle, are protected under California Fish and Game Code (§3511). Fully protected birds may not be “taken” or possessed (i.e., kept in captivity) at any time.

## **6.2 Potential Special-Status Plants on the Project Site**

Based on a record search of the CDFW’s CNDDDB (2017) for special-status plant records occur within three miles of the project site, and the CNPS Inventory (CNPS 2001) for a list of special-status plant species from the same U.S. Geological Survey quadrangle as the project site (Cotati Quadrangle), M&A compiled a list of 9 special status plant species that are known from the region of the project site (Table 3). Figure 4 provides a visual representation of the known records of special-status plant species within two miles of the project site.

Formal rare plant surveys were conducted on the project site in 2015 by Mr. Roy Buck, Senior Botanist with California Environmental Services, LLC and by M&A in 2017. No rare plants were found during the required two years of rare plant surveys conducted at appropriate times when the targeted listed plants were identified in flower at reference population sites. Similarly, M&A conducted a mid-summer rare plant survey on July 15, 2016 for late-blooming species and identified no rare plants. Thus, the development of the project site will not impact any special-status plant species. *As such, pursuant to the CEQA, development of the project site will not result in significant impacts on federal, state-listed plants, or other plants that have special status species designations.*

In compliance with new published-CDFW survey guidelines released on March 18, 2018, one additional year of surveys will be conducted on the project site in 2019 to bring the previous year’s surveys up to date and demonstrate the absence of special-status plants on the project site under the most current and up to date survey guidelines. Results will be provided to the County in a separate report confirming the presence/absence of special-status plants on the project site. M&A has been looking at this project site for many years and conducted formal rare plant surveys in 2016 and 2017. Rare plants are not anticipated to be found during the final rare plant survey in 2018.

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*Regardless, pursuant to the USFWS' 2007 Programmatic Biological Opinion by and between the USFWS and the Corps, impacts to Suitable Habitat [wetlands only] (even when two years of surveys proves absence, must nonetheless be mitigated by purchase of conservation credits providing 1:1 occupied or established habitat (any combination) with success criteria met prior to groundbreaking at the project site and 0.5:1 established habitat credit with success criteria met prior to groundbreaking at the project site. Thus, if the project requires a Corps permit, even with two years of formal rare plant surveys that were negative for rare plants, to obtain a Corps permit, 1.5:1 replacement to impacts vernal pool listed plant mitigation credit must be obtained by the project. See Impacts and Mitigation Sections of this Report below.*

### **6.3 Potential Special-Status Animals on the Project Site**

Based on a record search of the CDFW's CNDDDB (2017) for special-status wildlife records within three miles of the project site, M&A compiled a list of nine special-status wildlife species that are known from the vicinity of the project site (Table 4). The project site does not provide suitable habitat for seven of these species, and as such, these species are summarily dismissed from consideration in Table 4. As the California tiger salamander has been captured on the site during a salvage project that was implemented in 2003/2004, and as there is suitable habitat for the pallid bat (*Antrozous pallidus*), which are known to occur in the region of the project site, we discuss these species further below. Figure 4 provides a visual representation of the known records of special-status wildlife species within two miles of the project site.

#### **6.3.1 CALIFORNIA TIGER SALAMANDER**

The project site is located within the known range of the Sonoma County "Distinct Population Segment" (DPS) of the California tiger salamander. Under the FESA, the USFWS emergency listed the Sonoma County DPS as endangered on July 22, 2002. The USFWS formalized the listing of the Sonoma County DPS of the California tiger salamander as endangered on March 19, 2003 (USFWS 2003b). The USFWS determined that this population is significantly and immediately imperiled by a variety of threats including habitat destruction, degradation, and fragmentation due to urban development, road construction, pesticide drift, collection, and inadequate regulatory mechanisms. In addition, it was determined that this population could face extinction because of naturally occurring events (e.g., fires, droughts) due to the small and isolated nature of the remaining breeding sites combined with the small number of individuals in the population.

Finally, in 2011, the USFWS designated revised critical habitat for the Sonoma County DPS. In total, approximately 47,383 acres (19,175 hectares) of land were designated as critical habitat for the Sonoma County DPS of the California tiger salamander under the revised Final Rule (USFWS 2011). *The project site is within this mapped critical habitat (Figure 5).*

On March 4, 2010, the California tiger salamander was also state-listed as a threatened species under the California Endangered Species Act (CESA). Proposed projects may not impact the California tiger salamander without incidental take authority from both the USFWS and the CDFW. Prior to impacting habitat that supports the California tiger salamander, the USFWS must prepare an incidental take permit pursuant to either Section 7 or Section 10 of the Federal Endangered Species Act. Similarly, projects that impact the California tiger salamander also require incidental take authority from the CDFW.

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CTS occur in grasslands and open oak woodlands that provide suitable aestivation and/or breeding habitats. M&A has worked with populations that are almost at sea level (Catellus Site in the City of Fremont) to almost 2,900 feet above sea level (Kammerer Ranch, East Santa Clara County). California tiger salamanders spend most their lives underground. They typically only emerge from their subterranean refugia for a few nights each year during the rainy season to migrate to breeding ponds. While 1.3 miles is typically considered the maximum migration distance of California tiger salamanders to/from their breeding pools to upland over-summering habitat, there is literature suggesting that California tiger salamanders could migrate up to 1.5 miles from their breeding pools. This migration distance is reported by the USFWS' Recovery Plan for the Santa Rosa Plain (USFWS 2016) where it states: *Based on distances travelled per night, Searcy and Shaffer (2011) estimated that Central California tiger salamanders are physiologically capable of moving up to 2.4 km (1.5 mi) each breeding season, with an average dispersal distance estimated to be 0.56 km (1,840 ft). Orloff (2007) found that the majority of California tiger salamanders dispersed at least 0.5-mile (0.8 km) from the breeding site, with a smaller number of salamanders appearing to move even farther—from 1.2 to 2.2 km (0.75 to 1.3 mi) between breeding ponds and upland habitat.* M&A biologists, Mr. Geoff Monk and Ms. Sarah Lynch have observed California tiger salamanders migrating up to 0.6-mile and further from their underground refugia to breeding ponds (personal data from Livermore, California; Monk & Lynch 1997). As such, unobstructed migration corridors are important component of California tiger salamander habitat.

In Sonoma County, California tiger salamanders emerge during the first heavy, warm rains of the year, typically in late November and early December. In most instances, larger movements of California tiger salamanders do not occur unless it has been raining hard and continuously for several hours. Typically, for larger movements of California tiger salamanders to occur, nighttime temperatures also must be above 48° F (G. Monk and S. Lynch pers. observations). Other factors that encourage larger movements of California tiger salamanders to their breeding ponds include flooding of refugia (observed by G. Monk in Springtown, east Alameda County in 1997) as occurs after significant rainfall events.

During the spring, summer, and fall months, most known populations of the California tiger salamander throughout this species range in California predominately use California ground squirrel (*Spermophilus beechyi*) burrows as over summering habitat (G. Monk personal observation). However, in Sonoma County where California ground squirrel populations are scarce to non-existent, subterranean refugia likely include Botta's pocket gopher (*Thomomys bottae*) burrows, deep fissures in desiccated clay soils, and debris piles (e.g., downed wood, rock piles).

Stock ponds, seasonal wetlands, and deep vernal pools typically provide most of the breeding habitat used by California tiger salamanders. In such locations, California tiger salamander attach their eggs to rooted, emergent vegetation, and other stable filamentous objects in the water column. Eggs are gelatinous and are laid singly or occasionally in small clusters. Eggs range in size from about  $\frac{3}{4}$  the diameter of a dime to the full diameter of a dime.

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Occasionally California tiger salamanders are found breeding in slow moving streams or ditches. In 1997, Mr. G. Monk observed California tiger salamanders breeding in large, still ditches in Fremont, California. Similarly, in 2001/2002, Mr. D. Wooten observed California tiger salamanders breeding in a roadside ditch in Cotati, California (D. Wooten, formerly of USFWS, pers. comm. w/ Mr. G. Monk). Ditches and/or streams that are subject to rapid flows, even if only on occasion, typically will not support or sustain California tiger salamanders egg attachment through hatching, and thus, are not usually used successfully by California tiger salamanders for breeding (G. Monk and S. Lynch, pers. observations). Similarly, streams and/or ditches that support predators of California tiger salamanders or their eggs and larvae such as fish, bullfrogs (*Rana catesbeiana*), red swamp crayfish (*Procambarus clarkii*), or signal crayfish (*Pacifastacus leniusculus*), almost never constitute suitable breeding habitat.

In most of the range of the California tiger salamander, seasonal wetlands that are used for breeding typically must hold water into the month of May to allow enough time for larvae to fully metamorphose. Typically, in Sonoma County, pools that are 16 inches or deeper in the peak winter months will remain inundated long enough to provide good breeding conditions for California tiger salamanders. In dry years, seasonal wetlands, especially shallower pools, may dry too early to allow enough time for California tiger salamander larvae to successfully metamorphose. Under such circumstances, desiccated California tiger salamander larvae are often found in dried pools. In addition, as pools dry down to very small areas of inundation, California tiger salamander larvae become concentrated and are very susceptible to predation.

On the project site, there is a single seasonal wetland that M&A inspected in the winter of 2003/2004 (W1 on Attachment A). This seasonal wetland does not pool water deeper than three to four inches deep and it fills and drains/dries throughout the winter months in accordance with the frequency of large storm events. No wetland on the project site is deep enough or has sufficient ponding duration to support breeding California tiger salamanders; hence, no impacts to California tiger salamander *breeding and larval development habitat* is expected from the proposed project.

In 2003/2004 the Sonoma Business Park development project that is located immediately east of the Reds project site was underway. The developer was required by USFWS and CDFG (now CDFW) to salvage California tiger salamanders presumed to be migrating from their upland retreats on adjacent properties, including the Reds project site, to a breeding pool that occurred on the now-developed Sonoma Business Park. This California tiger salamander salvage project was supervised by the CDFW and the USFWS under the assumption that all adult California tiger salamanders and their breeding habitat had been removed from the Sonoma Business Park project site when it was mass-graded in June 2002. The recovery/salvage project was implemented under expectation that the balance of the Sonoma Business Park and the parcel to the north (then called the Nibe project site) and the project site (then referred to as the Reds project site) would be developed under a master development project. Thus, California tiger salamanders' salvage occurred in the winter of 2003/2004 via use of drift fences and pitfall traps installed on the Reds, Nibe, and Sonoma Business Park properties.

In September 2007, M&A prepared and submitted a report to the USFWS and CDFW summarizing the salvage trapping effort titled *California Tiger Salamander (Ambystoma*

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*californiense*) Survey and Salvage Summary “Nibe” and “Red’s” Project Sites Santa Rosa, California September 20, 2007. That report indicates that 12 adult California tiger salamanders were captured on the Reds Project Site (the project site under review herein) in the winter of 2003/2004 and were surrendered to the CDFW. Thus, there is an assumption that California tiger salamanders were removed from the project site, and in the absence of potential breeding habitat removed from the area in 2002, that this salamander likely no longer occupies the Reds site (the project site under discussion herein). Regardless, there is an assumption that the proposed project *could* impact the California tiger salamander, and thus it will mitigate these impacts as detailed below in the Impacts and Mitigation section of this report.

The project site is in an area of the Santa Rosa Plain that is designated in Figure 3 of the USFWS’ Conservation Strategy (USFWS 2005b) (see Conservation Strategy Section below) as within “Sonoma County Incorporated Areas” in a “Development Area.” Accordingly, the USFWS anticipated that this project site would be developed when it prepared the Conservation Strategy. In addition, the project site is *not* within 500 feet of a known and extant California tiger salamander breeding pond/pool. While not believed to still be a viable record location, the closest known record for California tiger salamander is located 0.1-mile north of the project site (Occurrence No. 648) within a drainage ditch alongside Alder Avenue.

The possibility of California tiger salamanders migrating across the project site today, under the considerations that the population was regarded as “salvaged” or removed, and that the breeding pools are no longer present, is very low. Regardless, the presence of this salamander cannot be dismissed entirely. Accordingly, the applicant will be required to acquire permits from the USFWS and the CDFW for project impacts to the California tiger salamander. Please review the FESA and CESA regulatory considerations. Also, please review the Impacts and Mitigation Section of this report for a full discussion on mitigation requirements.

### 6.3.2 PALLID BAT

The pallid bat is a California “species of special concern.” It has no federal status. The “species of special concern” status designation does not provide any special legally mandated protection for this bat species. However, this status designation meets the definition of “rare” pursuant to the CEQA (14 CCR §15380(2)(A)).

This bat is a locally common species of low elevations in California. It occurs throughout California except for the high Sierra Nevada from Shasta to Kern Counties, and the northwestern corner of the state from Del Norte and western Siskiyou counties to northern Mendocino County. It occurs in a wide variety of habitats. It is most common in open, dry habitats with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Roosts must protect bats from high temperatures. Night roosts may be in more open sites such as porches and open buildings. A social bat, the pallid bat roosts in groups of 20 or more.

This species is known from the region of the project site. Because abandoned buildings and trees on the project site provide suitable roosting habitat for this species, impacts to pallid bat cannot be ruled out. Prior to construction, bat surveys must be conducted to confirm or negate this

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species presence on the project site. The Impacts and Mitigation sections below address these impacts.

## **7. REGULATORY FRAMEWORK FOR NATIVE WILDLIFE, FISH AND PLANTS**

This section provides a discussion of those laws and regulations that are in place to protect native wildlife, fish, and plants. Under each law we discuss their pertinence to the proposed development.

### **7.1 Federal Endangered Species Act**

The FESA forms the basis for the federal protection of threatened or endangered plants, insects, fish and wildlife. FESA contains four main elements, they are as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit through approval of a Habitat Conservation Plan.

In the case of salt water fish and other marine organisms, the requirements of FESA are enforced by the National Marine Fisheries Service (NMFS). The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under Federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which kills or injures wildlife; such an act may include significant habitat modification or degradation where it kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. Per this ruling, the USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is actually present.

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Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species is necessary to complete an otherwise lawful activity, this triggers the need to obtain an incidental take permit either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency), or requires preparation of a Habitat Conservation Plan (HCP) pursuant to Section 10 of FESA (for state and local agencies, or individuals, and projects without a federal "nexus").

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by a listed species that are determined essential for the conservation of the species.

The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the "federal nexus agency," for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the "action agency" – that is, the federal agency that is carrying out, funding, or approving a project - that the project "may affect" a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in "jeopardy" to a listed species or if it could adversely modify designated critical habitat. If the USFWS/NMFS prepares a Biological Opinion, it will contain either a "jeopardy" or "non-jeopardy" decision. If the USFWS/NMFS concludes that a proposed project would result in adverse modification of critical habitat or would jeopardize the continued existence of a federally-listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be most unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a "non-jeopardy" Biological Opinion, the nexus federal agency may authorize the discretionary permit making all conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an "incidental take" permit that allows applicants to "take" federally-listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, counties that are considering a discretionary permit, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, the applicant for an "incidental take permit" is required to submit a "conservation plan" to USFWS or NMFS that specifies, among other things, the impacts that are

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likely to result from the taking, and the measures the permit applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The term incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

#### 7.1.1 RESPONSIBLE AGENCY

FESA gives regulatory authority to the USFWS for federally-listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally-listed marine mammals and anadromous fish.

#### 7.1.2 APPLICABILITY TO THE PROPOSED PROJECT

The project site does not provide fisheries habitat; thus, the project would not result in impacts to federally-listed fish species. As such, consultation with the NMFS for the proposed project is not warranted.

Several federally-listed plant and wildlife species are known to occur in the region of the project site (Tables 3 and 4). *No federally-listed plants were found during special-status plant surveys conducted on the project site in 2015 and 2017.* Regardless, in compliance with new published-CDFW survey guidelines released on March 18, 2018, one additional year of surveys will be conducted on the project site in 2019 to bring the previous year's surveys up to date and demonstrate the absence of special-status plants on the project site under the most current and up to date survey guidelines. Results will be provided to the City in a separate report confirming the presence/absence of special-status plants on the project site. M&A has been looking at this project site for many years and conducted formal rare plant surveys in 2015 and 2017. *Rare plants are not anticipated to be found during the final rare plant survey in 2019.*

Regardless that rare plant surveys dismissed presence of state and federally-listed vernal pool plants in 2015 and 2017, the Programmatic Biological Opinion (USFWS 2007) regards all seasonal wetland habitats as "suitable" listed vernal pool rare plant habitat and requires mitigation compensation. Per the Programmatic Biological Opinion (op. cit.), the applicant is required to purchase vernal pool conservation credits for Sebastopol meadowfoam at 1:1 occupied or established habitat ratio (any combination) with success criteria met prior to groundbreaking at the project site and 0.5:1 established habitat ratio with success criteria met prior to groundbreaking at the project site. Thus, if the project requires a Corps permit, even with the two years of negative rare plant surveys, to obtain a Corps permit, 1.5:1 replacement to impacts vernal pool listed plant mitigation credit must be obtained by the project.

It is recognized that the Programmatic Biological Opinion has been under revision by the Corps and USFWS over the last two years. It remains to be reissued as of the date of this report. Accordingly, if a new Programmatic Biological Opinion is released by the Corps/USFWS, and a Corps permit is required for the proposed project, then any requirements set forth in the revised Programmatic Biological Opinion will supersede and replace those requirements set forth in the 2007 Programmatic Biological Opinion.

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As part of the Sonoma Business Park development project located immediately east of the project site, in 2003/2004, the developer was required to salvage California tiger salamander presumed to be migrating from adjacent properties, including the project site, to the former (now developed) breeding pool on the Sonoma Business Park project site. This salvage project was supervised by the CDFW and the USFWS under the assumption that all adult California tiger salamanders and their breeding habitat had been removed from the Sonoma Business Park project site when it was mass-graded in June 2002. The recovery/salvage project was implemented under expectation that the balance of the Sonoma Business Park and the parcels to the north (then called the Nibe project site) and the project site to the west (then called the Reds project site) would be developed under a master development project. In September 2007, M&A prepared and submitted a report to the USFWS and CDFG summarizing the salvage trapping effort titled *California Tiger Salamander (Ambystoma californiense) Survey and Salvage Summary "Nibe" and "Red's" Project Sites Santa Rosa, California September 20, 2007*. That report indicates that 12 adult California tiger salamanders were captured on the project site in the winter of 2003-04 and were surrendered to the CDFW. *Thus, there will continue to be an assumption that the proposed project will impact the California tiger salamander.* As such, a FESA Incidental Take Permit must be acquired from the USFWS for the proposed project (See Impacts and Mitigation Section).

## 7.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to “take” (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

Executive Order 13186 for conservation of migratory birds (January 11, 2001) requires that any project with federal involvement address impacts of federal actions on migratory birds. The order is designed to assist federal agencies in their efforts to comply with the MBTA and does not constitute any legal authorization to take migratory birds. The order also requires federal agencies to work with the USFWS to develop a memorandum of understanding (MOU). Protocols developed under the MOU must promote the conservation of migratory bird populations through the following means:

- avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

### 7.2.1 APPLICABILITY TO THE PROPOSED PROJECT

No take (i.e., to kill) of birds listed under the Migratory Bird Treaty Act is legal. Passerine (perching) birds or raptors could nest in trees, on abandoned buildings, or in the grassland of the project site. While birds are adept at flying out of harm’s way, bird nests, eggs, and nestlings are

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stationary and subject to construction related impacts. To comply with the Migratory Bird Treaty Act, preconstruction surveys would have to be conducted for nesting bird species to ensure that there is no direct take of these birds including their eggs or young. Non-disturbance buffers would have to be established around any active nesting site and would have to be of sufficient size to protect the nesting birds from harm. Upon completion of nesting the buffers could be removed, and the project could commence as otherwise planned. Please review specific requirements for avoidance of nest sites for nesting bird species in the Impacts and Mitigations section below.

### **7.3 California Endangered Species Act**

#### 7.3.1 SECTION 2081 OF THE STATE ENDANGERED SPECIES ACT

In 1984, the state legislated the CESA (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for "harm" (see discussion of FESA, above), the CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If the CDFW determines that a proposed project could impact a state-listed threatened or endangered species, the CDFW will provide recommendations for "reasonable and prudent" project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project's benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no "irreversible or irretrievable" commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired "incidental take" permits from the CDFW and/or USFWS (if it is a federally-listed species) prior to allowing/permitting impacts to such species.

If proposed projects would result in impacts to a state-listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a Federal incidental take permit for federal-listed species). The CDFW will issue an incidental take permit only if:

- 1) The authorized take is incidental to an otherwise lawful activity;
- 2) the impacts of the authorized take are minimized and fully mitigated;
- 3) measures required to minimize and fully mitigate the impacts of the authorized take:
  - a) are roughly proportional in extent to the impact of the taking on the species;
  - b) maintain the project applicant's objectives to the greatest extent possible; and,
  - c) capable of successful implementation; and,
- 4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing a HCP as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should

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involve the CDFW staff in development of the HCP. If a final Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the FESA, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of “take.” These species are listed in several statutes that identify “fully protected” species and “specified birds.” See Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a “fully protected” species or a “specified bird” occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a “non-jeopardy” federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal incidental take permit) pursuant to the FESA, to submit the federal opinion or permit to CDFW for a determination as to whether the federal document is “consistent” with CESA. If after 30 days CDFW determines that the federal incidental take permit is consistent with state law, and that all state listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are state listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a state CESA permit under Section 2081(b). Section 2081(b) is of no use if an affected species is state-listed, but not federally listed.

State and federal incidental take permits are issued on a discretionary basis, and are typically only authorized if applicants can demonstrate that impacts to the listed species in question are unavoidable, and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the incidental take permit(s). The endowment is used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

### 7.3.2 APPLICABILITY TO PROPOSED PROJECT

Several state-listed plant and wildlife species are known to occur in the region of the project site (Tables 3 and 4). No state-listed plants were found during special-status plant surveys conducted on the project site in 2015, 2016 and 2017. *Therefore, it can safely be concluded that the proposed project site will not impact state-listed plant species.* Thus, an Incidental Take Permit is not required for the project for state-listed plants. However, in compliance with new published-CDFW survey guidelines released on March 18, 2018, one additional year of surveys will be conducted in 2019 to bring the previous year’s surveys up to date and demonstrate the absence of state-listed plants on the project site under the most current and up to date survey guidelines. Results will be provided to the County in a separate report confirming the presence/absence of special-status plants on the project site. However, as M&A has been looking at this project site for many years and conducted formal rare plant surveys in 2015 and 2017 with

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negative results, *rare plants are not anticipated to be found during the final rare plant survey in 2019.*

As part of the Sonoma Business Park development project located immediately east of the Reds project site, in 2003/2004, the developer was required to salvage California tiger salamander presumed to be migrating from adjacent properties, including the project site (then called the Reds project site), to the former (now developed) breeding pool on the Sonoma Business Park project site. This salvage project was supervised by the CDFW and the USFWS under the assumption that all adult California tiger salamanders and their breeding habitat had been removed from the Sonoma Business Park project site when it was mass graded in June 2002. The recovery/salvage project was implemented under expectation that the balance of the Sonoma Business Park and the parcel to the north (then called the Nibe project site) and west (the Reds project site) of this project site would be developed under a master development project. In September 2007, M&A prepared and submitted a report to the USFWS and CDFG summarizing the salvage trapping effort titled *California Tiger Salamander (Ambystoma californiense) Survey and Salvage Summary "Nibe" and "Red's" Project Sites Santa Rosa, California September 20, 2007*. That report indicates that 12 adult California tiger salamanders were captured/salvaged from the project site in the winter of 2003-04 and were surrendered to the CDFG (now CDFW). Since California tiger salamanders were captured on the project site during the 2003/2004 salvage effort, the project site is regarded as habitat that could continue to support California tiger salamanders. From a practical standpoint, the breeding ponds that were being used by this local population of California tiger salamander were removed by development in 2002. Thus, the possibility of California tiger salamanders migrating across the project site today, under the considerations that the population was regarded as "salvaged" or removed, and that the breeding pools are no longer present, is very low. Regardless, the presence of this salamander cannot be dismissed entirely. *As such, a CESA Incidental Take Permit for impacts to the California tiger salamander must be acquired from the CDFW for the proposed project.*

#### **7.4 California Fish and Game Code §§ 3503, 3503.5, 3511, and 3513**

California Fish and Game Code §§3503, 3503.5, 3511, and 3513 prohibit the "take, possession, or destruction of birds, their nests or eggs." Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "take." Such a take would also violate federal law protecting migratory birds (Migratory Bird Treaty Act).

All raptors (that is, hawks, eagles, owls) their nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

##### **7.4.1 APPLICABILITY TO THE PROPOSED PROJECT**

Passerine (perching) birds or raptors could nest in trees, on abandoned buildings, or in the grassland of the project site. These birds while nesting would be protected by the Fish and Game Codes that project nesting birds. As long as there is no direct mortality of species protected pursuant to these codes caused by development of the site, there should be no constraints to

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development of the site. To comply with the Fish and Game Codes that protect nesting birds, preconstruction surveys would have to be conducted for nesting bird species to ensure that there is no direct take or these birds including their eggs or young. Non-disturbance buffers would have to be established around any active nesting sites and would have to be of sufficient size to protect the nesting birds from harm. Upon completion of nesting the buffers could be removed, and the project could commence as otherwise planned. Please review specific requirements for avoidance of nest sites in the Impacts and Mitigations section below.

## 7.5 Santa Rosa Plain Conservation Strategy

The Federal listing of California tiger salamander resulted in uncertainty for many local jurisdictions, landowners, and developers about its effects on their current and proposed activities. Because of this uncertainty, local private and public interest groups met with the USFWS to discuss a cooperative approach to protecting California tiger salamander, while allowing currently planned and future land uses to occur within its range. The result of these discussions was the creation of the Final Santa Rosa Plain Conservation Strategy (USFWS 2005).

The goal of the *Conservation Strategy* is to preserve a large enough area of suitable habitat to ensure the conservation of the California tiger salamander and listed plants and contribute to their recovery. In order to do this, areas are identified within the Santa Rosa Plain that currently do or potentially could support California tiger salamander and listed plants, as well as the areas that currently do or likely will support development. This information was used to develop appropriate “conservation areas” and requirements as well as mitigation guidelines and requirements, to “provide consistency, timeliness and certainty for permitted activities.”

Proposed projects within the potential California tiger salamander range will fall into one of three categories:

- a.) Projects within 1.3 miles of a known California tiger salamander breeding site, and likely to impact California tiger salamander breeding and/or upland habitat; or
- b.) Projects beyond 1.3 miles from a known California tiger salamander breeding site, but within the “Potential for Presence of California tiger salamander” or “Potential for Presence of California tiger salamander and Plants”; or
- c.) Projects where “Presence of California tiger salamander is Not Likely”.

Different mitigation ratios are recommended for each of these categories.

The *Conservation Strategy* recommends that projects filling *potential* listed plant habitat should mitigate these impacts via the preservation of existing occupied habitat at a 1:1 ratio, and projects filling *known* listed plant habitat should mitigate these impacts via the preservation of existing occupied habitat at a 2:1 ratio, as per a Programmatic Biological Opinion (USFWS 1998) in effect at the time of the *Conservation Strategy* was prepared in 2005. The USFWS’ 2007 Programmatic Biological Opinion (USFWS 2007) has since superseded the 1998 Programmatic Biological Opinion.

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The *Conservation Strategy* recommends that projects filling wetlands should mitigate these impacts via the preservation of wetlands at a minimum of a 1:1 replacement ratio, depending on the quality of the filled wetlands, as per a Programmatic Biological Opinion (USFWS 1998) in effect at the time of the *Conservation Strategy* was prepared in 2005. The 1998 Programmatic Biological Opinion was superseded by a Programmatic Biological Opinion prepared by the USFWS for the Corps in 2007 (USFWS 2007). Currently the 2007 *Programmatic Biological Opinion* is under revision to incorporate the elements of the Recovery Plan for the Santa Rosa Plain (USFWS 2016) (See Recovery Plan below). This revised *Programmatic Biological Opinion* currently under revision has not been released to the public at this time.

#### 7.5.1 APPLICABILITY TO THE PROPOSED PROJECT

The USFWS released a revised *Programmatic Biological Opinion* (USFWS 2007) which replaced the USFWS' earlier Biological Opinion (USFWS 1998). Mitigation ratios established in the earlier Programmatic Biological Opinion were revised. Thus, while the objectives for the *Conservation Strategy* remain unchanged today, mitigation ratios for impacts to listed plants should be taken and are derived from the USFWS's 2007 *Programmatic Biological Opinion*.

The project site is in an area of the Santa Rosa Plain that is designated in Figure 3 of the USFWS' Conservation Strategy (USFWS 2005b) (see Conservation Strategy Section below) as within "Sonoma County Incorporated Areas" in a "Development Area." In the USFWS' 2016 Recovery Plan (USFWS 2016), the project site is shown on Figure 1 of that plan (See M&A Figure 7) as not being within a designated "Conservation Area." Accordingly, the USFWS anticipated in 2005 that this project site would be developed when it prepared the Conservation Strategy.

### 7.6 Santa Rosa Plain 2007 Programmatic Biological Opinion

The *Programmatic Biological Opinion* (USFWS 2007) is based on the biological framework presented in the *Conservation Strategy*. This *Programmatic Biological Opinion* replaced (supersedes) the July 17, 1998 *Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects that May Affect Four Endangered Plant Species on the Santa Rosa Plain* (USFWS 1998), that was prepared for listed plant species on the Santa Rosa Plain.

Projects that require a Corps permit, that remain consistent with objectives stated in the *Conservation Strategy*, can be appended to the *Programmatic Biological Opinion* at the discretion of the USFWS. Projects that are appended to the *Programmatic Biological Opinion* will be provided individual take authorization for impacts to federally-listed species.

#### Impacts to Listed Plant Species

Seasonal wetlands are considered "suitable habitat" for listed plants if they are within the range of listed plants occurring on the Santa Rosa Plain. Seasonal wetlands are considered "occupied habitat" if surveys have been conducted following USFWS protocols and listed species are recorded on the site, or if listed species have been recorded on the site in the past. The following mitigation to impacts ratios are required to adhere to the *Programmatic Biological Opinion* (USFWS 2007):

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**Burke's Goldfields**

Impacts to Occupied Habitat:

3:1 occupied or established habitat (any combination) with success criteria met prior to groundbreaking at the project site.

Impacts to Suitable Habitat:

1:1 occupied or established habitat (any combination) with success criteria met prior to groundbreaking at the project site.

AND

0.5:1 established habitat with success criteria met prior to groundbreaking at the project site.

**Sonoma Sunshine**

Impacts to Occupied Habitat:

3:1 occupied or established habitat (any combination) with success criteria met prior to groundbreaking at the project site.

Impacts to Suitable Habitat:

1:1 occupied or established habitat (any combination) with success criteria met prior to groundbreaking at the project site.

AND

0.5:1 established habitat with success criteria met prior to groundbreaking at the project site.

**Sebastopol Meadowfoam**

Impacts to Occupied Habitat:

2:1 occupied or established habitat (any combination) with success criteria met prior to groundbreaking at the project site.

Impacts to Suitable Habitat:

1:1 occupied or established habitat (any combination) with success criteria met prior to groundbreaking at the project site.

AND

0.5:1 established habitat with success criteria met prior to groundbreaking at the project site.

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### Impacts to California Tiger Salamander

For projects that may affect California tiger salamander, mitigation requirements will apply to the entire Project area, except the portions of the project site that are covered with existing hardscape. The following mitigation to impacts ratios will be used for adherence to the Programmatic:

#### Mitigation of 3:1

For projects that are within 500 feet of a known breeding site.

#### Mitigation of 2: 1

For projects that are greater than 500 feet and within 2,200 feet of a known breeding site, and for projects beyond 2,200 feet from a known breeding site, but within 500 feet of an adult occurrence.

#### Mitigation of 1: 1

For projects that are greater than 2,200 feet and within 1.3 miles of a known breeding site.

#### Mitigation of 0.2: 1

For projects that are greater than 1.3 miles from a known breeding site and greater than 500 feet from an adult occurrence, but excluding "No Effect" areas.

In addition, as per the *Programmatic Biological Opinion* (USFWS 2007), “projects and other activities will incorporate measures to minimize their potential direct and indirect effects on the California tiger salamander. Minimization measures may vary based on environmental factors and site location as determined by the USFWS” [and the CDFW].

#### 7.6.1 APPLICABILITY TO THE PROPOSED PROJECT

As the proposed project *will* require a permit from the Corps, the Programmatic Biological Opinion by and between the Corps and the USFWS (USFWS 2007) is available for the proposed project as the proposed project is in the Santa Rosa Plain. Although federal and state-listed plants were not observed on the project site during two years of formal rare plant surveys conducted in 2015 and 2017, per the *Programmatic Biological Opinion* (USFWS 2007), seasonal wetlands on the site are still regarded by USFWS to be “suitable habitat.” Consequently, impacted seasonal wetlands on the project site would still be required to be mitigated as “suitable” listed plant habitats.

Per the USFWS’ 2007 Programmatic Biological Opinion, if a federal permit is acquired for this project (e.g., a Corps permit), the applicant shall be required to purchase vernal pool conservation credits for Sebastopol meadowfoam at 1:1 occupied or established habitat ratio (any combination) with success criteria met prior to groundbreaking at the project site and 0.5:1 established habitat ratio with success criteria met prior to groundbreaking at the project site.

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Thus, even with the two years of negative rare plant surveys, to obtain a Corps permit, a 1.5:1 replacement to impacts vernal pool listed plant mitigation credit must be obtained by the project. Provided 1) the Programmatic Biological Opinion (USFWS 2007) remains valid when the project is constructed; 2) a Corps permit is required for the project; and 3) the Corps/USFWS allow use of the 2007 Programmatic Biological Opinion, then the applicant shall be required to provide proof that conservation credits for Sebastopol meadowfoam (or other vernal pool species as otherwise allowed by the Corps/USFWS) were obtained to the resource agencies and to the City of Cotati.

The project site is *not* within 500 feet of a known California tiger salamander breeding pool, the closest known extant breeding location record for California tiger salamander is located 0.1-mile north of the project site (Occurrence No. 648) within a drainage ditch alongside Alder Avenue. However, in the winter of 2003/2004, 12 adult California tiger salamanders were captured on the project site and removed with the assistance of the CDFG (now CDFW) to known conservation sites (see California tiger salamander section above). Accordingly, the project site is regarded as habitat that could continue to support California tiger salamander.

According to the USFWS' 2007 Programmatic Biological Opinion (USFWS 2007), the portions of the 5.63-acre project that constitutes over summering or migration habitat of the California tiger salamander that are greater than 500 feet and within 2,200 feet of a known breeding site, and for projects beyond 2,200 feet from a known breeding site, but within 500 feet of an adult occurrence, would be mitigated at a 2:1 replacement to impacts ratio (see Figure 6 for calculation of mitigation ratio acreages). Approximately 1.99 acres of the 5.63-acre project site is currently developed with buildings or hard-packed, gravel-impregnated roadways and parking areas around buildings. These developed surfaces do not constitute California tiger salamander habitat that warrants mitigation. In consideration of these mitigation ratios and the already developed surfaces that do not constitute California tiger salamander habitat on the project site, to compensate for impacts to 3.64 acres of California tiger salamander habitat that would occur from development of the project site (as shown in Figure 6), the Programmatic Biological Opinion (USFWS 2007) requires that applicant purchase 7.28 acres of California tiger salamander mitigation credits from a USFWS (and CDFW) approved Conservation Bank.

It is recognized that the Programmatic Biological Opinion is currently going through revision, but it has not been released to the public or agencies yet. Accordingly, if a new Programmatic Biological Opinion is released by the Corps/USFWS, and a Corps permit is required for the proposed project, then any requirements set forth in the revised Programmatic Biological Opinion will supersede and replace those requirements set forth in the 2007 Programmatic Biological Opinion. Please see the Impacts and Mitigation Section below for greater detail.

## **7.7 USFWS Recovery Plan for the Santa Rosa Plain (USFWS 2016)**

In December 2016, the USFWS adopted a formal Recovery Plan for the Santa Rosa Plain addressing recovery efforts necessary to protect and otherwise eventually recover the federally-listed Sonoma County Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*) and three vernal pool plants: *Blennosperma bakeri* (Sonoma sunshine); *Lasthenia burkei* (Burke's goldfields); *Limnanthes vinculans* (Sebastopol

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meadowfoam) (USFWS 2016). All four species are confined almost entirely to the Santa Rosa Plain. The Recovery Plan and its objectives are implemented through cooperative CEQA lead agencies, and through federal nexus agency consultations (e.g., Corps consultations) with the USFWS via Section 7 of the FESA. Any federal nexus agency that consults with the USFWS pursuant to Section 7 will obtain a letter of no effect or a Biological Opinion that provides or denies “incidental take authority.” Pursuant to the FESA Incidental take would include loss of a listed species habitat or harm that could occur to a federally-listed species. An Incidental Take Permit allows an otherwise legally sanctioned activity to proceed even if there is a collateral impact to a federally-listed species. Similarly, any Section 10 FESA consultation with the USFWS, which is allowed for in the FESA for all non-federal entities, which results in Incidental Take authority granted by the USFWS to the non-federal entities, would otherwise include provisions for compliance with the objectives of the Recovery Plan.

The USFWS has determined that the primary threats to the three listed vernal pool plants and the California tiger salamander on the Santa Rosa Plain is the reduction and fragmentation of habitat due to urban development, agricultural land conversion, and habitat degradation that modifies vernal pool hydrology, and colonization of seasonal wetlands by competitive invasive plants. Consequently, the Recovery Plan focuses on these threats. To downlist or delist the four species that are imperiled in the Santa Rosa Plain, the threats to the species’ habitat must be reduced or eliminated. The USFWS criteria for downlisting are based upon preservation of extant vernal pools systems and attending uplands that support wetland complexes. The USFWS has segmented the Santa Rosa Plain into “Core” and “Management Areas” (Exhibits A and B) where species preservation, and habitat enhancement and management must occur to recover these four listed species.

[The following information has been obtained from various personal communications in 2016 and 2017 between Mr. G. Monk and Mr. Vincent Griego and/or Mr. Ryan Olah of the Sacramento Endangered Species Office of the USFWS]. The USFWS is now requiring that projects that impact federally listed plant species in Core habitats, and/or California tiger salamander Core habitat (Exhibits A and B), mitigate through preservation and enhancement of extant listed species habitats in the same Core Area where the impacts will occur. Mitigation for Core area species always takes precedence over Management area species. The USFWS is also now requiring that impacts to specific federally listed species’ Management Areas, be mitigated in the affected species Core areas or its Management Areas as designated in the USFWS’ 2016 Santa Rosa Plain Recovery Plan (USFWS 2016) Impacts to California tiger salamander outside of Core and Management Areas may be mitigated in any Core or Management Area designated in the Santa Rosa Plain (Ryan Olah pers. Comm. With G. Monk, January 18, 2017).

#### 7.7.1 APPLICABILITY TO PROPOSED PROJECT

The project site is within the *Limnanthes vinculans* (Sebastopol meadowfoam) Core Area (Exhibit A). Accordingly, vernal pool plant mitigation that is implemented to offset impacts to “suitable vernal pool plant species habitat” must be obtained within this Core Area to meet the objectives of the Recovery Plan (USFWS 2016). Regarding impacts that would occur to the California tiger salamander from the implementation of the proposed project, these impacts would occur within the West Cotati Core California tiger salamander area (Exhibit B). Thus, compensation for these impacts must be obtained from this Core Area.

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## **7.8 City of Cotati Tree Ordinance - Chapter 17.54 Tree Preservation and Protection**

Below are key provisions of the City of Cotati's Tree Ordinance. Since the project will impact both native and non-native (i.e. landscape) trees, this ordinance will apply.

### 7.8.1 APPLICABILITY (17.54.020)

A. Applicability of Requirements. The provisions of this chapter shall apply in all zoning districts to the removal or relocation of any tree with a circumference of twelve inches or more, measured at fifty-four inches above natural grade.

#### B. Tree Permit Required.

1. Activities Requiring a Permit. A tree permit shall be required prior to:

- a. The relocation, removal, cutting-down, or other act that causes the destruction of a tree;
- b. Prior to any grading, paving, or other ground-disturbing activity within the protected zone of a tree; and
- c. The approval of a use permit, minor use permit, variance, minor variance, or subdivision, hereafter referred to as "discretionary projects."

2. Permit Issuance. The procedure and review authority for a tree permit is as follows:

- a. Developed Parcel. A tree permit for the removal of other than a native oak from a developed parcel shall be issued as follows:
  - i. A permit for a parcel developed with one single-family dwelling may be issued by the director after a site inspection. In this case, the director may waive the prior submittal of a site plan.
  - ii. A permit for a parcel developed with multiple dwellings or a nonresidential structure may be issued by the director after the review of a complete tree permit application in compliance with Section 17.54.030 (Tree permit application requirements) of this chapter.
- b. Vacant Parcel. A tree permit for the removal of other than a native oak from a vacant parcel shall require commission approval, and shall not be granted except in conjunction with:
  - i. The approval of a discretionary project for the same site;
  - ii. The approval of a building permit for the same site; or
  - iii. The approval of improvement plans for a subdivision of the same property.

C. Native Oak Removal. The removal of a native oak with a trunk circumference of twelve inches measured at fifty-four inches above natural grade shall be prohibited, except where approved by the council after a public hearing in compliance with Chapter 17.88 (Public Hearings) of this title, in conjunction with the approval of a subdivision or other specific development project.

D. Timing of Removal of Large-Stature Trees. The removal of a tree with a height of fifty feet or more shall not occur between April 15 and June 15 of any year, to provide for the nesting and stopover patterns of raptors, migratory birds, and other bird species.

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E. Exceptions. The removal or relocation of a tree that would otherwise require a tree permit is exempt from the provisions of this chapter only in case of emergency, where the director, city engineer, a member of a law enforcement agency, or the fire district determines that a tree poses an imminent threat to the public safety, or general welfare. (Ord. 766 § 2 Exh. A (part), 2004).

#### 7.8.2 TREE PERMIT APPLICATION REQUIREMENTS (17.54.030)

A. Application Contents. Each tree permit application shall include the information and materials required by the department, and:

1. Shall be accompanied by the application fee required by the city fee schedule;
2. The application may be required to include an arborist's report, at the discretion of the director; and
3. If the site is subject to conditions, covenants, and restrictions (CC&Rs) that address tree removal and are administered by an active homeowners' association, the application shall include a letter from the homeowners' association authorizing the tree removal.

B. Application Filing. An application for a tree permit involving a discretionary project shall be included as part of the application for the discretionary project. An application for a tree permit not associated with a discretionary project shall be filed with the department separately. (Ord. 766 § 2 Exh. A (part), 2004).

##### 7.8.2.1 Protection of Trees to Be Retained

A. Purpose. The purpose of this section is to define procedures necessary to protect the health of affected protected trees. Great care must be exercised when work is conducted upon or around trees that are not authorized for removal.

B. Applicability. The requirements of this section shall apply to all encroachments into the protected zone of a tree that is not authorized for removal from a site when approved grading or other construction is to occur. All tree permits shall be deemed to incorporate the requirements of this section except as a tree permit may otherwise specifically provide.

C. Trenching Procedure. Trenching within the protected zone of a protected tree, when permitted, may only be conducted with hand tools or as otherwise directed by the city, to avoid root injury.

D. Cutting Roots.

1. Minor roots less than one inch in diameter may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area.
2. Major roots over one inch in diameter may not be cut without the director's approval. Depending upon the type of improvement being proposed, bridging techniques or a new site design may need to be employed to protect the root and the tree.

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E. Irrigation Systems. An independent low-flow drip irrigation system may be used for establishing drought-tolerant plants within the protected zone of a tree to be protected.

F. Plant Materials Under Oaks. Planting live material under native oak trees is generally discouraged, and it will not be permitted within six feet of the trunk of a native oak tree with a circumference of less than twelve inches measured at fifty-four inches above natural grade, or within ten feet of the trunk of a native oak tree with a circumference of twelve inches or more measured at fifty-four inches above natural grade. Only drought-tolerant plants will be permitted within the protected zone of native oak trees.

#### G. Protective Fencing.

1. Type of Fencing. A minimum five-foot high chain link or substitute fence approved by the director shall be installed at the outermost edge of the protected zone of each protected tree or groups of protected trees. Exceptions to this policy may occur in cases where protected trees are located on slopes that will not be graded. However, approval must be obtained from the department to omit fences in any area of the project.

2. Fence Installation. The fences shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review authority. The developer shall call the city engineer for an inspection of the fencing prior to grading operations.

3. Signing. Signs shall be installed on the fence in four equidistant locations around each individual protected tree. The size of each sign must be a minimum of two feet by two feet and must contain the following language: "WARNING, THIS FENCE SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE COTATI PLANNING AND BUILDING DEPARTMENT." Signs placed on fencing around a grove of protected trees, shall be placed at approximately fifty-foot intervals.

4. Fence Removal. Once approval has been obtained, the fences shall remain in place throughout the entire construction period and shall not be removed without obtaining written authorization from the department.

H. Retaining Walls and Root Protection. Where a tree permit has been approved for construction of a retaining wall within the protected zone of a protected tree, the developer shall provide for the immediate protection of exposed roots from moisture loss during the time prior to completion of the wall. The retaining wall shall be constructed within seventy-two hours after completion of grading.

I. Preservation Devices. If required, preservation devices such as aeration systems, oak tree wells, drains, special foundation systems, special paving and cabling systems must be installed per approved plans.

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#### J. Grading.

1. Every effort shall be made to avoid cut and/or fill slopes within or in the vicinity of the protected zone of any protected tree.
2. No grade change shall cause water to drain into an area around a protected tree equal to twice the longest radius of the protected zone.
3. No grade changes are permitted that will lower or raise the ground on any side of the tree.

K. Chimney Locations. A chimney for a wood burning fireplace or stove shall not be located within the canopy of a tree or in any location that sparks emitted from the chimney may damage a tree.

L. On-site Information. The following information shall be on-site while any construction activity is ongoing for a project requiring a tree permit:

1. Any applicable arborist's report and any subsequent modifications to the arborist's report;
2. Tree location map with a copy of the tree fencing plan;
3. Tree permit and approved construction plans;
4. Approved planting and irrigation drawings.

M. Information on Standards. The developer shall be responsible for informing all subcontractors and individuals who will be performing work around protected trees of the requirements of this section for working around trees and conditions of approval for the project. This information shall be provided in writing to the subcontractors and employees by the general contractor or applicant.

N. Utility Trenching Pathway Plan. In the event trenching is proposed, the tree permit application shall include a utility trenching pathway plan for approval following approval of the project improvement or civil plans.

1. Contents. The trenching-pathway plan shall depict all of the following systems: storm drains, sewers, easements, water mains, area drains, and underground utilities. Except in lot sale subdivisions, the trenching-pathway plan must show all lateral lines serving buildings. To be completely effective, the trenching-pathway plan must include the surveyed locations of all protected trees on the project as well as an accurate plotting of the protected zone of each protected tree.
2. Standards for Plan. The trenching-pathway plan shall be developed considering the following general guidelines:

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- a. The trenching-pathway plan shall be developed to avoid trenching in the protected zone of any protected tree on its path from the street to the building.
- b. Where it is impossible to avoid the protected zone, the design shall minimize the extent of trenching within the protected zone. The required arborist’s report shall include mitigation measures for any trenching within the protected zone.

O. Final Certification of Tree Work. All of the tree preservation measures required by the conditions of the discretionary project approval, and/or the tree permit, as applicable, shall be completed, and certified by an arborist selected by the director prior to city issuance of a final building inspection or certificate of occupancy. (Ord. 766 § 2 Exh. A (part), 2004).

7.8.3 TREE PLANTING AND REPLACEMENT (17.54.050)

The city’s principal objective for the tree permit process is the preservation of native oaks and other significant trees, particularly in groves. Where the review authority determines that preservation is infeasible, replacement plantings may be allowed in compliance with this section.

A. Extent of Replacement Required. The review authority may condition any tree permit for the removal of a tree to require tree replacement, as shown in Table 5-2. The review authority may approve a replacement program using one of the methods identified in subsection B or C of this section, or any combination of the methods.

**Table 5-2**

**Minimum Required Replacement Trees**

<b>Species of Tree to be Removed</b>	<b>Circumference of Tree to be Removed<sup>(1)</sup></b>	<b>Mitigation Value (required number of replacement trees)</b>	<b>Required Size and Species of Replacement Trees for Mitigation Value</b>
Oaks (Black, Valley, Live)	12 to 49 inches	5	15-gallon, oak of the same species removed
	50 to 79 inches	10	
	80 or more inches	20	
Other	12 to 49 inches	2	15-gallon, of species determined by city
	50 to 79 inches	4	
	80 or more inches	6	

Notes:

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- (1) Circumference shall be measured at a point fifty-four inches above the natural grade at the base of the tree.

B. Location and Specifications for Replacement Trees. The replacement trees required by Table 5-2 shall be planted on-site (the city's preferred method of mitigation), except that the review authority may authorize other areas where maintenance to ensure survival of the trees will be guaranteed.

1. All replacement trees shall be of the same species as the trees being replaced, propagated from locally gathered seeds, except in the case where a replacement tree is approved in a location characterized by nonnative species (for example, within a narrow roadway median where existing trees are ornamental non-natives), or where the review authority otherwise determines that native species are inappropriate.
2. The review authority may allow up to fifty percent of the required replacement trees to have a five-gallon container size, where it determines that long-term tree health and survival will be improved by starting with a smaller container size, and that each tree with a container size less than fifteen gallons will not be planted where it will be subject to damage while becoming established.
3. The review authority may require fewer and/or larger replacement trees than required by Table 5-2 where it determines that fewer but significantly larger trees are appropriate because of the size of the site, or on-site environmental resources or terrain constraints.
4. Replacement trees shall be in addition to any trees required by provisions of this land use code other than this chapter (e.g., required parking lot landscaping or street trees).

C. In-lieu Mitigation Fee. The review authority may determine that the remedies described above are not feasible or desirable and may instead require the payment of an in-lieu fee for the cost of purchasing, planting, irrigating, and maintaining each tree for a period of ten years. The in-lieu fee shall be as required by the city fee schedule. The in-lieu fee shall be deposited into the city's tree fund. (Ord. 766 § 2 Exh. A (part), 2004).

#### 7.8.4 TREE PERMIT APPROVAL FINDINGS AND CONDITIONS (17.54.060)

A. Required Findings. The approval of a tree permit shall require that the review authority first make all the following findings:

1. The approval of the tree permit will not be detrimental to the public health, safety or welfare, and approval of the tree permit is consistent with the provisions of this chapter;
2. Measures have been incorporated into the project or permit to mitigate impacts to remaining trees or to replace the trees removed in compliance with this chapter;
3. The removal of a healthy tree cannot be avoided by:

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- a. Reasonable redesign of the site plan prior to construction, or
  - b. Trimming, thinning, tree surgery, or other reasonable treatment, as determined by the director;
4. Adequate provisions for drainage, erosion control, land stability, windscreen, buffers along the road and between neighbors have been made where these problems are anticipated as a result of the removal; and,
  5. The tree to be removed does not contain an active nest that has been identified through the environmental process or is otherwise known to the review authority as the nest of a migratory bird, except where a qualified professional has determined that the nest can be relocated without damage to the nestlings.

B. Conditions of Approval. The approval of a tree permit shall include conditions of approval as necessary to ensure compliance with Section 17.54.050 (Tree planting and replacement) of this chapter. (Ord. 766 § 2 Exh. A (part), 2004).

#### 7.8.5 APPLICABILITY TO THE PROPOSED PROJECT

The project will impact both native and non-native trees subject to the City of Cotati's Tree Protection Ordinance. An Arborist Report has been prepared by Mr. John Meserve (Meserve 2017) that details tree impacts for the proposed project. M&A used this report and identified tree impacts to prepared Table A (presented in Mitigations below), which states which trees would be impacted that require replacement mitigation. It should be noted that pursuant to the City of Cotati's Tree Ordinance that the City has the discretion to set a different number of replacement trees depending on the desired character for the post developed project site. *The applicant shall submit the arborist's report and an application for a tree permit as part of the application for the development project. In compliance with the Tree Protection Ordinance, tree replacement species and numbers are presented in Table A or as otherwise required by the City of Cotati.*

## **8. REGULATORY REQUIREMENTS PERTAINING TO WATERS OF THE UNITED STATES AND STATE**

This section presents an overview of the criteria used by the Corps, the RWQCB, the State Water Resources Control Board (SWRCB), and the CDFW to determine those areas within a project area that would be subject to their regulation.

### **8.1 U.S. Army Corps of Engineers Jurisdiction and Permitting**

#### 8.1.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the Corps regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or fill materials into any water of the United States.

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In the Federal Register "waters of the United States" are defined as, "...all interstate waters including interstate wetlands...intrastate lakes, rivers, streams (including intermittent streams), wetlands, [and] natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce..." (33 CFR Section 328.3).

Limits of Corps' jurisdiction:

(a) Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)

(b) Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:

- (1) Extends to the high tide line, or
- (2) When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.

(c) Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:

- (1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
- (2) When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
- (3) When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

Section 404 jurisdiction in "other waters" such as lakes, ponds, and streams, extends to the upward limit of the OHWM or the upward extent of any adjacent wetland. The OHWM on a non-tidal water is:

- the "line on shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

Wetlands are defined as: "...those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions" (33 CFR Section 328.8 [b]). Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (e.g., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded) to be regulated by the Corps pursuant to Section 404 of the Clean Water Act.

#### 8.1.1.1 Clean Water Rule 2015

In 2015, the Environmental Protection Agency (EPA) and the Corps published a Final Rule defining the scope of waters protected under the Clean Water Act (CWA), in light of the statute,

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science, Supreme Court decisions in *U.S. v. Riverside Bayview Homes*, *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC)*, and *Rapanos v. United States (Rapanos)*, and the agencies' experience and technical expertise. The Rule reflects consideration of the extensive public comments received on the proposed rule. The Rule was stayed in federal court shortly after it was adopted in 2015. In August 2018, the stay was lifted and the Clean Water Rule (Rule) became effective once again and remains in effect today. The Rule ensures protection for the nation's public health and aquatic resources and increase CWA program predictability and consistency by clarifying the scope of "waters of the United States" protected under the Act.

The Rule only protects waters that have historically been covered by the Clean Water Act. A tributary, or upstream water, must show physical features of flowing water – a bed, bank, and ordinary high water mark – to warrant protection. The Rule provides protection for headwaters that have these features and have a significant connection to downstream waters. Adjacent waters are defined by three qualifying circumstances established by the Rule. These can include wetlands, ponds, impoundments, and lakes which can impact the chemical, biological or physical integrity of neighboring waters. All existing exclusions from longstanding agency practices are officially established for the first time. Waters used in normal agricultural, ranching, or silvicultural activities, as well as certain defined ditches, prior converted cropland, and waste treatment systems continue to be excluded from CWA protection.

#### 8.1.1.2 Permitting Corps Jurisdictional Areas

To remain in compliance with Section 404 of the Clean Water Act, project proponents and property owners (applicants) are required to be permitted by the Corps prior to discharging or otherwise impacting waters of the United States. In many cases, the Corps must visit a proposed project area (to conduct a "jurisdictional determination") to confirm the extent of area falling under their jurisdiction prior to authorizing any permit for that project area. Typically, at the time the jurisdictional determination is conducted, applicants (or their representative) will discuss the appropriate permit application that would be filed with the Corps for permitting the proposed impact(s) to "waters of the United States."

Pursuant to Section 404 of the Clean Water Act, the Corps normally provides two alternatives for permitting impacts to the type of "waters of the United States" found in the project area. The first alternative would be to use Nationwide Permit(s) (NWP). The second alternative is to apply to the Corps for an Individual Permit (33 CFR Section 235.5(2)(b)). The application process for Individual Permits is extensive and includes public interest review procedures (i.e., public notice and receipt of public comments) and must contain an "alternatives analysis" that is prepared pursuant to Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)). The alternatives analysis is also typically reviewed by the federal EPA and thus brings another resource agency into the permitting framework. Both the Corps and EPA take the initial viewpoint that there are practical alternatives to the proposed project if there would be impacts to waters of the U.S., and the proposed permitted action is not a water dependent project (e.g. a pier or a dredging project). Alternative analyses therefore must provide convincing reasons that the proposed permitted impacts are unavoidable. Individual Permits may be available for use in the event that discharges into regulated waters fail to meet conditions of NWP(s).

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NWPs are a type of general permit administered by the Corps and issued on a nationwide basis that authorize minor activities that affect Corps regulated waters. Under NWP, if certain conditions are met, the specified activities can take place without the need for an individual or regional permit from the Corps (33 CFR, Section 235.5[c][2]). In order to use NWP(s), a project must meet 27 general nationwide permit conditions, and all specific conditions pertaining to the NWP being used (as presented at 33 CFR Section 330, Appendices A and C). It is also important to note that pursuant to 33 CFR Section 330.4(e), there may be special regional conditions or modifications to NWPs that could have relevance to individual proposed projects. Finally, pursuant to 33 CFR Section 330.6(a), Nationwide permittees may, and in some cases must, request from the Corps confirmation that an activity complies with the terms and conditions of the NWP intended for use (*i.e.*, must receive “verification” from the Corps).

Prior to finalizing design plans, the applicant needs to be aware that the Corps maintains a policy of “no net loss” of wetlands (waters of the United States) from project area development. Therefore, it is incumbent upon applicants that propose to impact Corps regulated areas to submit a mitigation plan that demonstrates that impacted regulated areas would be recreated (*i.e.*, impacts would be mitigated). Typically, the Corps requires mitigation to be “in-kind” (*i.e.*, if a stream channel would be filled, mitigation would include replacing it with a new stream channel), and at a minimum of a 1:1 replacement ratio. Often a 2:1 replacement ratio is required. Usually the 2:1 ratio is met by recreation or enhancement of an equivalent amount of wetland as is impacted, in addition to a requirement to preserve an equivalent amount of wetland as is impacted by the project. In some cases, the Corps allows “out-of-kind” mitigation if the compensation site has greater value than the impacted site. For example, if project designs call for filling an intermittent drainage, mitigation should include recreating the same approximate jurisdictional area (same drainage widths) at an offsite location or on a set-aside portion of the project area. Finally, there are many Corps approved wetland mitigation banks where wetland mitigation credits can be purchased by applicants to meet mitigation compensation requirements. Mitigation banks have defined service areas and the Corps may only allow their use when a project would have minimal impacts to wetlands.

#### 8.1.2 APPLICABILITY TO THE PROPOSED PROJECT

On July 25, 2008, the Corps confirmed the extent of its jurisdiction on the project site (Corps File No. SPN-2007-400822-N). This jurisdictional map remained valid until July 25, 2010. On July 15, 2016 and April 24, 2017, M&A biologists Mr. Monk and Ms. Owens conducted a wetland delineation in 2016 and again in 2017. A Request for Preliminary Jurisdictional Determination and the Preliminary Aquatic Resources Map was submitted to the Corps on August 18, 2017. On September 8, 2017, Ms. Roberta Morganstern from the Corps confirmed the extent of the Corps’ jurisdiction on the project site.

On March 20, 2018, M&A biologist, Ms. Christy Owens, conducted additional wetland delineation work of potential offsite impact areas associated with the improvement of Highway 116 along the frontage of the project site. An amended Request for Preliminary Jurisdictional Determination and a Preliminary Aquatic Resources Map was submitted to the Corps on August 18, 2018. On May 21, 2018, Ms. Morganstern of the Corps confirmed jurisdiction over 0.06-acre

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of seasonal wetland within the expanded limits of delineation which includes the project site (Attachments A and B).

The proposed project will result in the fill of approximately 0.06-acre of jurisdictional seasonal wetland regarded as a waters of the U.S. pursuant to the CWA. As impacts to waters of the U.S. will be less than 0.5-acre, the threshold for the Corps to authorize use of a Nationwide Permit, this project will require a Nationwide Permit(s) authorization from the Corps. Similarly, as no Corps Clean Water Act permit is operable without a Permit from the RWQCB, the applicant shall obtain a permit from both the Corps and the RWQCB prior to impacting waters of the U.S. and State on the project site.

## **8.2 State Water Resources Control Board (SWRCB) /California Regional Water Quality Control Board (RWQCB)**

### 8.2.1 SECTION 401 OF THE CLEAN WATER ACT

The SWRCB and RWQCB regulate activities in "waters of the State" (which includes wetlands) through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the United States, including wetlands and other waters, any Corps permit authorized for a proposed project would be inoperative unless it is a NWP that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific certification or waiver of water quality. Certification of NWPs requires a finding by the SWRCB that the activities permitted by the NWP will not violate water quality standards individually or cumulatively over the term of the permit (the term is typically for five years). Certification must be consistent with the requirements of the federal Clean Water Act, the CEQA, the CESA, and the SWRCB's mandate to protect beneficial uses of waters of the State. Any denied (i.e., not certified) NWPs, and all Individual Corps permits, would require a project specific RWQCB certification of water quality.

### 8.2.2 APPLICABILITY TO THE PROPOSED PROJECT

The Corps' confirmed Aquatic Resources Map is provided as Attachment A. Since the RWQCB does not have a formal method for technically defining what constitutes waters of the state, M&A expects that the RWQCB should remain consistent with the Corps' determination. The proposed project will result in impacts to a 0.06-acre seasonal wetland that is regarded as a water of the U.S. and State.

Any proposed impact to waters of the State would have to be mitigated pursuant to Section 401 of the CWA and/or pursuant to the Porter-Cologne Water Quality Control Act. The RWQCB will require mitigation that replaces the functions and services of the impacted wetland(s) as a condition of issuing a permit for impacts to wetlands. The RWQCB requirements for issuance of a "401 Permit" typically parallel the Corps requirements for permitting impacts to Corps regulated areas pursuant to Section 404 of the Clean Water Act. Please refer to the Corps Applicability Section above for likely mitigation requirements for impacts to RWQCB regulated waters. Also, please refer to the applicability section of the Porter-Cologne Water Quality Control Act below for other applicable actions that may be imposed on the project by the RWQCB prior to the time any certification of water quality is authorized for the project.

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### 8.2.3 PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act, Water Code § 13260, requires that “any person discharging waste, or proposing to discharge waste, that could affect the waters of the State to file a report of discharge” with the RWQCB through an application for waste discharge (Water Code Section 13260(a)(1)). The term “waters of the State” is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (Water Code § 13050(e)). It should be noted that pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB also regulates “isolated wetlands,” or those wetlands considered to be outside of the Corps’ jurisdiction pursuant to the SWANCC decision (see Corps Section above).

The RWQCB generally considers filling in waters of the State to constitute “pollution.” Pollution is defined as an alteration of the quality of the waters of the state by waste that unreasonably affects its beneficial uses (Water Code §13050(1)). The RWQCB litmus test for determining if a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act is if the action could result in any “threat” to water quality.

The RWQCB requires complete pre- and post-development Best Management Practices Plan (BMPs) of any portion of the project site that is developed. This means that a water quality treatment plan for the pre- and post-developed project site must be prepared and implemented. Preconstruction requirements must be consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES). That is, a *Stormwater Pollution Prevention Plan* (SWPPP) must be developed prior to the time that a site is graded (see NPDES section below). In addition, a post construction BMPs plan, or a Stormwater Management Plan (SWMP) must be developed and incorporated into any site development plan.

### 8.2.4 APPLICABILITY TO PROPOSED PROJECT

Since any “threat” to water quality could conceivably be regulated pursuant to the Porter-Cologne Water Quality Control Act, care will be required when constructing the proposed project to be sure that adequate pre-and post-construction Best Management Practices Plan (BMPs) are incorporated into the project implementation plans. Please note that any isolated wetlands defined by the Corps on the project site, that are not regulated by the Corps pursuant to the SWANCC decision, would still be regulated by the RWQCB pursuant to the Porter-Cologne Water Quality Control Act.

It should also be noted that prior to issuance of any permit from the RWQCB this agency will require submittal of a Notice of Determination from the City of Cotati indicating that the proposed project has completed a review conducted pursuant to CEQA. The pertinent sections of the CEQA document (typically the biology section) are often submitted to the RWQCB for review prior to the time this agency will issue a permit for a proposed project.

Much of the stormwater runoff currently flows into the City’s existing stormdrain system. It is expected that project development will utilize the existing stormdrain system; however, pre-treatment of stormwater in accordance with Provision C.3 (discussed in the section below) prior to release into the City stormdrain system will be necessary. Additionally, during project construction, it is important for the project proponent to have the components of a Storm Water

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Pollution Prevention Plan (SWPPP) and Storm Water Management Plan (SWMP) in place; these documents are typically prepared by the project civil engineer. Please note that the City of Cotati and the County of Sonoma in the area of the project site replace preparation of the SWMP pursuant to the Standard Urban Storm Water Mitigation Plan (SUSMP – see SUSMP Guidelines below).

#### 8.2.5 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

In 1972 the Clean Water Act was amended to state that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the Clean Water Act added Section 402(p) which establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES Program.

While federal regulations allow two permitting options for stormwater discharges (individual permits and General Permits), the SWRCB has elected to adopt only one statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except from those on Tribal Lands, in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (CalTrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than one acre of land or those sites less than one acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a SWPPP which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters.
2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively-defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.
3. Perform inspections of all BMPs.

This Construction General Permit is implemented and enforced by the nine California Regional Water Quality Control Boards (RWQCBs). It is also enforceable through citizens' suits and represents a dramatic shift in the State Water Board's approach to regulating new and redevelopment sites, imposing new affirmative duties and fixed standards on builders and developers.

#### Types of Construction Activity Covered by the Construction General Permit

- clearing,
- grading,
- disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre or more of total land area.

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Construction activity that results in soil disturbances to a smaller area would still be subject to this General Permit if the construction activity is part of a larger common plan of development that encompasses greater than one acre of soil disturbance, or if there is significant water quality impairment resulting from the activity.

Construction activity does not include:

- routine maintenance to maintain original line and grade,
- hydraulic capacity, or original purpose of the facility,
- nor does it include emergency construction activities required to protect public health and safety.

Project proponents (landowners) should confirm with the local RWQCB whether or not a particular routine maintenance activity is subject to this General Permit.

The State Water Board's new quantitative standards (Order 2009-0009-DWQ) take a two-tiered approach, depending on the risk level associated with the site in question. Exceedance of a benchmark Numeric Action Level ("NAL") measured in terms of pH and turbidity (a measure related to both the amount of sediment in and the velocity of site runoff) triggers an additional obligation to implement additional BMPs and corrective action to improve SWPPP performance. New minimum BMPs include Active Treatment Systems, which may be necessary where traditional erosion and sediment controls do not effectively control accelerated erosion; where site constraints inhibit the ability to construct a correctly-sized sediment basin; where clay and/or highly erosive soils are present; or where the site has very steep or long slope lengths.

In addition, the Construction General Permit includes several "post-construction" requirements. These requirements entail that site designs provide no net increase in overall site runoff and match pre-project hydrology by maintaining runoff volume and drainage concentrations. To achieve the required results where impervious surfaces such as roofs and paved surfaces are being increased, developers must implement non-structural off-setting BMPs, such as landform grading, site design BMPs, and distributed structural BMPs (bioretention cells, rain gardens, and rain cisterns). This "runoff reduction" approach is essentially a State Water Board-imposed regulatory requirement to implement Low Impact Development ("LID") design features. Volume that cannot be addressed using non-structural BMPs must be captured in structural BMPs that are approved by the RWQCB.

Improving the quality of site runoff is necessary to improve water quality in impaired and threatened streams, rivers, and lakes (that is, water bodies on the EPA's 303(d) list). The RWQCB prioritizes the water bodies on the 303(d) list according to potential impacts to beneficial uses. Beneficial uses can include a wide range of uses, such as nautical navigation; wildlife habitat; fish spawning and migration; commercial fishing, including shellfish harvesting; recreation, including swimming, surfing, fishing, boating, beachcombing, and more; water supply for domestic consumption or industrial processes; and groundwater recharge, among other uses. The State is required to develop action plans and establish Total Maximum Daily Loads (TMDLs) to improve water quality within these impaired water bodies. The TMDL is the

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quantity of a pollutant that can be safely assimilated by a water body without violating the applicable water quality standards.

Pursuant to the CWA, the RWQCB regulates construction discharges under the National Pollutant Discharge Elimination System (NPDES). The project sponsor of construction or other activities that disturb more than 1 acre of land must obtain coverage under NPDES Construction General Permit Order 2009-0009-DWQ, administered by the RWQCB<sup>1</sup>.

#### 8.2.6 APPLICABILITY TO THE PROPOSED PROJECT

To obtain coverage under the General Storm Water Permit the applicant must electronically file a number of permit-related compliance documents (Permit Registration Documents (PRDs)), including a Notice of Intent (NOI), a risk assessment, site map, signed certification, Stormwater Pollution Prevention Plan (SWPPP), Notice of Termination (NOT), NAL exceedance reports, and other site-specific PRDs that may be required. The PRDs must be prepared by a Qualified SWPPP Practitioner (QSP) or Qualified SWPPP Developer (QSD) and filed by a Legally Responsible Person (LRP) on the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS). QSDs are typically civil engineers, professional hydrologists, engineering geologists, or landscape architects. Once filed, these documents become immediately available to the public for review and comment. At a minimum, the SWPPP shall identify Best Management Practices (BMPs) for implementation during project construction that are in accordance with the applicable guidance and procedures contained in the California Stormwater Quality Association's *California Stormwater Best Management Practices Handbook* (2015).

Construction stormwater BMPs are intended to minimize the migration of sediments offsite. They can include:

- covering soil stockpiles,
- sweeping soil from streets or other paved areas,
- performing site-disturbing activities in dry periods,
- planting vegetation or landscaping quickly after disturbance to stabilize soils.

Other typical stormwater BMPs include erosion reduction controls such as:

- hay bales, water bars, covers, sediment fences, sensitive area access restrictions, vehicle mats in wet areas, geotextile blankets, fiber rolls, temporary slope drains, mulching of exposed areas, vehicle mats in wet areas, and other erosion-reducing features, and retention/settlement ponds.

Excavation and other soil-disturbing activities associated with the project could potentially affect water quality as a result of erosion of sediment. In addition, leaks from construction equipment; accidental spills of fuel, oil, or hazardous liquids used for equipment maintenance; and

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<sup>1</sup> CGP Order 2009-0009-DWQ remains in effect, but has been amended by CGP Order 2009-0014-DWQ, effective February 14, 2011, and CGP Order 2009-0016-DWQ, effective July 17, 2012. The first amendment merely provided additional clarification to Order 2009-0009-DWQ, while Order 2009-0016-DWQ eliminated numeric effluent limits on pH and turbidity (except in the case of active treatment systems), in response to a legal challenge to the original order.

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accidental spills of construction materials are all potential sources of pollutants that could degrade water quality.

## 9. STANDARD URBAN STORM WATER MITIGATION PLAN (SUSMP)

### 9.1 SUSMP Overview

The City of Cotati is a participating City with the County of Sonoma with other participating entities that on June 3, 2005 published the *Guidelines for the Standard Urban Storm Water Mitigation Plan (SUSMP), Storm Water Best Management Practices for New Development and Redevelopment for the Santa Rosa Area and Unincorporated Areas around Petaluma and Sonoma*. This SUSMP was updated and republished in 2014. The SUSMP guidelines were created to comply with the municipal storm water NPDES permit requirements enforced by the SWRCB and the RWQCB. The SUSMP guidelines were developed to assist project sponsors and municipal staff to implement the SUSMP requirements adopted by the North Coast Regional Water Quality Control Board. Since the SUSMP requirements apply to both privately sponsored projects and public capital improvement projects, these Guidelines are required to be used by development project applicants, municipal development project review staff, and municipal staff responsible for capital improvement projects. The SUSMP requirements ensure that projects otherwise meet Storm Water Management Plan requirements enforceable pursuant to the National Pollutant Discharge Elimination System (NPDES) C3 requirements.

The SUSMP goals for new and redevelopment projects are to manage, as close to the point of origin as possible, 1) storm water quality, 2) storm water quantity, and 3) to conserve natural areas of the development site. These three goals are described further below. It should be noted that the concept of “maximum extent practical” (MEP) applies to each of the goals. The MEP requirement is a technology based standard established by Congress in the Clean Water Act U.S.C. S 1342 (p)(3)(B)(iii) that municipal dischargers of storm water must meet. To achieve the maximum extent practicable standard, municipalities must employ whatever Best Management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the maximum extent practicable means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive.

The SUSMP goals for new and redevelopment projects are as follows:

**Storm Water Quality.** The first goal is to prevent pollutants generated at development and redevelopment projects from reaching storm drains. Projects covered by the SUSMP must be designed to minimize the introduction of pollutants.

**Storm Water Quantity.** The second goal is to prevent increases in storm water runoff from the two-year 24-hour storm event for Sonoma County. SUSMP projects should incorporate best management practices to limit the post-development runoff to pre-development conditions to the MEP. Best management practices are methods used to minimize pollutants in storm water and the quantity of runoff. One of the objectives of these guidelines is to provide more specific information about how MEP will be achieved.

**Conserve Natural Areas.** The third goal is to conserve natural areas of a development site. This goal supports the other two goals by preserving areas where storm water runoff can be purified naturally by infiltration into the soil and flow over vegetated areas. SUSMP projects should strive to maximize the amount of land left in a natural, undisturbed condition, preserve riparian areas and wetlands, limit clearing of native vegetation, and maximize trees and vegetation.

This SUSMP applies to applicable projects that require a discretionary permit, including any ministerial permits that are based on the discretionary permit. Source controls will be recommended for all discretionary projects.

Projects that must comply with the SUSMP include:

- a) Development projects that create one acre (43,560 square feet) or more of new impervious surface. This category includes development of any type on public or private land, which falls under the planning and building authority of Sonoma County or City of Santa Rosa, where one acre or more of new impervious surface, collectively over the entire project site, will be created.
- b) Streets, roads, highways and freeways that create one acre (43,560 square feet) or more of new impervious surface. This category includes any newly constructed impervious surface used for the transportation of pedestrians, bicycles, and motorized vehicles.
- c) Redevelopment projects that are located on an already developed site and result in the addition of and/or reconstruction of one acre (43,560 square feet) or more of new impervious surface. Only the additional and/or reconstructed portion(s) of the site must be included in treatment design. Excluded from this category are interior remodels and routine maintenance or repair, including roof or exterior surface replacement and resurfacing.
- d) Development and redevelopment projects located directly adjacent to a natural waterway, modified natural waterway, or constructed channel or that requires a new storm drain outfall to such waterway, regardless of project size or impervious surface. This requirement is intended to protect environmentally sensitive areas. For redevelopment projects, excluded from this category are interior remodels and routine maintenance or repair, including roof or exterior surface replacement and resurfacing.

Regarding phased projects, new development or redevelopment activity that is part of a larger common plan of development that results in less than one acre of impervious surface must comply with SUSMP requirements. For example, if 50% of a subdivision is constructed and results in 0.9 acre of impervious surface and the remaining 50% of the subdivision is to be developed at a future date, the property owner must comply with SUSMP requirements.

## **9.2 Source and Treatment Control Requirements**

Source control and treatment control BMPs are intended to reduce runoff and keep pollutants out of storm water throughout the life of the project. They may be described as post-construction BMPs or “post-development” control measures. Post-construction BMPs differ from construction BMPs, which are used during the construction phase to prevent erosion and keep construction-related pollutants from reaching storm water.

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The SUSMP recognizes two types of post-development BMPs for storm water pollution control – source controls and treatment controls. Source controls include BMPs that are designed to prevent pollutants from reaching storm water runoff and minimize site runoff. Source controls include a large variety of BMPs that range from minimizing the amount of impervious surface used at a project site to specific pollution prevention BMPs such as providing a roof over waste storage areas. The municipal storm water NPDES permit characterizes source control as the first line of defense at a project site and storm water treatment as a backup or additional line of defense. Source controls will be recommended for all discretionary projects.

Storm water treatment controls are engineered systems that are designed to remove pollutants from storm water. The SUSMP and NPDES permit have specific hydraulic design criteria for sizing storm water treatment controls to assure that an optimum amount of storm water receives treatment. Examples of storm water treatment controls include vegetated swales, extended detention basins, and bioretention areas. These are described in more detail in Chapter 4.

Source and treatment controls require long-term maintenance to continue to function effectively and avoid the creation of nuisance conditions. The SUSMP requires the project applicant to provide to the City or County a signed statement accepting responsibility for maintenance until the responsibility is legally transferred. The SUSMP further requires property owners to conduct maintenance inspection of all source and treatment control BMPs at least once a year or as specified by the designer or manufacturer.

### **9.3 Post-Construction Sediment and Erosion Control**

Sediment is an important pollutant of concern in the North Coast Region. During construction sediment and erosion control BMPs must be implemented in accordance with the Statewide Construction Activity NPDES General Permit and the City of Santa Rosa or County of Sonoma grading permit programs. The design of projects must also consider potential sedimentation and erosion issues during long-term project operations and incorporate appropriate sediment and erosion controls in the project design.

Source Controls includes the need to select and maintain vegetation in landscaped pervious areas to prevent runoff from contacting bare earth and conveying sediment into the storm drain system. Similarly, pervious paving materials must also be selected, designed and maintained to avoid sedimentation and erosion.

### **9.4 Enforceability**

The NPDES permit issued to the participating SUSMP entities requires these entities to control pollutant discharges to their respective storm drain systems. At a minimum, this legal authority empowers the participating entities to use enforcement mechanisms, including monetary fines, to require compliance by private entities within their jurisdictions. In the event that a project applicant fails to comply with the SUSMP requirements, the participating entities may determine that it is necessary to undertake enforcement actions, which may include a monetary fine.

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## **9.5 Applicability to the Proposed Project**

The proposed project will affect greater than one acre and is therefore subject to the SUSMP. The project must be reported under the City of Santa Rosa's MS4 permit. In addition, the RWQCB will require that the SUSMP be submitted for review as a condition of authorizing any impacts to waters of the state. The RWQCB can be expected to enforce routine BMPs necessary to ensure that the proposed project complies with the NPDES.

## **10. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE PROTECTIONS**

### **10.1 Section 1602 of California Fish and Game Code**

Pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which the CDFW typically considers to include its riparian vegetation. Any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, would require entering into a Streambed Alteration Agreement (SBAA) with the CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, the CDFW typically reviews an analysis of the expected biological impacts, any proposed mitigation plans that would be implemented to offset biological impacts and engineering and erosion control plans.

### **10.2 Applicability to Proposed Project**

There are no streams, tributaries, or creeks on or adjacent to the project site that would be impacted by the proposed project. Accordingly, no 1602 permit is required for this project from the CDFW.

## **11. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS**

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary permit (i.e., conditional use permit) would be required for a project (e.g. an occupancy permit must be issued), the lead agency typically must determine if there could be significant environmental impacts. This is usually accomplished by an "Initial Study." If there could be significant environmental impacts, the lead agency must determine an appropriate level of environmental review prior to approving and/or otherwise permitting the impacts. In some cases, there are "Categorical Exemptions" that apply to the proposed activity; thus the activity is exempt from CEQA. The Categorical Exemptions are provided in CEQA. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. If the project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a "Negative Declaration." If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a "Mitigated Negative Declaration" is typically prepared by the lead agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can't be mitigated to a level considered less than

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significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines “endangered” species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. “Rare” species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will “substantially affect a rare or endangered species of animal or plant or the habitat of the species.” The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

#### 11.1.1 APPLICABILITY TO THE PROPOSED PROJECT

This report has been prepared as a Biology Section that is suitable for incorporation into the biology section of a CEQA review document such as an Environmental Impact Report or Mitigated Negative Declaration by the CEQA lead agency (in this case the City of Cotati). This report addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA, and similarly it addresses potential effects of the project on all other known sensitive biological resources. Finally, it provides a regulatory agency review discussing other regulatory requirements of the project that pertain to biological resources.

## 12. IMPACTS ANALYSIS

Below the criteria used in assessing impacts to Biological Resources is presented.

### 12.1 Significance Criteria

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other Federal, State, and local agencies’ considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as “significant,” “potentially significant,” or “less than significant.” Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated “waters of the United States” and/or stream channels.

#### 12.1.1 THRESHOLDS OF SIGNIFICANCE

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#### 12.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would:

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

#### 12.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States, which includes wetlands, as discussed in the bulleted item above, and also includes “other waters” (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the state. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

#### 12.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which the CDFW typically considers to include riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

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### 13. IMPACT ASSESSMENT AND PROPOSED MITIGATION

In this section, we discuss potential impacts to sensitive biological resources including special-status animal species and waters of the United States and/or State. We follow each impact with a mitigation prescription that when implemented would reduce impacts to a level regarded as less than significant pursuant to CEQA. This impact analysis is based on the Sterling Senior Communities Project Site Improvement Plans-Overall Site Plan prepared by Adobe Associates, Inc. dated October 1, 2018 (Attachment C)

#### 13.1 Impact BIO-1: Development of the proposed project would have a potentially significant impact on suitable habitat for state and federally-listed vernal pool Plants (Potentially Significant)

Formal rare plant surveys were conducted on the project site in 2015 by Mr. Roy Buck, Senior Botanist with California Environmental Services, LLC and by M&A in 2017. No rare plants were found during the required two years of rare plant surveys conducted at appropriate times when the targeted listed plants were identified in flower at reference population sites. Similarly, M&A conducted a mid-summer rare plant survey on July 15, 2016 for late-blooming species and identified no rare plants. Thus, development of the project site will not impact any special-status plant species. However, in compliance with new published-CDFW survey guidelines released on March 18, 2018, one additional year of surveys will be conducted in 2019 to bring the previous year's surveys up to date and demonstrate the absence of state-listed plants on the project site under the most current and up to date survey guidelines. If a state or federally listed plant is found during the additional survey in 2019, mitigation will be established for occupied habitat as necessary to remain commensurate with mitigation requirements as outlined by the USFWS and CDFW for impacts to listed plants.

Rare plants survey conducted in 2015 and 2017 that were negative established that the seasonal wetland on the project site is not "occupied" with listed endangered vernal pool plants. Regardless, the single seasonal wetland would still be regarded pursuant to the USFWS' 2007 Programmatic Biological Opinion by and between the USFWS and the Corps (USFWS 2007), as "suitable vernal pool plant habitat" [i.e. seasonal wetlands] (even when two years of surveys proves absence). Impacts to suitable listed plant habitat must nonetheless be mitigated by purchase of rare plant conservation credits. As a federal permit will be obtained for this project from the Corps, a federal nexus agency to the USFWS, pursuant to the USFWS' formal Recovery Plan for the Santa Rosa Plain (USFWS 2016), and current mitigation policy implemented by the USFWS, mitigation that will compensate for impacts to "suitable seasonal wetland habitat" must be obtained for *Limnanthes vincularis* (Sebastopol meadowfoam) from a conservation bank located in the Sebastopol meadowfoam Core Area (Exhibit A). ***Thus, pursuant to the CEQA, the proposed project will result in significant impacts to suitable vernal pool plant species habitat.*** Such impacts could be mitigated to a level considered less than significant.

#### 13.2 Mitigation Measure BIO-1. Federally-Listed Vernal Pool Plant Suitable Habitat

As the project is in the Santa Rosa Plain and will require a permit from the Corps, the Programmatic Biological Opinion by and between the Corps and the USFWS (USFWS 2007) is available for use by the proposed project. Regardless that formal rare plant surveys conducted in

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2015 and 2017 proved absence of state and federally-listed vernal pool plants, the 2007 Programmatic Biological Opinion nonetheless regards all seasonal wetland habitats as “suitable” listed vernal pool habitat and requires mitigation compensation. Per the 2007 Programmatic Biological Opinion, if a Corps permit is acquired for this project, the applicant shall be required to purchase vernal pool conservation credits for Sebastopol meadowfoam at 1:1 occupied or established habitat ratio (any combination) with success criteria met prior to groundbreaking at the project site and 0.5:1 established habitat ratio with success criteria met prior to groundbreaking at the project site. Thus, since the project requires a Corps permit, even with the two years of negative rare plant surveys, a 1.5:1 replacement to impacts vernal pool listed plant habitat ratio must be met by the project provided: 1) the Programmatic Biological Opinion (2007) remains valid when the project is constructed; 2) a Corps permit is required for the project; and 3) the Corps/USFWS allows use of the 2007 Programmatic Biological Opinion (or any successor Programmatic Biological Opinion). It is recognized that the Programmatic Biological Opinion is currently going through revision but it has not been released to the public or agencies yet. Accordingly, if a new Programmatic Biological Opinion is released by the Corps/USFWS, and a Corps permit is required for the proposed project, then any requirements set forth in the revised Programmatic Biological Opinion will supersede and replace those requirements set forth in the 2007 Programmatic Biological Opinion.

Accordingly, the project will impact 0.06-acre of “suitable vernal pool rare plant habitat.” Thus, in consideration of these mitigation ratios, the applicant shall secure 0.09 acre credits for Sebastopol meadowfoam (or as otherwise allowed by the Corps/USFWS) from the Sebastopol meadowfoam Core Area (Exhibit A; USFWS 2016). Any rare plant conservation credits purchased for the project shall be approved by the USFWS prior to the purchase of the credits. The applicant shall be required to provide proof that these conservation credits have been purchased to the City of Cotati prior to commencement of grading on the project site.

**When implemented, these mitigation measures would reduce project impacts to federally-listed vernal pool plant suitable habitat to a level considered less than significant pursuant to CEQA.**

### **13.3 Impact BIO-2. Development of the proposed project would have a potentially significant impact on the State and Federally-Listed California Tiger Salamander**

In 2003/2004, construction of the Sonoma Business Park development project that is located immediately east of the Reds project site was underway. The developer was required by USFWS and CDFW to salvage California tiger salamanders presumed to be migrating from adjacent properties, including the project site (then called the Reds project site), to the former (now developed) breeding pools on the Sonoma Business Park project site. This salvage project was supervised by the CDFW and the USFWS under the assumption that all adult California tiger salamanders and their breeding habitat had been removed from the Sonoma Business Park project site when it was mass-graded in June 2002. The recovery/salvage project was implemented under expectation that the balance of the Sonoma Business Park and the parcel to the north (then called the Nibe project site) and project site (then called the Reds project site) would be developed under a master development project. In September 2007, M&A prepared and submitted a report to the USFWS and CDFG summarizing the salvage trapping effort titled

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*California Tiger Salamander (Ambystoma californiense) Survey and Salvage Summary “Nibe” and “Red’s” Project Sites Santa Rosa, California September 20, 2007.* That report indicates that 12 adult California tiger salamanders were captured on the Reds Project Site in the winter of 2003/2004 and were surrendered to the CDFW. Since California tiger salamanders were captured on the project site during the 2003/2004 salvage effort, the project site is regarded as habitat that could continue to support California tiger salamanders. From a practical standpoint, the breeding ponds that were being used by this local population of California tiger salamander were removed by development in 2002. Thus, the possibility of California tiger salamanders migrating across the project site today, under the considerations that the population was regarded as “salvaged” or removed, and that the breeding pools are no longer present, is very low. Regardless, the presence of this salamander cannot be dismissed entirely. Thus, there will be an assumption that the proposed project will impact the California tiger salamander. ***Thus, pursuant to the CEQA the proposed project will result in significant impacts to the California tiger salamander and its habitat.*** Such impacts could be mitigated to a level considered less than significant.

#### **13.4 Mitigation BIO-2. California Tiger Salamander**

The closest known breeding location record for California tiger salamander is located 0.1-mile (510 feet) north of the project site (Occurrence No. 648) within a drainage ditch alongside Alder Avenue (Figure 6); however, no breeding habitat occurs on the project site. In 2002, two known California tiger salamander breeding pools were impacted within 500 feet of the project site. These pools are now developed under a condominium complex. California tiger salamanders were salvaged as part of that development project from the breeding pool project site, the Nibe project site immediately to the north and the project site under consideration herein immediately to the west (then known as the Reds project site) (see California tiger salamander section of this report). For California tiger salamander mitigation calculations derived from the Conservation Strategy (USFWS 2005), the closest breeding pool is regarded as greater than 500 feet but less than 2,200 feet from the project site.

According to the USFWS’ 2007 Programmatic Biological Opinion (USFWS 2007), the portions of the 5.63-acre project that constitutes over summering or migration habitat of the California tiger salamander that are greater than 500 feet and within 2,200 feet of a known breeding site, and for projects beyond 2,200 feet from a known breeding site, but within 500 feet of an adult occurrence, would be mitigated at a 2:1 replacement to impacts ratio (see Figure 6 for calculation of mitigation ratio acreages). Approximately 1.99 acres of the 5.63-acre project site is currently developed with buildings or hard-packed, gravel-impregnated roadways and parking areas around buildings. These developed surfaces do not constitute California tiger salamander habitat that warrants mitigation. In consideration of these mitigation ratios and the already developed surfaces that do not constitute California tiger salamander habitat on the project site, to compensate for impacts to 3.64 acres of California tiger salamander habitat that would occur from development of the project site (as shown in Figure 6), the Programmatic Biological Opinion (USFWS 2007) requires that applicant purchase 7.28 acres of California tiger salamander mitigation credit from a USFWS (and CDFW) approved Conservation Bank.

In accordance with the USFWS’ Recovery Plan (USFWS 2016) the applicant shall secure credits from the West Cotati Core California tiger salamander area (Exhibit B). Any conservation credits

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purchased for the project shall be approved by the USFWS prior to the purchase of the credits. The applicant shall be required to provide proof that these California tiger salamander conservation credits have been purchased to the City of Cotati prior to commencement of grading on the project site. In lieu of conservation bank credits, the applicant may preserve extant occupied California tiger salamander habitat in the West Cotati Core California tiger salamander area (Exhibit B) via recordation of a perpetual conservation easement. Any preservation plan would have to be approved by the USFWS and the CDFW.

It should be noted that currently the 2007 *Programmatic Biological Opinion* is under revision by the USFWS and Corps to incorporate the elements of the Recovery Plan for the Santa Rosa Plain (USFWS 2016). The revised *Programmatic Biological Opinion* has not been released to the public at this time. Accordingly, mitigation requirements for impacts to the California tiger salamander may change with the release of a revised Programmatic Biological Opinion. If an updated Programmatic Biological Opinion is released by the USFWS, if that Biological Opinion is used to acquire Incidental Take Authority for project impacts to the California salamander, then the revised mitigation requirements in the updated Programmatic Biological Opinion shall supersede those set forth herein.

Finally, to ensure that migrating California tiger salamanders do not end up within the project site while under construction where they could be killed, prior to grading the project site, the developer shall surround the project site in California tiger salamander exclusion fencing. This fencing shall be inspected daily by a qualified biologist or a trained construction manager. In the event that a California tiger salamander is found trapped up against the fence and must be moved, it shall only be moved by a qualified 10(a)(1)(A) federally permitted and a state permitted California tiger salamander biologist. Any such relocation would be as permitted by the USFWS and CDFW in their Incidental Take Permits issued to the project that address impact to the California tiger salamander. Copies of the USFWS' Biological Opinion (Incidental Take Permit) and of the CDFW's 2081 Incidental Take Permit shall be provided to the City of Cotati prior to the commencement of grading on the project site.

**When implemented, these mitigation measures would reduce significant impacts to the California tiger salamander to a level regarded as less than significant pursuant to CEQA.**

### **13.5 Impact BIO-3. Development of the proposed project would have a potentially significant impact on special-status bats**

The trees and abandoned buildings on the project site provide suitable roosting habitat for the pallid bat. This bat species is designated by the State as "species of special concern." In accordance with the CEQA Guidelines (Section 15380) which protects "rare" and "endangered" species as defined by CEQA, CDFW designated species of special concern meet this CEQA definition. Accordingly, "take" (i.e., to harm or kill) of these bats resulting from the project would be regarded as significant. The project proponent can avoid impacts to special-status bats by conducting preconstruction surveys and implementing avoidance measures. ***As such, pursuant to the CEQA, development of the proposed project would result in potentially significant impacts to special-status bats.*** Such impacts could be mitigated to a level considered less than significant.

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### **13.6 Mitigation Measure BIO-3. Special-Status Bats**

To avoid impacts to special-status bats, a qualified biologist should conduct a preconstruction survey of the structures and trees that would be impacted by the project 15 days prior to removal or commencement of ground work. All bat surveys should be conducted by a biologist with experience surveying for bats. If no special-status bats are found during the surveys, then building demolition and tree removal may commence. Per the recommendation of the CDFW, trees should be trimmed and/or removed in a two-phased removal system conducted over two consecutive days. The first day (in the afternoon), limbs and branches would be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures would be avoided, and only branches or limbs without those features would be removed. On the second day, the entire tree would be removed.

If special-status bat species are found roosting on the project site, the biologist should determine if there are young present (i.e., the biologist should determine if there are maternal roosts). If young are found roosting in any tree or structure that will be impacted by the project, such impacts should be avoided until the young are flying and feeding on their own. A non-disturbance buffer installed with orange construction fencing should also be established around the maternity site. The size of the buffer zone should be determined by a qualified bat biologist at the time of the surveys. If adults are found roosting in a tree or structure on the project site but no maternal sites are found, then the adult bats can be flushed or one-way eviction doors can be placed over any tree cavity (or structure access opening) supporting bat access for a 48-hour period prior to the time the tree or structure in question would be removed or disturbed. At that point, no other mitigation compensation would be required.

**When implemented, these mitigation measures would reduce project impacts to special-status bats to a level considered less than significant pursuant to CEQA.**

### **13.7 Impact BIO-4. Development of the proposed project would have a potentially significant impact on Nesting Raptors and Passerine Birds.**

Nesting raptors (birds of prey) and passerine (perching) birds are protected pursuant to California Fish and Game Code (Sections 3503, 3503.5, 3513), and the Federal Migratory Bird Treaty Act. The oaks present on the project site provide suitable nesting habitat for raptors and passerines. In addition, the grassland on the project site provides suitable nesting habitat for ground-nesting birds, and finally birds could nest on the abandoned buildings on the project site. Since typically most birds can fly out of harm's way, development of the project site would not be expected to harm adult birds. However, nesting birds are susceptible to take through disturbance that harms eggs or young. The project proponent can avoid impacts to nesting birds by conducting preconstruction nesting surveys and implementing avoidance measures. *As such, pursuant to the CEQA, development of the proposed project would result in potentially significant impacts to nesting birds.* Such impacts could be mitigated to a level considered less than significant.

### **13.8 Mitigation Measure BIO-4. Nesting Birds**

To avoid impacts to nesting raptors and passerines, a nesting survey shall be conducted 15 days prior to commencing with construction work if this work would begin between February 1 and August 31. The nesting survey shall be conducted on the project site and within a zone of

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influence around the project site. The zone of influence includes those areas off the project site where raptors could be disturbed by earth-moving vibrations or noise. The nesting survey should include examination of all suitable nesting habitats within 300 feet of the entire project site. A nest survey report shall be prepared upon completion of the survey and provided to the City of Cotati with any recommendations required for establishment of protective buffers as necessary to protect nesting birds.

If birds are identified nesting on or within the zone of influence of the construction project, a qualified biologist shall establish a temporary protective buffer around the nest(s). The buffer must be of sufficient size to protect the nesting site from construction-related disturbance and shall be established by a qualified ornithologist or biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 75 feet from the nest site or nest tree dripline for small birds and up to 300 feet for sensitive nesting birds that include several raptor species known from the region of the project site. The nest buffer should be staked with orange construction fencing or orange lath staking.

No construction or earth-moving activity shall occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified ornithologist/biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise completed. In the region of the project site, most species complete nesting by mid-July. This date can be significantly earlier or later, and would have to be determined by the qualified biologist. At the end of the nesting cycle, and abandonment of the nest by its occupants, as determined by a qualified biologist, temporary nest buffers may be removed and construction may commence in established nesting buffers without further regard for the nest site.

**When implemented, these mitigation measures would reduce project impacts to nesting raptors and passerine birds to a level considered less than significant pursuant to CEQA.**

### **13.9 Impact BIO-5. Development of the proposed project would have a significant impact on waters of the United States and/or State.**

On May 21, 2018, the Corps confirmed jurisdiction over 0.06-acre of seasonal wetland within the expanded limits of delineation which includes the project site (Attachments A and B).

Consequently, the proposed project will impact approximately 0.06-acre of jurisdictional seasonal wetland regarded as waters of the U.S. and State subject to regulation by the Corps and the RWQCB. *As such, pursuant to the CEQA, development of the proposed project would result in significant impacts to waters of the U.S. and State.* Such impacts could be mitigated to a level considered less than significant.

### **13.10 Mitigation Measure BIO-5. Waters of the United States and/or State**

Impacts to waters of the United States and/or State can be reduced to less-than-significant levels with incorporation of mitigation that includes avoidance, minimization of impacts, and/or mitigation compensation.

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The applicant shall compensate for the loss of wetlands via the purchase of wetland credit from a Corps- and RWQCB-approved wetland mitigation bank. The applicant shall mitigate for project-related impacts to 0.06-acre of waters of U.S./State via the purchase of 0.10-acre of wetland credit, or as otherwise necessary to mathematically round upwards in acreage to the smallest rare plant credit available that compensates at no less than a 1:1 impacts to mitigation ratio. This is the minimum mitigation acreage. This credit acreage may be modified by the Corps and/or RWQCB and will appear as a condition of issued permits from these agencies. Should the mitigation requirements differ in the conditions of issued Corps and RWQCB permits, these conditions must be implemented by the project. Proof of the purchase of wetland mitigation credits shall be provided to the City of Cotati, the Corps, and the RWQCB in advance of grading activities on the project site.

**When implemented, these mitigation measures would reduce project impacts to waters of the U.S./State to a level considered less than significant pursuant to CEQA.**

### **13.11 Impact BIO-6. Development of the proposed project would have a significant impact on protected trees**

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Trees present on the project site are comprised of a mix of non-native, native and protected trees, such as valley oak, Garry oak, and several non-native (landscape) tree species. Pursuant to the City of Cotati Tree Ordinance, mitigation is required for impacts to protected trees. ***As such, pursuant to the CEQA, development of the proposed project would result in significant impacts to protected trees.*** Such impacts could be mitigated to a level considered less than significant.

### **13.12 Mitigation BIO-6. Protected Trees**

The project will impact both native and non-native trees subject to the City of Cotati's Tree Protection Ordinance. Tree replacement mitigation measures are derived from the City of Cotati's *Tree Impact and Mitigation Policy Derived from City of Cotati Tree Mitigation and Protection Ordinance, Article 5, Chapter 17.54 of the City of Cotati Municipal Code Title 17 Land Use Code. Tree mitigation replacement numbers derived from Section 17.54.050 (Tree Required Replacement Trees. Planting and Replacement) Table 5-2.* An arborist report has been prepared by Mr. John Meserve that details tree impacts from the proposed project. The applicant shall submit the arborist report with a tree permit application as part of the application for the development project. The applicant shall mitigate impacts to trees as suggested in Table A below, or as otherwise required/modified by the City of Cotati.

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**Table A. Impacted Trees <sup>1</sup> and Mitigation Schedule per City of Cotati Tree Ordinance <sup>2</sup>**

<b>Tree Tag</b>	<b>Species</b>	<b>Circumference <sup>3</sup></b>	<b>Oak Tree Mitigation Replacement Numbers</b>	<b>Other Tree Species Mitigation Replacement Numbers <sup>4</sup></b>	<b>Tree Replacement Size <sup>5</sup></b>
2	<i>Quercus lobata</i>	36	5		15
7	<i>Quercus lobata</i>	113	20		15
8	<i>Quercus lobata</i>	50	10		15
20	<i>Quercus lobata</i>	194	20		15
21	<i>Quercus lobata</i>	31	5		15
22	<i>Quercus lobata</i>	61	10		15
23	<i>Quercus lobata</i>	39	5		15
24	<i>Quercus lobata</i>	50	10		15
26	<i>Quercus lobata</i>	17	5		15
27	<i>Quercus lobata</i>	65	10		15
30	<i>Quercus lobata</i>	38	5		15
31	<i>Quercus lobata</i>	35	5		15
33	<i>Quercus lobata</i>	57	10		15
34	<i>Quercus lobata</i>	69	10		15
37	<i>Quercus lobata</i>	79	10		15
40	<i>Quercus lobata</i>	135	20		15
41	<i>Quercus lobata</i>	110	20		15
43	<i>Quercus lobata</i>	63	10		15
44	<i>Sequoia sempervirens</i>	101		6	15
45	<i>Acacia melanoxylon</i>	40			15
46	<i>Acacia melanoxylon</i>	88		6	15
47	<i>Acacia melanoxylon</i>	44			15
48	<i>Quercus lobata</i>	22	5		15
49	<i>Quercus lobata</i>	79	10		15
50	<i>Quercus lobata</i>	72	10		15
51	<i>Quercus lobata</i>	107	20		15
52	<i>Juglans nigra</i>	69		4	15
53	<i>Sequoia sempervirens</i>	239		6	15
55	<i>Acer saccharinum</i>	94		6	15
56	<i>Quercus lobata</i>	63	10		15
<b>Totals</b>			245	28	

<sup>1</sup> Meserve, John C., 2017. *Tree Preservation and Mitigation Report (Updated)*. Horticultural Associates.

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<sup>2</sup> Tree Impact and Mitigation Policy Derived from City of Cotati Tree Mitigation and Protection Ordinance, Article 5, Chapter 17.54 of the City of Cotati Municipal Code Title 17 Land Use Code. Tree mitigation replacement numbers derived from Section 17.54.050 (Tree Required Replacement Trees. Planting and Replacement) Table 5-2.

<sup>3</sup> Multiple trunks at "Breast Height" have been summed to calculate circumference.

<sup>4</sup> Replacement tree species to be determined by the City of Cotati.

<sup>5</sup> The review of authority may allow up to fifty percent of the required replacement trees to be a five-gallon container size, where it determines that long-term tree health and survival will be improved by starting with a smaller container size.

**Planting replacement tree species as required by the Tree Ordinance with City of Cotati discretion that ensures tree replacement numbers and species are commensurate with suitability of the project site, would mitigate impacts to impacted trees to a level regarded as less than significant pursuant to the CEQA.**

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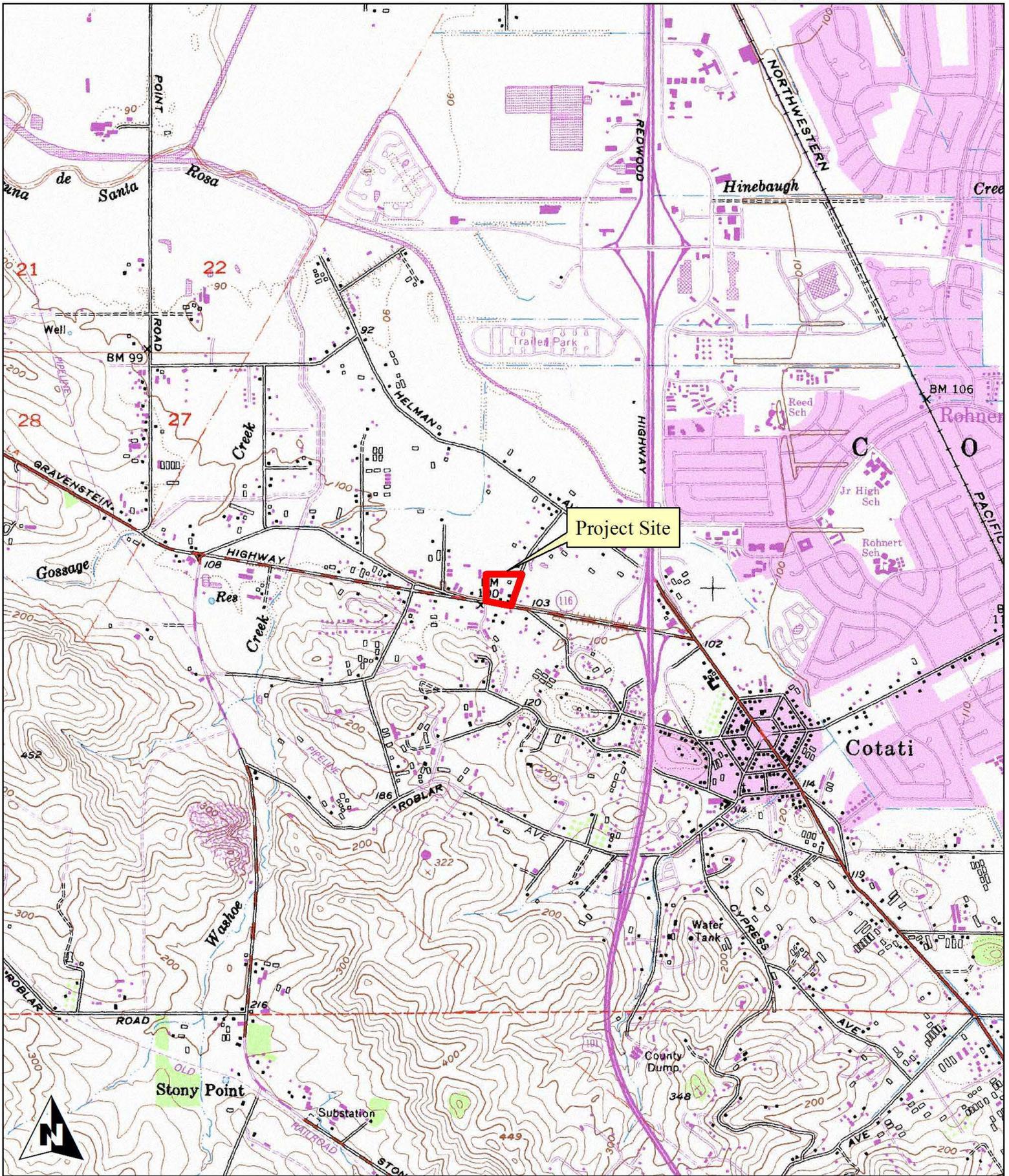
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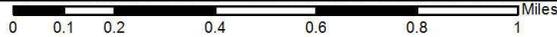




Monk & Associates  
Environmental Consultants  
1136 Saranap Avenue, Suite Q  
Walnut Creek, California 94595  
(925) 947-4867

Figure 2. Project Site  
Location Map  
Cotati, California

Land Grant  
Reds: 38.333158 -122.721363  
7.5-Minute Cotati quadrangle  
Topography Source: USGS  
Map Preparation Date: August 17, 2017

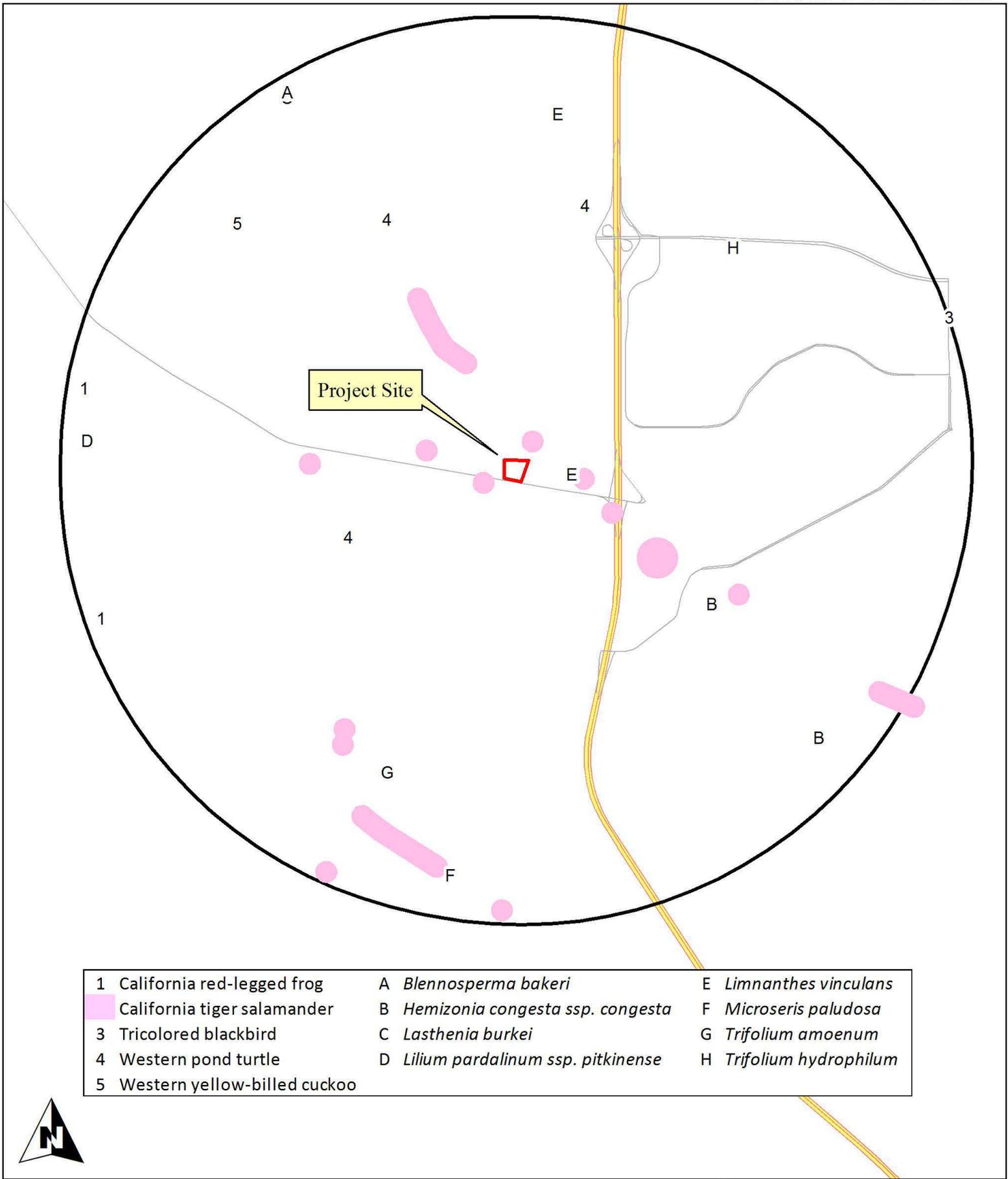




Monk & Associates  
Environmental Consultants  
1136 Saranap Avenue, Suite Q  
Walnut Creek, California 94595  
(925) 947-4867

Figure 3. Aerial Photograph of the  
Project Site  
Cotati, California

Aerial Photograph Source: ESRI  
Map Preparation Date: August 17, 2017



1 California red-legged frog	A <i>Blennosperma bakeri</i>	E <i>Limnanthes vinculans</i>
California tiger salamander	B <i>Hemizonia congesta ssp. congesta</i>	F <i>Microseris paludosa</i>
3 Tricolored blackbird	C <i>Lasthenia burkei</i>	G <i>Trifolium amoenum</i>
4 Western pond turtle	D <i>Lilium pardalinum ssp. pitkinense</i>	H <i>Trifolium hydrophilum</i>
5 Western yellow-billed cuckoo		



0 0.25 0.5 1 1.5 2 Miles

Figure 4. Closest Known Special-Status CNDDDB Species Within 2 Miles of the Project Site

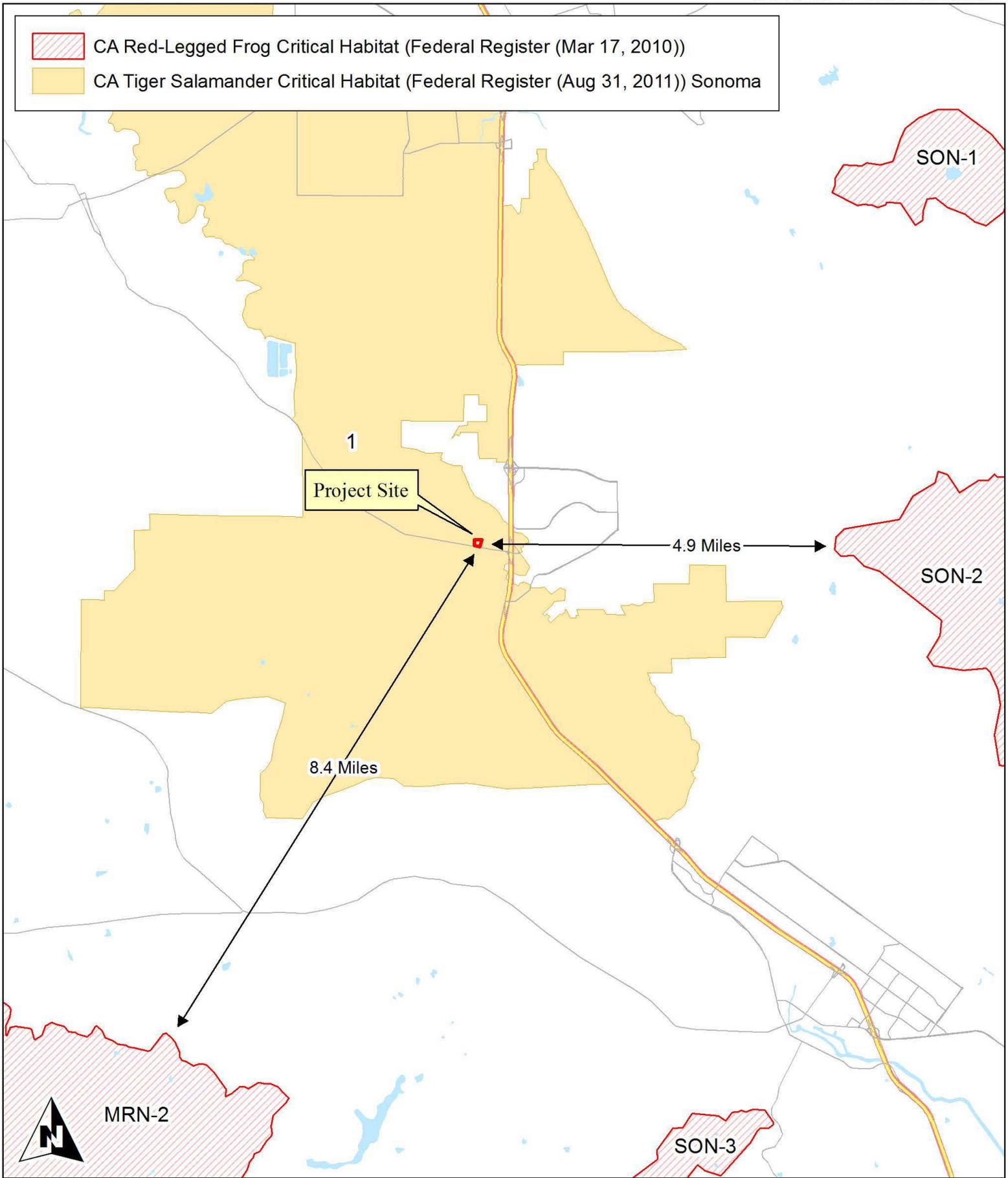
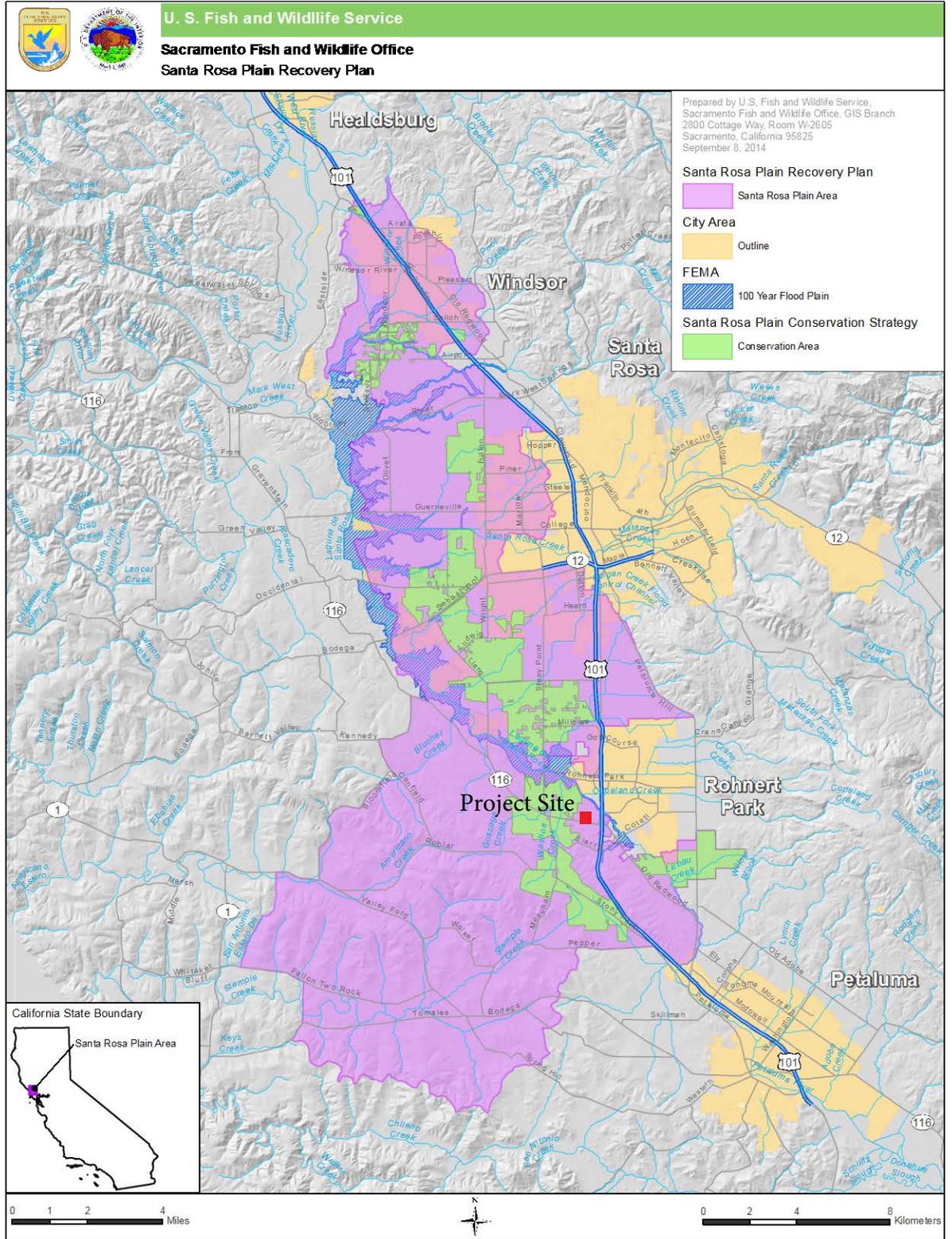


Figure 5. USFWS Critical Habitat in the Vicinity of the  
Project Site  
Cotati, California



Figure 6. CTS Mitigation Requirement - USFWS 2007 Programmatic Biological Opinion  
 Project Site, Cotati, California

Figure 7. Santa Rosa Plain Portion of Recovery Planning Area



**Table 1**  
**Plant Species Observed on the Project Site**

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**Gymnosperms**


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**Cupressaceae**

<i>Juniperus sp.</i>	Juniper
<i>Sequoia sempervirens</i>	Redwood

**Pinaceae**

* <i>Cedrus deodara</i>	Deodar cedar
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**Angiosperms - Dicots**


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**Amaranthaceae**

* <i>Amaranthus albus</i>	Tumble pigweed
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**Apiaceae**

* <i>Ammi majus</i>	Greater ammi
* <i>Conium maculatum</i>	Poison hemlock
* <i>Daucus carota</i>	Queen Anne's lace
* <i>Foeniculum vulgare</i>	Sweet fennel

**Apocynaceae**

* <i>Vinca major</i>	Periwinkle
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**Araliaceae**

* <i>Hedera helix</i>	English ivy
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**Asteraceae**

* <i>Anthemis cotula</i>	Mayweed
<i>Baccharis pilularis subsp. consanguinea</i>	Coyote brush
* <i>Calendula arvensis</i>	Field-marigold
* <i>Carduus pycnocephalus subsp. pycnocephalus</i>	Italian thistle
<i>Centromadia pungens subsp. pungens</i>	Common spikeweed
* <i>Cichorium intybus</i>	Chicory
* <i>Cirsium vulgare</i>	Bull thistle
* <i>Helminthotheca echioides</i>	Bristly ox-tongue
* <i>Hypochaeris radicata</i>	Rough cat's-ear
* <i>Lactuca saligna</i>	Willow lettuce
* <i>Lactuca serriola</i>	Prickly lettuce
* <i>Leontodon saxatilis subsp. saxatilis</i>	Long-beaked hawkbit
<i>Madia sativa</i>	Coast tarweed
* <i>Matricaria discoidea</i>	Pineapple-weed
* <i>Pseudognaphalium luteoalbum</i>	Everlasting cudweed
* <i>Senecio vulgaris</i>	Common groundsel
* <i>Silybum marianum</i>	Milk thistle
* <i>Sonchus asper subsp. asper</i>	Prickly sow-thistle
* <i>Sonchus oleraceus</i>	Common sow-thistle
* <i>Tragopogon porrifolius</i>	Common salsify
<i>Xanthium strumarium</i>	Cocklebur

**Brassicaceae**

* <i>Brassica nigra</i>	Black mustard
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\* Indicates a non-native species

**Table 1**  
**Plant Species Observed on the Project Site**

* <i>Capsella bursa-pastoris</i>	Shepherd's purse
* <i>Hirschfeldia incana</i>	Short-podded mustard
* <i>Lepidium didymum</i>	Wart cress
* <i>Raphanus raphanistrum</i>	Jointed charlock
* <i>Raphanus sativus</i>	Wild radish
* <i>Sisymbrium altissimum</i>	Tumble mustard
<b>Cactaceae</b>	
* <i>Opuntia sp.</i>	Prickly pear
<b>Caryophyllaceae</b>	
* <i>Cerastium glomeratum</i>	Mouse-ear chickweed
* <i>Spergularia rubra</i>	Ruby sand-spurrey
* <i>Stellaria media</i>	Common chickweed
<b>Chenopodiaceae</b>	
* <i>Chenopodium album</i>	White pigweed
<b>Convolvulaceae</b>	
* <i>Convolvulus arvensis</i>	Bindweed
<b>Euphorbiaceae</b>	
<i>Croton setiger</i>	Turkey mullein
* <i>Euphorbia pepulus</i>	Petty spurge
<b>Fabaceae</b>	
* <i>Acacia melanoxydon</i>	Blackwood acacia
<i>Acmispon americanus var. americanus</i>	Spanish-clover
* <i>Lathyrus hirsutus</i>	Caley pea
* <i>Lotus corniculatus</i>	Birdfoot trefoil
<i>Lupinus bicolor</i>	Bicolored lupine
<i>Lupinus nanus</i>	Sky lupine
* <i>Medicago polymorpha</i>	California burclover
* <i>Robinia pseudoacacia</i>	Black locust
<i>Trifolium ciliolatum</i>	Foothill clover
* <i>Trifolium dubium</i>	Little hop clover
* <i>Trifolium hirtum</i>	Rose clover
* <i>Trifolium incarnatum</i>	Crimson clover
* <i>Trifolium subterraneum</i>	Subterranean clover
* <i>Vicia benghalensis</i>	Purple vetch
* <i>Vicia sativa subsp. nigra</i>	Narrow-leaved vetch
* <i>Vicia sativa subsp. sativa</i>	Spring vetch
<b>Fagaceae</b>	
<i>Quercus garryana var. garryana</i>	Garry oak
<i>Quercus kelloggii</i>	California black oak
<i>Quercus lobata</i>	Valley oak
<b>Geraniaceae</b>	
* <i>Erodium botrys</i>	Broad-leaf filaree
* <i>Erodium moschatum</i>	White-stem filaree
* <i>Geranium dissectum</i>	Cut-leaf geranium

**Table 1**  
**Plant Species Observed on the Project Site**

<b>Juglandaceae</b>	
<i>Juglans hindsii</i>	Northern California black walnut
<b>Lamiaceae</b>	
* <i>Lamium amplexicaule</i>	Deadnettle
* <i>Mentha pulegium</i>	Pennyroyal
<b>Lythraceae</b>	
* <i>Lythrum hyssopifolia</i>	Hyssop loosestrife
<b>Malvaceae</b>	
* <i>Malva nicaeensis</i>	Bull mallow
<b>Montiaceae</b>	
<i>Claytonia perfoliata</i>	Miner's lettuce
<b>Myrsinaceae</b>	
* <i>Lysimachia arvensis</i>	Scarlet pimpernel
<b>Onagraceae</b>	
<i>Epilobium brachycarpum</i>	Summer cottonweed
<i>Epilobium ciliatum subsp. ciliatum</i>	Hairy willow-herb
<b>Oxalidaceae</b>	
<i>Oxalis pilosa</i>	Hairy wood-sorrel
<b>Papaveraceae</b>	
<i>Eschscholzia californica</i>	California poppy
<b>Plantaginaceae</b>	
* <i>Kickxia spuria</i>	Round-leaved toadflax
* <i>Plantago lanceolata</i>	English plantain
<i>Veronica peregrina subsp. xalapensis</i>	Purslane speedwell
<b>Polygonaceae</b>	
* <i>Polygonum aviculare</i>	Common knotweed
* <i>Rumex acetosella</i>	Sheep sorrel
<i>Rumex californicus</i>	California willow dock
* <i>Rumex crispus</i>	Curly dock
* <i>Rumex pulcher</i>	Fiddle dock
<b>Ranunculaceae</b>	
* <i>Ranunculus muricatus</i>	Spiny-fruit buttercup
<b>Rosaceae</b>	
* <i>Rubus armeniacus</i>	Himalayan blackberry
<b>Rubiaceae</b>	
<i>Galium aparine</i>	Goose grass
<b>Salicaceae</b>	
<i>Populus sp.</i>	Cottonwood
<b>Theaceae</b>	
* <i>Camellia japonica</i>	Camellia

\* Indicates a non-native species

**Table 1**  
**Plant Species Observed on the Project Site**

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**Angiosperms -Monocots**

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**Amaryllidaceae**

\**Agapanthus orientalis* Lilly-of-the-Nile

**Araceae**

\**Arum italicum* Italian arum

**Arecaceae**

*Washingtonia filifera* California fan palm

**Cyperaceae**

*Carex echinata subsp. echinata* Prickly little sedge

*Cyperus eragrostis* Tall flatsedge

**Juncaceae**

*Juncus bufonius* Toad rush

*Juncus patens* Spreading rush

*Juncus phaeocephalus* Brown-headed rush

*Juncus phaeocephalus var. paniculatus* Panicked rush

**Poaceae**

\**Alopecurus pratensis* Meadow foxtail

\**Arrhenatherum elatius* Tall oatgrass

\**Arundo donax* Giant reed

\**Avena barbata* Slender wild oat

\**Avena fatua* Wild oat

\**Briza minor* Small quaking grass

*Bromus carinatus var. carinatus* California brome

\**Bromus catharticus var. elatus* Chilean brome

\**Bromus diandrus* Ripgut grass

\**Bromus hordeaceus* Soft chess

\**Bromus madritensis subsp. madritensis* Foxtail chess

\**Cynodon dactylon* Bermudagrass

\**Dactylis glomerata* Orchard grass

\**Ehrharta erecta* Panic veldt grass

*Elymus triticoides* Creeping wildrye

\**Festuca arundinacea* Tall fescue

\**Festuca bromoides* Brome fescue

\**Festuca myuros* Rattail sixweeks grass

\**Festuca perennis* Italian ryegrass

\**Holcus lanatus* Common velvet grass

*Hordeum brachyantherum* Meadow barley

\**Hordeum marinum subsp. gussoneanum* Mediterranean barley

\**Hordeum murinum subsp. leporinum* Hare barley

\**Pennisetum villosum* Feathertop

\**Phalaris aquatica* Harding grass

*Pleuropogon californicus var. californicus* Annual semaphore grass

\**Poa annua* Annual bluegrass

\**Polypogon monspeliensis* Annual beard grass

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\* Indicates a non-native species

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**Table 2**  
**Wildlife Species Observed on the Project Site**

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**Birds**

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Eurasian collared-dove	<i>Streptopelia decaocto</i>
Mourning dove	<i>Zenaida macroura</i>
Black phoebe	<i>Sayornis nigricans</i>
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>
Bushtit	<i>Psaltriparus minimus</i>
Western bluebird	<i>Sialia mexicana</i>
Northern mockingbird	<i>Mimus polyglottos</i>
European starling	<i>Sturnus vulgaris</i>
California towhee	<i>Pipilo crissalis</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed cowbird	<i>Molothrus ater</i>
House finch	<i>Haemorhous mexicanus</i>
Lesser goldfinch	<i>Spinus psaltria</i>
House sparrow	<i>Passer domesticus</i>

**Table 3**  
**Special-Status Plant Species Known to Occur in the Vicinity of the Project Site**

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<b>Asteraceae</b>					
<i>Blennosperma bakeri</i> Sonoma sunshine	Fed: FE State: CE CNPS: Rank 1B.1	February-April	Valley and foothill grassland (mesic); vernal pools.	Record for this species located 2.0 mile northwest from the project site (Occurrence No. 20).	None. Seasonal wetland habitat onsite but not detected during appropriately timed surveys conducted in 2015 and 2017. See text for further information.
<i>Centromadia parryi parryi</i> Pappose tarplant	Fed: - State: - CNPS: Rank 1B.2	May-November	Coastal prairie; meadows and seeps; marshes and swamps; vernal wet grassland (sometimes alkaline).	CNPS 1-Quad Search	None. Seasonal wetland habitat onsite but not detected during appropriately timed surveys conducted in 2015, 2016 and 2017. No impacts anticipated.
<i>Hemizonia congesta congesta</i> White seaside tarplant	Fed: - State: - CNPS: Rank 1B.2	April-November	Valley and foothill grassland. 20 to 560 meters.	Record for this species located 1.2 mile northeast from the project site (Occurrence No. 12).	None. Marginal habitat present. Not detected during appropriately timed surveys conducted in 2015, 2016 and 2017. No impacts anticipated.
<i>Lasthenia burkei</i> Burke's goldfields	Fed: FE State: CE CNPS: Rank 1B.1	April-June	Meadows and seeps (mesic); vernal pools.	Record for this species located 2.0 mile northwest from the project site (Occurrence No. 29).	None. Seasonal wetland habitat onsite but not detected during appropriately timed surveys conducted in 2015 and 2017. See text for further information.
<i>Microseris paludosa</i> Marsh microseris	Fed: - State: - CNPS: Rank 1B.2	April-July	Closed-cone coniferous forest; cismontane woodland; coastal scrub; valley and foothill grassland. 5-300 m.	Record for this species located 1.8 mile south from the project site (Occurrence No. 18).	None. No suitable habitat present. Not detected during appropriately timed surveys conducted in 2015, 2016 and 2017. No impacts anticipated.
<b>Cyperaceae</b>					
<i>Rhynchospora globularis</i> Roundheaded beaked-rush	Fed: - State: - CNPS: Rank 2B.1	July-August	Marshes and swamps (freshwater).	CNPS 1-Quad Search	None. No marsh or swamps onsite. Not detected during appropriately timed surveys conducted in 2015, 2016 and 2017. No impacts anticipated.

**Table 3**  
**Special-Status Plant Species Known to Occur in the Vicinity of the Project Site**

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<b>Fabaceae</b>					
<i>Trifolium amoenum</i> Showy Indian clover	Fed: FE State: - CNPS: Rank 1B.1	April-June	Valley and foothill grassland (sometimes serpentinite)	Record for this species located 1.8 mile south from the project site (Occurrence No. 18).	None. No suitable habitat present. Not detected during appropriately timed surveys conducted in 2015 and 2017. No impacts anticipated.
<i>Trifolium hydrophilum</i> Saline clover	Fed: - State: - CNPS: Rank 1B.2	April-June	Marshes and swamps; valley and foothill grassland (mesic, alkaline); vernal pools. 0-300 m.	Record for this species located 1.3 mile northeast from the project site (Occurrence No. 49).	None. No suitable habitat present. Not detected during appropriately timed surveys conducted in 2015 and 2017. No impacts anticipated.
<b>Liliaceae</b>					
<i>Fritillaria liliacea</i> Fragrant fritillary	Fed: - State: - CNPS: Rank 1B.2	February-April	Coastal prairie; coastal scrub; valley and foothill grassland; [often serpentinite].	Record for this species located 3.0 mile west from the project site (Occurrence No. 47).	None. No suitable habitat. Not detected during appropriately timed surveys conducted in 2015 and 2017. No impacts anticipated.
<i>Lilium pardalinum pitkinense</i> Pitkin Marsh lily	Fed: FE State: CE CNPS: Rank 1B.1	June-July	Cismontane woodland (mesic); meadows and seeps; marshes and swamps (freshwater).	Record for this species located 3.0 mile west from the project site (Occurrence No. 3).	None. No meadows, seeps, woodland or marshes onsite. Not detected during appropriately timed surveys conducted in 2016 and 2017. No impacts anticipated.
<b>Limnanthaceae</b>					
<i>Limnanthes vinculans</i> Sebastopol meadowfoam	Fed: FE State: CE CNPS: Rank 1B.1	April-May	Meadows (mesic); vernal pools.	Record for this species located 0.1 mile east from the project site (Occurrence No.352).	None. Seasonal wetland habitat onsite but not detected during appropriately timed surveys conducted in 2015 and 2017. See text for further information.

**Table 3**

**Special-Status Plant Species Known to Occur in the Vicinity of the Project Site**

Family	Taxon	Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<b>Poaceae</b>	<i>Pleuropogon hooverianus</i>	North coast semaphore grass	Fed: - State: CT CNPS: Rank 1B	May-August	Broadleaved upland forest; meadows; north coast coniferous forest; vernal pools; [mesic].	CNPS 1-Quad Search	None. Seasonal wetland habitat onsite but not detected during appropriately timed surveys in 2015, 2016 and 2017. No impacts anticipated.

**\*Status**

- Federal:  
 FE - Federal Endangered  
 FT - Federal Threatened  
 FPE - Federal Proposed Endangered  
 FPT - Federal Proposed Threatened  
 FC - Federal Candidate
- State:  
 CE - California Endangered  
 CT - California Threatened  
 CR - California Rare  
 CC - California Candidate  
 CSC - California Species of Special Concern
- CNPS:  
 Rank 1A - Presumed extinct in California  
 Rank 1B - Plants rare, threatened, or endangered in California and elsewhere  
 Rank 1B.1 - Seriously endangered in California (over 80% occurrences threatened/ high degree and immediacy of threat)  
 Rank 1B.2 - Fairly endangered in California (20-80% occurrences threatened)  
 Rank 1B.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

- CNPS Continued:  
 Rank 2 - Plants rare, threatened, or endangered in California, but more common elsewhere  
 Rank 2A - Extirpated in California, common elsewhere  
 Rank 2B.1 - Seriously endangered in California, but more common elsewhere  
 Rank 2B.2 - Fairly endangered in California, but more common elsewhere  
 Rank 2B.3 - Not very endangered in California, but more common elsewhere  
 Rank 3 - Plants about which we need more information (Review List)  
 Rank 3.1 - Plants about which we need more information (Review List)  
 Rank 3.2 - Plants about which we need more information (Review List)  
 Rank 4 - Plants of limited distribution - a watch list

**Table 4**  
**Special-Status Wildlife Species Known to Occur in the Vicinity of the Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
<b>Fish</b>				
Steelhead - Central California Coast DPS <i>Oncorhynchus mykiss irideus</i>	Fed: FT State: - Other:	From Russian River south to Soquel Creek, and to Pajaro River. Also found in San Francisco & San Pablo Bay Basins. Spawn in clear, cool, well oxygenated streams greater than 18 cm deep.	2002 record for this species located 3.0 miles east from the project site (Occurrence No. 37).	None. No suitable habitat. No creeks/streams on or near the project site.
<b>Amphibians</b>				
California tiger salamander <i>Ambystoma californiense</i>	Fed: FT State: CT Other:	Found in grassland habitats of the valleys and foothills. Requires burrows for aestivation and standing water until late spring (May) for larvae to metamorphose.	2001 record for this species located 0.1 mile north from the project site (Occurrence No. 648).	Low. CTS known to be present in 2003/2004 but removed from site. See text for further detail.
California red-legged frog <i>Rana draytonii</i>	Fed: FT State: CSC Other:	Occurs in lowlands and foothills in deeper pools and streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.	2004 record for this species located 1.7 miles south from the project site (Occurrence No. 779).	None. No suitable habitat (e.g. creeks, streams) anywhere near the project site.
Foothill yellow-legged frog <i>Rana boylei</i>	Fed: -- State: CC Other:	Found in partially shaded, shallow streams with rocky substrates. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.	1996 record for this species located 2.5 miles east from the project site (Occurrence No. 161).	None. No suitable habitat. No creeks anywhere near the project site.
<b>Reptiles</b>				
Western pond turtle ** <i>Actinemys marmorata marmorata</i>	Fed: - State: CSC Other:	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying. Occurs in the Central Valley and Contra Costa County.	1992 record for this species located 0.8 mile west from the project site (Occurrence No. 402).	None. No suitable habitat. No ponds anywhere near the project site.

**Table 4**  
**Special-Status Wildlife Species Known to Occur in the Vicinity of the Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
<b>Birds</b>				
California yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Fed: - State: CE Other: -	Riparian forest nester along broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods w/ lower story of blackberry, nettles, or wild grape.	1923 record for this species located 1.8 miles northwest from the project site (Occurrence No. 97).	None. No riparian habitat anywhere near the project site.
Tricolored blackbird <i>Agelaius tricolor</i>	Fed: - State: CC Other: CSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	1976 record for this species located 2.2 mile east from the project site (Occurrence No. 325).	None. No suitable habitat (e.g. creeks, ponds) anywhere near the project site.
<b>Mammals</b>				
Pallid bat <i>Antrozous pallidus</i>	Fed: - State: CSC Other: -	Occurs in deserts, grasslands, shrublands, woodlands, and forests. Most common in dry habitats with rocky areas for roosting. Roosts in caves, crevices, mines, and occasionally hollow trees. Night roosts in open areas such as porches and open buildings.	1997 record for this species located 9.0 mile southeast from the project site (Occurrence No. 50).	Low. Abandoned buildings on site provide suitable roost site. Pre-demolition surveys warranted.
American badger <i>Taxidea taxus</i>	Fed: - State: CSC Other: -	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Need sufficient food, friable soils & open, uncultivated ground. Prey on burrowing rodents. Dig burrows.	2007 record for this species located 2.5 miles south from the project site (Occurrence No. 407).	None. Too developed in the area. Very unlikely occurrence in the area.

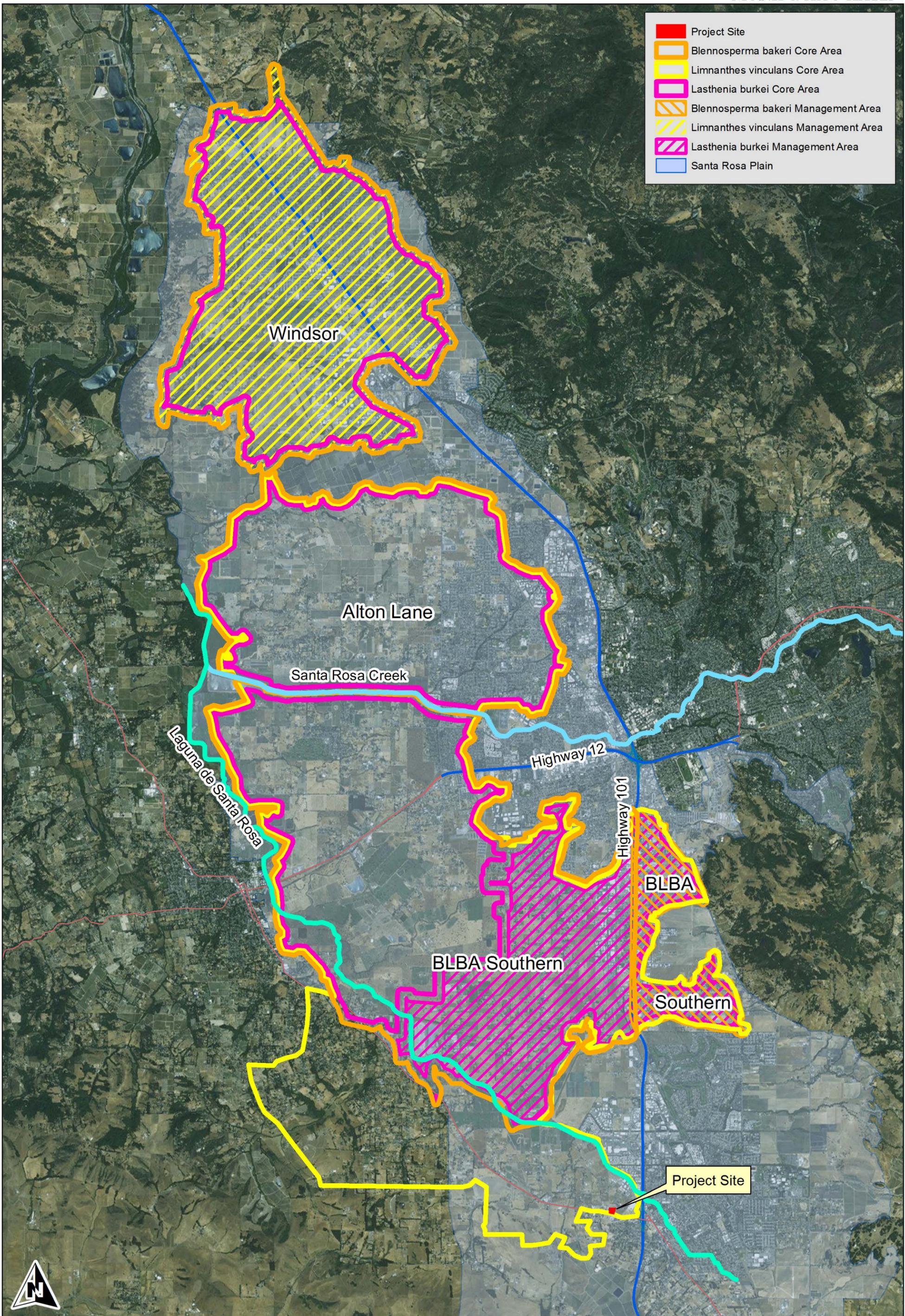
**Table 4**  
**Special-Status Wildlife Species Known to Occur in the Vicinity of the Project Site**

Species	*Status	Habitat	Closest Locations	Probability on Project Site
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**\*Status**

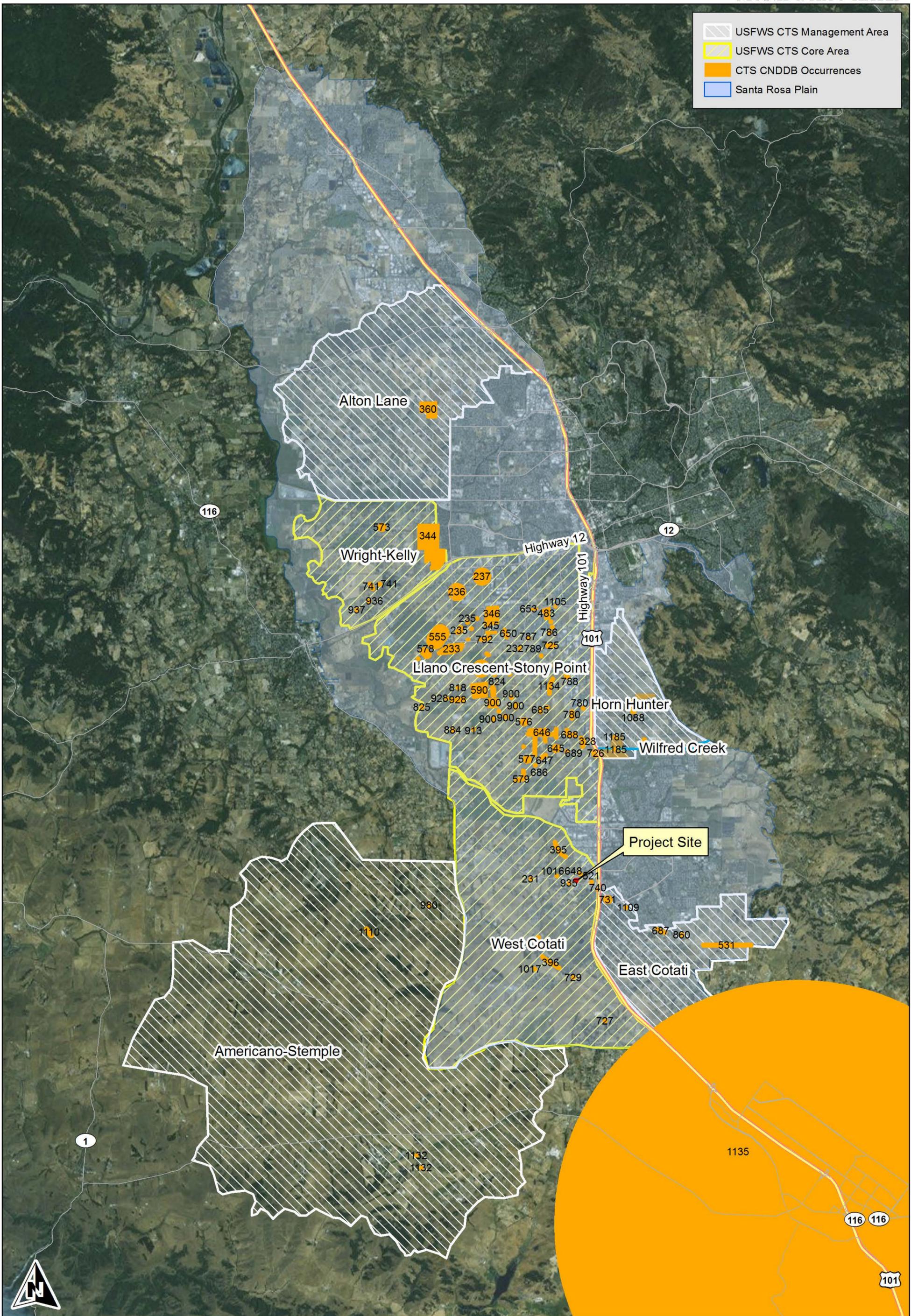
- |  |   |
|--|---|
| Federal:                               | State:  |
| FE - Federal Endangered                | CE - California Endangered                      |
| FT - Federal Threatened                | CT - California Threatened                      |
| FPE - Federal Proposed Endangered      | CR - California Rare                            |
| FPT - Federal Proposed Threatened      | CC - California Candidate                       |
| FC - Federal Candidate                 | CSC - California Species of Special Concern     |
| FPD - Federally Proposed for delisting | FP - Fully Protected                            |
|  | WL - Watch List. Not protected pursuant to CEQA |

\*\*The USFWS hopes to finish a 12-month finding for western pond turtle in 2021 but until formally listed, it is not afforded the protections of FESA.



- Project Site
- Blennosperma bakeri* Core Area
- Limnanthes vinculans* Core Area
- Lasthenia burkei* Core Area
- Blennosperma bakeri* Management Area
- Limnanthes vinculans* Management Area
- Lasthenia burkei* Management Area
- Santa Rosa Plain





- USFWS CTS Management Area
- USFWS CTS Core Area
- CTS CNDDB Occurrences
- Santa Rosa Plain

Wetland #	Sq. Ft.	Acres
W1	2,670	0.06

- Control Points
- Data Points
- Confirmed Wetland (2,670 Sq. Ft., 0.06 Acre)
- Reinforced Concrete Pipe
- Corrugated Metal Pipe
- Drain Inlet
- Firehydrant
- Limits of Delineation (275,935 Sq. Ft., 6.33 Acres)



**Preliminary Jurisdictional Determination**  
 Pursuant to Section 404 of Clean Water Act  
 and Section 10 of the Rivers and Harbors Act.

U. S. Army Corps  
 of Engineers  
 San Francisco District  
 Regulatory Branch

**Highway 116 west Alder Avenue**  
 Cotati, Sonoma County  
 38.332737°N, -122.72277°W  
 APNs 999-999-ROW, 144-040-008, 144-040-021,  
 144-040-006, 144-050-009 and 144-110-ROW  
 Map accurately presents jurisdiction.  
 File #2007-00822N      May 21, 2018



Monk & Associ.  
 Environmental Consultants  
 1136 Saranap Avenue, Suite Q  
 Walnut Creek, California 94595  
 (925) 947-4867

**Sheet 1. Aquatic Resources Map**  
 Reds Project Site and Highway 116 Offsite Improvement Area  
 Cotati, California

Delineation Date: July 15, 2016, April 24, 2017 and March 20, 2018  
 Delineation Conducted by: Geoff Monk & Christy Owens  
 Verification by: Roberta Morganstern, US Army Corps of Engineers  
 Aerial Photograph Source: ESRI  
 Map Preparation Date: May 15, 2018



**DEPARTMENT OF THE ARMY**  
**SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS**  
1455 MARKET STREET, 16<sup>TH</sup> FLOOR  
SAN FRANCISCO, CALIFORNIA 94103-1398  
MAY 21, 2018

Regulatory Division

Subject: File No. 2007-00822N

Ms. Christy Owens  
c/o Monk & Associates  
1136 Saranap Avenue Suite 0  
Walnut Creek, California 94595

Dear Ms. Owens:

This correspondence is in reference to your submittal of May 10, 2018 on behalf of Townsend Capital Partners, LLC requesting a preliminary jurisdictional determination of the extent of navigable waters of the United States (U.S.) and waters of the U.S. occurring on a parcel located on Gravenstein Highway / Highway 116 west of the intersection with Alder avenue in Cotati, Sonoma County, California. Coordinates for the location are 38.332737°N, -122.72277°W; APNs 999-999-ROW, 144-040-008, 144-040-021, 144-040-006, 144-050-009 and 144-110-ROW.

All proposed discharges of dredged or fill material occurring below the plane of ordinary high water in non-tidal waters of the U.S.; or below the high tide line in tidal waters of the U.S.; or within the lateral extent of wetlands adjacent to these waters, typically require Department of the Army authorization and the issuance of a permit under Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq.*). Waters of the U.S. generally include the territorial seas; all traditional navigable waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide; wetlands adjacent to traditional navigable waters; non-navigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally; and wetlands directly abutting such tributaries. Where a case-specific analysis determines the existence of a "significant nexus" effect with a traditional navigable water, waters of the U.S. may also include non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary; and certain ephemeral streams in the arid West.

The enclosed delineation map titled "Highway 116 west Alder Avenue" certified May 21, 2018, depicts the extent and location of wetlands within the boundary area of the site that **may** be subject to U.S. Army Corps of Engineers' regulatory authority under Section 404 of the Clean Water Act. This preliminary jurisdictional determination is based on the current conditions of the site, as verified during a field investigation of September 8, 2017, a review of available digital photographic imagery, and a review of other data included in your submittal. While this preliminary jurisdictional determination was conducted pursuant to Regulatory Guidance Letter

No. 16-01, *Jurisdictional Determinations*, it may be subject to future revision if new information or a change in field conditions becomes subsequently apparent. The basis for this preliminary jurisdictional determination is fully explained in the enclosed *Preliminary Jurisdictional Determination Form*. You are requested to sign and date this form and return it to this office within two weeks of receipt.

You are advised that the preliminary jurisdictional determination may **not** be appealed through the U.S. Army Corps of Engineers' *Administrative Appeal Process*, as described in 33 C.F.R. § 331 (65 Fed. Reg. 16,486; Mar. 28, 2000). Under the provisions of 33 C.F.R. § 331.5(b)(9), non-appealable actions include preliminary jurisdictional determinations since they are considered to be only advisory in nature and make no definitive conclusions on the jurisdictional status of the water bodies in question. However, you may request this office to provide an approved jurisdictional determination that precisely identifies the scope of jurisdictional waters on the site; an approved jurisdictional determination may be appealed through the *Administrative Appeal Process*. If you anticipate requesting an approved jurisdictional determination at some future date, you are advised not to engage in any on-site grading or other construction activity in the interim to avoid potential violations and penalties under Section 404 of the Clean Water Act. Finally, you may provide this office new information for further consideration and request a reevaluation of this preliminary jurisdictional determination.

You may refer any questions on this matter to Roberta A Morganstern of the Regulatory staff by telephone at 415-503-6782 or by e-mail at [Roberta.A.Morganstern@usace.army.mil](mailto:Roberta.A.Morganstern@usace.army.mil). All correspondence should be addressed to the Regulatory Division North Branch referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. The Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you

would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: <http://www.spn.usace.army.mil/regulatory/>.

Sincerely,

MORGANSTERN.ROBER  
TA.A.1365700083

Digitally signed by MORGANSTERN.ROBERTA.A.1365700083  
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,  
cn=MORGANSTERN.ROBERTA.A.1365700083  
Date: 2018.05.21 15:45:56 -0700

Roberta Morganstern, M.A.  
Regulatory Project Manager

Enclosure

Copy Furnished (**electronically**):

[Stephen.Bargsten@waterboards.ca.gov](mailto:Stephen.Bargsten@waterboards.ca.gov)  
[christy@monkassociates.com](mailto:christy@monkassociates.com)

# PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

District Office San Francisco District File/ORM # 2007-400822N Monahan Pacific Com PJD Date: May 18, 2018

State <u>CA</u> City/County <u>Sonoma</u>	Name/ Address of Person Requesting PJD	<u>Monk &amp; Associates, Inc for Townsend Capital Partners, LLC 1101 Fifth Avenue, Suite 130 San Rafael, California 94901</u>
Nearest Waterbody: <u>Laguna Santa Rosa</u>		
Location: TRS, LatLong or UTM: <u>38.332705N' -122.722759W NAD83</u>		

Identify (Estimate) Amount of Waters in the Review Area:	Name of Any Water Bodies on the Site Identified as Section 10 Waters:	Tidal: <u>none</u>
<u>Non-Wetland Waters:</u> <u>0</u> linear ft <u>    </u> width <u>    </u> acres Stream Flow: <u>    </u>	Non-Tidal: <u>none</u>	
<u>Wetlands:</u> <u>0.06</u> acre(s) Cowardin Class: <u>N/A</u>	<input type="checkbox"/> Office (Desk) Determination <input checked="" type="checkbox"/> Field Determination:	Date of Field Trip: <u>September 8, 2017</u>

**SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Geoff Mond
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite quad name:
- USDA Natural Resources Conservation Service Soil Survey. Citation:
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is:
- Photographs:  Aerial (Name & Date): ESRI map prepared 8/17/2017
  - Other (Name & Date):
- Previous determination(s). File no. and date of response letter:
- Other information (please specify):

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

Signature and Date of Regulatory Project Manager  
(REQUIRED)

Signature and Date of Person Requesting Preliminary JD  
(REQUIRED, unless obtaining the signature is impracticable)

### EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.



Wetland #	Sq. Ft.	Acres
W1	2,670	0.06

- Control Points
- Data Points
- Confirmed Wetland (2,670 Sq. Ft., 0.06 Acre)
- Reinforced Concrete Pipe
- Corrugated Metal Pipe
- Drain Inlet
- Firehydrant
- Limits of Delineation (275,935 Sq. Ft., 6.33 Acres)

38.33379 -122.722186

38.332143 -122.719343

**U.S. Army Corps of Engineers**  
 San Francisco District  
 Regulatory Branch

Preliminary Jurisdictional Determination  
 Pursuant to Section 404 of Clean Water Act  
 and Section 10 of the Rivers and Harbors Act.

**Highway 116 west Alder Avenue**  
 Cotati, Sonoma County  
 38.332737°N, -122.72277°W

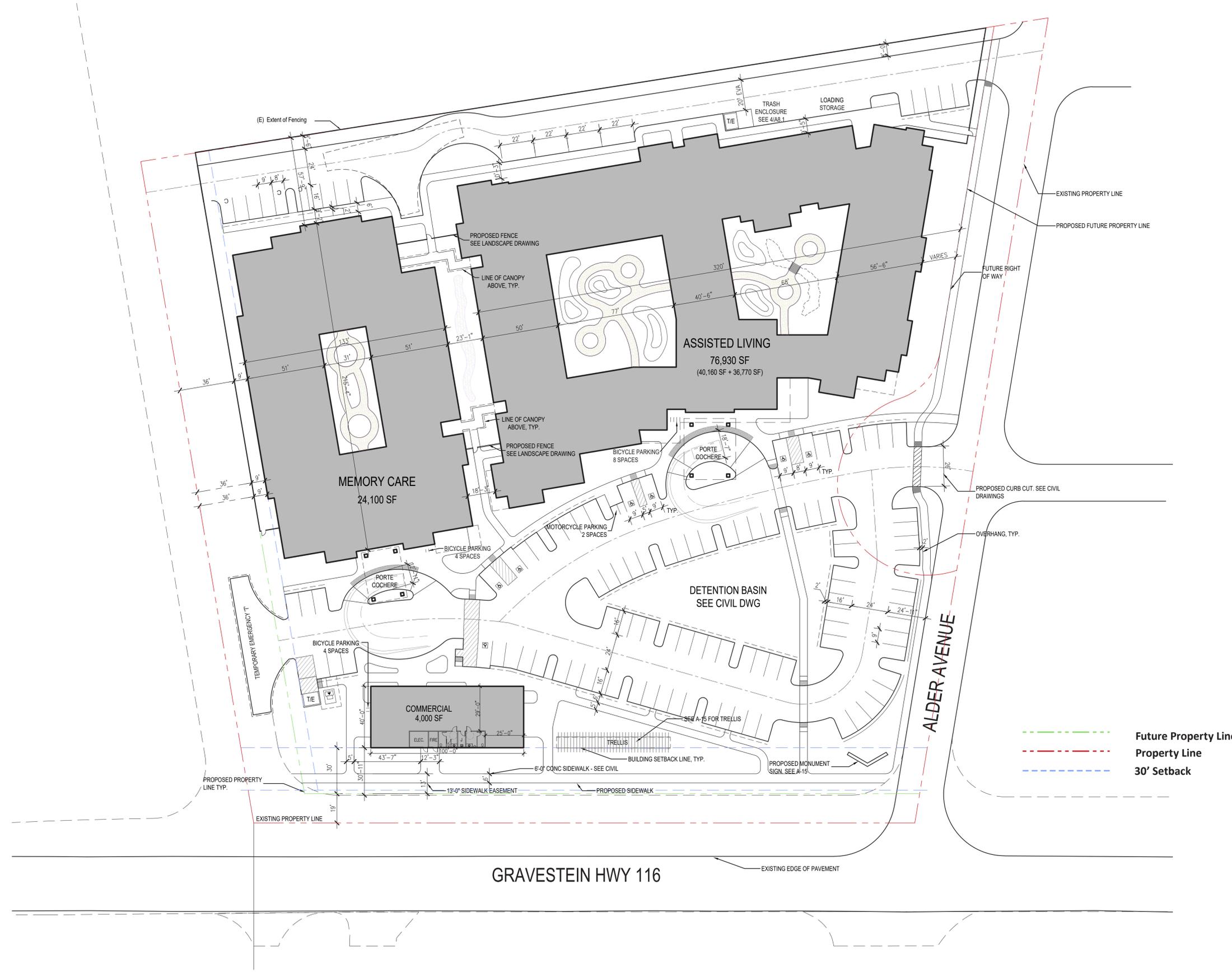
APNs 999-999-ROW, 144-040-008, 144-040-021,  
 144-040-006, 144-050-009 and 144-110-ROW  
 Map accurately presents jurisdiction.  
 File #2007-00822N May 21, 2018

Delineation Date: July 15, 2016, April 24, 2017 and March 20, 2018  
 Delineation Conducted by: Geoff Monk & Christy Owens  
 Verification by: Roberta Morgansalern, US Army Corps of Engineers  
 Aerial Photograph Source: ESRI  
 Map Preparation Date: May 15, 2018

Scale: 1 inch = 100 feet

Sheet 1 - Aquatic Resources Map  
 Red's Project Site and Highway 116 Offsite Improvement Area  
 Cotati, California

Monk & Associates  
 Environmental Consultants  
 1136 Saranap Avenue, Suite Q  
 Walnut Creek, California 94595  
 (925) 947-4867



--- Future Property Line  
- - - Property Line  
--- 30' Setback

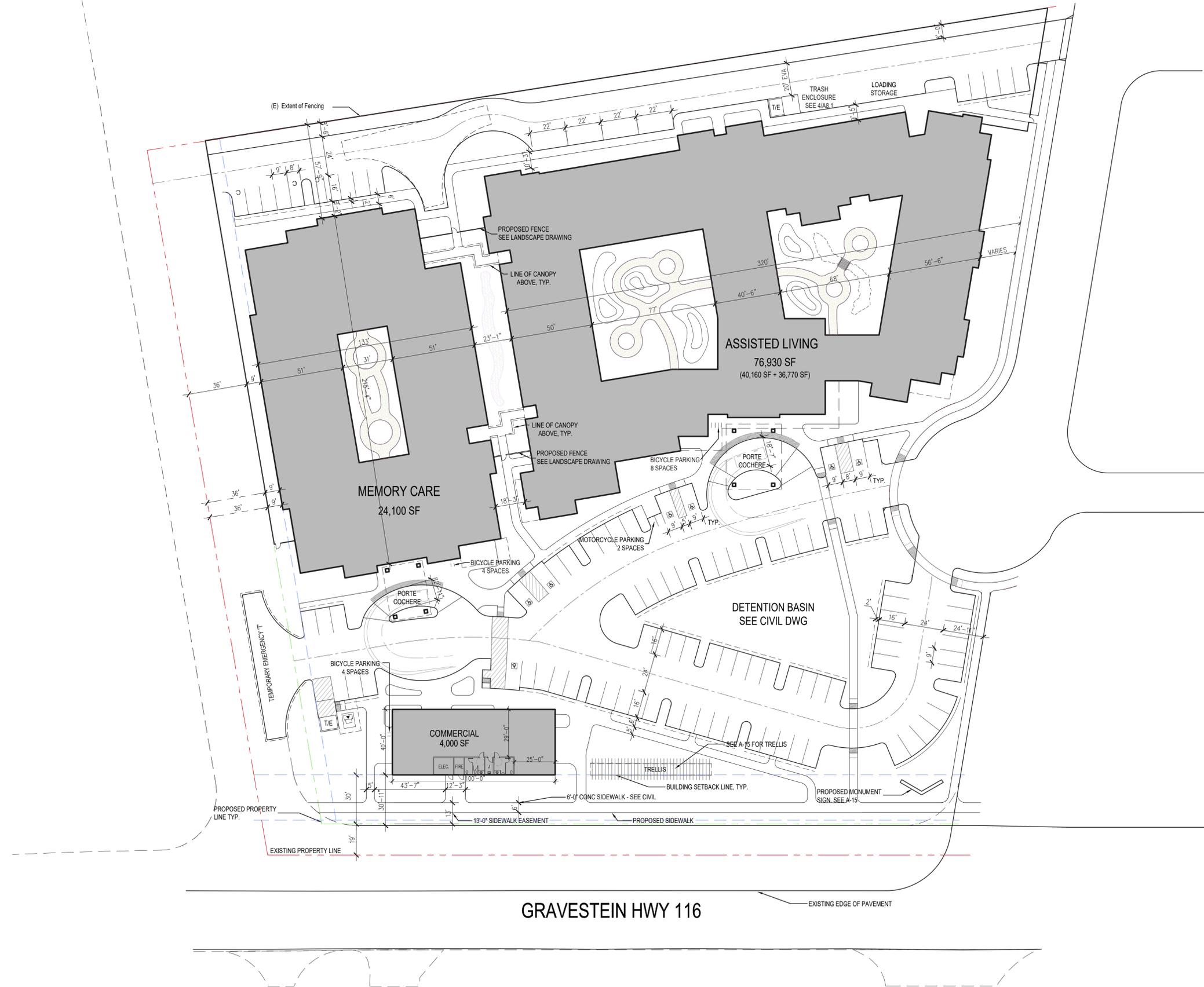


Plot Date: Sep. 30, 2018  
File Location: \\SF-SGPA-FS\projects\2018\21852 - Cotat Senior Living\01\_Working Files\2018\_10\_01\_New Planning Submittal Set\2018\_09\_27\_Planning Submittal.indd

### Sterling Senior Communities

Project No.: 21852  
09 . 30 . 2018

0' 20' 40'  
8 1/2"x11": 1"=80' | 24"x36": 1"=20'



GRAVESTEIN HWY 116



Proposed Future Site Plan

A-3