CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
BAY DELTA REGION
2825 CORDELIA ROAD, SUITE 100
FAIRFIELD, CA 94534

STREAMBED ALTERATION AGREEMENT
EPIMS-SOL-51987-R3

CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 4
ATTN: LINDSAY VIVIAN
111 GRAND AVENUE
OAKLAND CA 94612

INTERSTATE 80 (I-80) WESTBOUND CORDELIA COMMERCIAL VEHICLE ENFORCEMENT FACILITY PROJECT (04-0A53T)

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and California Department of Transportation (Permittee), as represented by Lindsay Vivian.

RECITALS

WHEREAS, pursuant to Fish and Game Code section 1602, Permittee notified CDFW on October 9, 2024, that Permittee intends to complete the project described herein.

WHEREAS, pursuant to Fish and Game Code section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The I-80 Westbound Cordelia Commercial Vehicle Enforcement Facility (CCVEF) Project is located along Interstate 80 (I-80) area is located in the City of Fairfield and unincorporated Solano County, California, east of the unincorporated community of Cordelia (Exhibit A). The Project 144.61-acre site is located within the Fairfield South, California 7.5- minute United States (U.S.) Geological Survey (USGS) quadrangle and in the Wooden Valley Creek-Frontal Suisun Bay Estuaries (GPS Coordinates 38.23211, -122.11276).

PROJECT DESCRIPTION

The proposed Project will construct a new Class B Facility (defined as an independent California Highway Patrol command facility), approximately 0.7 mile to the east of its current location (Exhibit A). The Project will construct two new off-ramps to the CCVEF, one directly from I-80 and the other from State Route (SR) 12, providing improved operations at the westbound SR 12/I-80 connector.

A new I-80 on-ramp from the CCVEF will cross Suisun Creek. To facilitate this crossing, an existing pedestrian bridge will be removed, and a new free span bridge over Suisun Creek will be constructed. The new creek crossing will be composed of three precast concrete girders that clear span the creek, to support an on-ramp with shoulders, 4-foot inside and 8-foot outside, and one 12-foot travelled lane. The girders support a reinforced concrete bridge deck which is also cantilevered from the exterior girders. The girders are supported on abutments placed on each creek bank. The bridge abutments will be placed above top of bank and rock slope protection (RSP) will be placed around the bridge abutments above top of bank.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect on-site and/or in the vicinity include:

Common Name	Scientific Name	Status
tri-colored blackbird	*Agelaius tricolor*	ST
burrowing owl	*Athene cunicularia*	SCT
golden eagle	*Aquila chrysaetos*	SFP
Swainson's hawk	*Buteo swainsoni*	ST
white-tailed kite	*Elanus leucurus*	SFP
loggerhead shrike	*Lanius ludovicianus*	SSC
chinook salmon (Central Valley spring-run ESU)	*Oncorhynchus tshawytscha pop. 11*	ST, FT
steelhead - central CA coast DPS	*Oncorhynchus mykiss irideus* pop. 8	SSC, FT
Crotch’s bumble bee	*Bombus crotchii*	SCE
western river lamprey	*Lampetra ayresii*	SSC
Sacramento splittail	*Pogonichthys macrolepidotus*	SSC
California tiger salamander	*Ambystoma californiense*	ST, FT
California red-legged frog	*Rana draytonii*	SSC, FT
western pond turtle	*Actinemys marmorata*	SSC, FCT
California red-legged frog	*Rana draytonii*	SSC, FT
Crotch’s bumblebee	*Bombus crotchii*	SCE
monarch - California overwintering population	*Danaus plexippus plexippus pop. 1*	FCT
valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	FT

vernal pool tadpole shrimp	*Lepidurus packardi*	FE
vernal pool fairy shrimp	*Branchinecta lynchi*	FT
pallid bat	*Antrozous pallidus*	SSC
western red bat	*Lasiurus frantzii*	SSC
American badger	*Taxidea taxus*	SSC
Suisun marsh aster	*Symphyotrichum lentum*	CNPS 1B.2
Nesting and Migratory Birds		
Beaver		
Roosting Bats		
Riparian habitat		
Aquatic habitat		
Water quality		

Notes:

FE = Federally Endangered; FT = Federally Threatened; FCT = Federally Candidate Threatened, FCE = Federally Candidate Endangered; SE = State Endangered; ST = State Threatened; SCE = State Candidate Endangered; SCT = State Candidate Threatened; SSC = State Species of Special Concern; CNPS ranking system: 1B= plants rare, threatened, or endangered in California and elsewhere; 2B= plants rare, threatened or endangered in California, but common elsewhere. Threat ranks: 0.1= seriously threatened in California; 0.2= moderately threatened in California.

The adverse effects the Project could have on the fish or wildlife resources identified above include:

- disruption to species listed above
- disruption to aquatic habitat, riparian habitat, and water quality
- colonization by exotic plant species
- temporary loss of aquatic habitat and riparian habitat
- permanent loss of riparian habitat
- loss of aquatic and terrestrial wildlife species
- temporary impediment to migration of aquatic and terrestrial species
- alter the existing drainage pattern of the site in a manner which would result in on- or off-site erosion
- change in composition of channel materials
- loss of bank stability during construction
- loss of substrate
- soil compaction or other disturbance to soil layer
- restrict or increase in sediment transport
- increased turbidity
- short term release of contaminants
- disruption to nesting birds and other wildlife due to construction related activities, including during and post-construction.

The Project will result in 0.304 acres of permanent impacts to bed, bank, channel and upland riparian habitat (Exhibit B). Since removal of the pedestrian bridge (0.021) is considered improvements, the acreage will be used to offset the total permanent impacts of the project. Therefore, the total permanent impacts to mitigate is 0.282 acres. In addition, the Project will result in the removal of 372 native and non-native trees (Exhibit C). Of these trees, only 10 trees greater than 4-inch diameter breast height (DBH) are in the riparian area. The disturbed section of Suisun Creek will be enhanced by planting perennial shrubs in the riparian area (Exhibit D).

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.

1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.

1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with the Agreement.

1.5 Notify CDFW Prior to Work. The Permittee shall notify CDFW by email at least five (5) days prior to commencement of Project activities. See contact information below.

1.6 Unauthorized Take. The Permittee is required to comply with all applicable State and Federal laws, including the California Endangered Species Act (CESA) and Federal Endangered Species Act. This Agreement does not authorize the take of any State or Federal threatened or endangered species. Liability for any take or incidental take of such listed species remains the responsibility of the Permittee for the duration of the Project. Any unauthorized take of such listed species may result in prosecution and nullification of the Agreement.

1.6.1 Permittee is responsible for ensuring project activities do not result in take of state candidate species, or if candidate species becomes state-listed as threatened or endangered during the term of this Agreement unless take authorization is provided through an Incidental Take Permit under Fish and Game Code section 2081(b).

1.6.2 If Permittee cannot ensure burrowing owls and their burrows are fully avoided, Permittee shall consult with CDFW and obtain a take authorization or otherwise demonstrate compliance with CESA.

1.7 Notification of Take or Injury. Permittee shall immediately notify CDFW of any take or injured wildlife (including but not limited to animal, active nest, egg, or state-listed plant species (including CNPS ranked species) found dead or injured and believed to be taken or injured by a project-related activity.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

2.1 Work Period. All work associated with the bed, bank, channel, and any upland riparian habitat resulting in impacts to bed, bank or channel shall occur between June 1 and October 15.

2.2 Conduct Work During Daylight Hours. A total of five (5) nights of work (consecutive or inconsecutive) are permitted under this Agreement. All other work shall be limited to occur from 30 minutes prior to sunrise and up to 30 minutes after sunset. Night work lighting shall have directional shields directing light downward and toward active construction and staging areas and shall not exceed 2,000 lumens.

2.3 Work Period in Dry Weather Only. Permittee shall conduct all work as described in the Project Description, and within the Project area during periods of dry weather. The Project area is defined as the bed, bank, channel, and associated riparian habitat. The Permittee shall monitor forecasted precipitation. When ¼-inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No Project activities may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-two-hour weather forecasts from National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less than a 40% forecast for precipitation for the following 24-hour period.

2.4 Work According to Documents. Except as they are contradicted by measure required by this Agreement, all work shall be conducted in conformance with the project description above and the avoidance, minimization, and mitigation measure provided in the notification package.

2.5 Decontamination of Clothing and Equipment. Any equipment that will enter the channel during construction will be decontaminated before and after construction to prevent the introduction, spread, and transport of aquatic diseases and invasive aquatic species. Workers that will enter the riparian area, bed, bank or channel must also decontaminate waders, boots and other clothing that will come in direct contact with the water. Decontamination of clothing and equipment will be done through by selecting one of the following:

- Drying equipment without washing, in an upland location following last aquatic use. If average daytime temperatures exceed 26.6 °C, drying times will be at least seven (7) days. If average daytime temperatures are below 26.6 °C, drying times will be at least thirty (30) days.

- Scalding water wash (at least 60 °C) with varying high- and low-pressure spray to dislodge pathogens, vegetation, and contaminated sediment.

- Freezing at a temperature of less than 0 °C for more than 72 hours.

- Soaking in a CDFW-approved disinfectant solution for at least two minutes (or longer, depending on the disinfectant used). To avoid harm to non-target species, disinfected clothing and equipment will be thoroughly rinsed in a water bath before entering the stream.

Repeat decontamination is required only if the equipment/clothing is removed from the site, used within a different water body, and returned to the Project site. Decontamination will take place in an upland location, preferably in the staging area, and any chemicals used during decontamination will be prevented from entering water bodies or storm water drains.

2.6 Staging. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream channel and banks to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Exceptions may be authorized upon written request and concurrence from CDFW.

2.7 Heavy Equipment. Refueling of mobile construction equipment and vehicles shall not occur within 100 feet of any water body, or anywhere that spilled fuel could drain to a water body. If critical equipment must be refueled within 100 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. All equipment shall be refueled with appropriate drip pans, absorbent pads, and water quality Best Management Practices. Equipment and vehicles operating in the Project site shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

2.8 Disposal and Removal of Materials. All removed spoils and construction debris shall be moved to areas where it may not permit to pass into, or place where it can pass into waters of the State in accordance with Fish and G. Code (FGC) Section 5650 and 5652. All removed material shall be disposed of according to State and local laws and ordinances.

2.9 Cover Spoil Piles. Permittee shall have readily available plastic sheeting to cover exposed spoil piles and exposed areas in order to prevent loose soil from moving into the stream. These covering materials shall be applied when it is evident rainy or windy conditions threaten to erode loose soils into the stream.

2.10 No Stockpiling of Vegetation. To prevent wildlife from utilizing piles of vegetation, vegetation removed under project activities shall be placed directly into a disposal vehicle and removed from the project site. Vegetation shall not be piled directly on the ground unless it is later transferred for disposal, piece by piece, under the direct supervision of a Qualified Biologist or Biological Monitor.

2.11 Herbicides. At no time during the term of the Project shall herbicides be used by Permittee within or in proximity to the Project site.

2.12 Minimum Vegetation Removal. No native riparian vegetation shall be removed from the bank of the stream, except where authorized by CDFW. Permittee shall limit the disturbance or removal of native vegetation to the minimum necessary to achieve design guidelines and standards for the Authorized Activity. Permittee shall take precautions to avoid damage to vegetation outside the work area.

2.13 Rock Slope Protection (RSP) Acceptable Practices. Un-grouted RSP shall consist of clean, competent quarried rock that is appropriately sized, properly installed, and sufficiently keyed into the channel bed and banks to prevent washout. The edges of the RSP (head, toe, and flanks) shall be designed and constructed so that undermining will not occur. Slopes with RSP shall be supported with competent boulders keyed into a footing trench at a depth sufficient to prevent instability and at a depth greater than the anticipated maximum scour depth (e.g., contraction scour, long-term degradation, and toe scour). RSP shall be placed in a smooth curve along the natural bank alignment, shall not project into the channel beyond the limits of the natural bank, and shall not form barbs or groins or any other structures that could deflect flow against the opposite bank or cause formation of downstream eddies. Any other form of bank stabilization shall be subject to CDFW review and written approval.

2.14 RSP Materials. RSP shall be installed according to the following criteria:

- Application of grout, cement, mortar or similar compounds to RSP is not authorized under this Agreement.
- Used of construction waste material such as broken cornet, asphalt, or demolition debris is prohibited under Fish and Game Cod and shall not be used for project activities conducted under this Agreement.
- RSP used within the bed, bank, and channel shall not utilize permanent filter fabric, geotextile, or plastic monofilament-based materials. Alternative filter layers such as granular filters shall be used.

2.15 Spill Containment and Clean Up. Prior to entering the work site, all field personnel shall know the location of spill kits and trained in their appropriate use. All activities performed in or near a river, stream, or lake shall have absorbent materials designated for spill containment and cleanup activities on-site for use in an accidental spill. CDFW shall be

notified by the Permittee within 24 hours of all spills and consulted regarding clean-up procedures.

2.16 Concrete Pouring and Curing. A total of five (5) night work shall be granted for concrete pouring activities, otherwise, no concrete pours are authorized to occur during the night (30 minutes prior to sunrise to 30 minutes prior to sunset) under the terms of this Agreement. All concrete used shall be excluded from the wetted channel or areas where it may come into contact with water for a period of thirty (30) days after it is poured/sprayed. Commercial sealants may be applied to the poured concrete surface where difficulty in excluding flow for a long period may occur. If sealant is used the Permittee shall follow the instructions as noted on the product label. All sealants shall be approved in advance, in writing by CDFW prior to their use on-site. As an alternative, water quality testing and analysis may be conducted in coordination with CDFW. Results shall be submitted and accepted by CDFW prior to removal of the temporary diversion system that will re-introduce flows to new concrete.

2.17 Concrete Spill and Monitoring Plan. Forty-five (45) days prior to the initiation of construction the Permittee shall develop a concrete specific spill response plan and submit the plan for CDFW review and approval in-writing (via e-mail). The plan shall designate a monitor who shall be present during all concrete pours to ensure all terms of this Agreement in regard to concrete are adhered to. Details the plan shall include:

- concrete pour schedules, formwork, pour quantities, material type and spill containment measures
- pH monitoring of the water quality before, during and after construction
- track and record the volume of material proposed for use prior to pouring of the concrete
- maintaining a log of all concrete pours that includes the quantity, location and type of concrete used and be included as part of the Final Construction Reports.

The records shall be provided to CDFW upon request and included as part of the Final Construction Report.

2.18 Concrete Avoidance and Minimization. Any concrete used shall be excluded from all aquatic features where it may come into contact with water, for a period of thirty (30) days after it is poured/sprayed. Commercial sealants may be applied to the concrete surface where difficulty in excluding flow for a long period may occur. If sealant is used the Permittee shall follow the instructions as noted on the product label. As an alternative, water quality testing and analysis may be conducted in coordination with CDFW. Results shall be submitted and accepted by CDFW. All concrete sealants and curing compounds shall be approved in advance, in writing by CDFW prior to their use.

2.19 Concrete Backfill Monitoring. For any concrete backfill activity, Permittee shall install concrete forms prior to any pours and install best management practices to prevent concrete from entering the creek such as temporary filter fabric, sheet piles, gravel dams and timber forms.

Wildlife Protection and Prevention

2.20 Qualified Biologist(s) and Monitor(s). At least forty-five (45) days prior to the start of Project activities, Permittee shall submit to CDFW for written approval, the names and resumes of all Qualified Biologists and Biological Monitors involved in conducting surveys and/or monitoring work. Resumes shall be submitted using the Biologist Resume Form (Exhibit E), or another format containing the same information. Once the Project has commenced, if additional Qualified Biologists and/or Biological Monitors are necessary, Permittee may submit additional names and resumes for written approval, as needed.

2.20.1 A Qualified Biologist is an individual who holds a bachelor's degree from an accredited university and: 1) is knowledgeable in relevant species' life histories and ecology, 2) can correctly identify relevant species, 3) has conducted field surveys for relevant species (and has observed species in the field via sight, sound, handling, etc.), 4) is familiar with relevant survey protocols, 5) is knowledgeable of state and federal laws regarding the protection of sensitive species and, 6) has previous experience on a transportation/infrastructure Project coordinating with a Resident Engineer and equipment operators.

2.20.2 A Biological Monitor is an individual who shall have academic and/or professional training and experience in biological sciences and related resource management activities as it pertains to this Project, experience with construction-level Biological Monitoring, be able to recognize species that may be present within the Project area and be familiar with the habitats and behavior of those species.

2.21 Stop Work Authority. The Qualified Biologist or Biological Monitor shall have independent authority to stop any and all work if any special-status species enters the project area, if project activities pose imminent threat to fish and wildlife resources, or if project activities are out of compliance with the measures outlined in this Agreement. If a special-status species is observed within the project site, then all work shall halt and not continue until the wildlife leaves the area on its own accord. The appropriate distance shall be determined by the Qualified Biologist and/or Biological Monitor at the time of discovery. The Qualified Biologist or Biological Monitor shall identify the animal to species and include the record of detection in the daily monitoring log. If within 24 hours the special status species has not left within its own volition or special-status species is within ESA fenced work area in harms way, relocation by a Qualified Biologist may be conducted in consultation with CDFW and appropriate CESA and ESA coverage.

If the Qualified Biologist or Biological Monitor witnesses a violation of this Agreement, they shall contact CDFW immediately. Permittee shall not enter into any agreement or contract of any kind with its contractors and/or the Designated Biologist that prohibit or impede open communication with CDFW. Failure to consult within 24-48 hours with CDFW on violations shall constitute grounds for CDFW to revoke the Biologist's monitoring authority and require Permittee to stop work until another Biologist has been approved.

2.22 Training Session for Personnel. Prior to the initiation of any Project activities, a Qualified Biologist shall provide an in-person training session for all work personnel working in the project area before performing any work. The training shall consist of any sensitive

species identification which may be in the area, their basic habits, habitat needs, and legal protections, how they may be encountered in their work area, and procedures to follow when they are encountered. Any personnel joining the work crew later shall receive the same training before beginning work. Upon completion of the Training Session, employees shall sign a form stating they attended the program and understand all protection measures. A pamphlet that contains images of sensitive species that may occur within the Project, environmentally sensitive areas within the Project site and notes key avoidance measures as well as employee guidance shall be given to each person who completes the Training Session. These forms shall be filed at the worksite offices and submitted to CDFW in the Final Construction Report or upon request.

2.23 Pre-construction Special Status Species Surveys. Within 48 hours prior to the start of project-related activities, a Qualified Biologist shall conduct pre-construction surveys for special status species. This Agreement does not authorize the handling of listed species. Approval of handling of listed species must be approved and/or permitted by the appropriate agencies. If any special status species are found, the Permittee shall contact CDFW within 24 to 48 hours of the detection.

2.24 Special-status Species Sightings or Injuries. If Permittee encounters any species listed as Rare, Threatened, or Endangered pursuant to CESA during implementation of project activities, all work shall be immediately suspended, and CDFW notified. Work may not reinitiate until Permittee has consulted with CDFW and can demonstrate compliance with CESA. A Qualified Biologist shall have the authority and responsibility to communicate directly to CDFW, without having to report first to Permittee. If special-status species are injured or otherwise harmed during project activities, CDFW reserves the right to require a separate notification be submitted by Permittee in the event special-status species are discovered. This separate notification may require environmental documentation be developed and circulated for compliance under CEQA.

2.25 Nesting Bird Surveys. If Project activities occur between February 1 and September 30, a Qualified Biologist shall conduct pre-construction surveys for nesting birds (**including ground nests and burrows**) no more than seven (7) days prior to construction. Results shall be submitted to CDFW prior to the initiation of construction. Surveys shall consist of observations made at an appropriate time of day and in appropriate weather conditions. If nests are found a Qualified Biologist shall establish an appropriate buffer to be in compliance with Migratory Bird Treaty Act (MBTA) and Fish and Game Codes § 3503 and § 3503.5. The protective buffers between each identified nest site and the construction site shall be determined as necessary by a Qualified Biologist/biological monitor in consultation with CDFW. CDFW reserves the right to extend or contract buffers as necessary to protect nesting birds. If BUOW activity is observed, Permittee shall consult with CDFW and obtain a take authorization or otherwise demonstrate compliance with CESA.

2.25.1 Nest Protection. A Qualified Biologist shall perform an appropriate amount of time for pre-construction monitoring of a nest to characterize “typical” bird behavior. A Qualified Biologist shall monitor the nesting birds and shall increase the buffer if the birds are showing signs of unusual or distressed “atypical” behavior by Project activities. Atypical behaviors, which may cause reproductive harm include, include but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a

brooding position, and flying away from the nest. A Qualified Biologist shall have authority to stop all Project activities if the nesting birds demonstrate atypical behavior, which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by a Qualified Biologist. Any sign of nest abandonment shall be reported to CDFW within 48 hours.

2.26 Nesting Habitat Removal or Modification. No habitat removal or modification shall occur within the ESA-fenced nest zone until a Qualified Biologist (in consultation with CDFW) has determined the young have fully fledged and will no longer be adversely affected by the Project. Any trees or shrubs that are removed shall be "downed" in such a manner as to minimize disturbance to stable soil conditions.

2.27 Western Burrowing Owl (BUOW) Inspection and Avoidance. Permittee shall inspect all burrows with typical characteristics of rodent and/or fossorial burrowing activity such as owl pellets, feathers, freshly turned dirt, animal tracks, fur, or white markings and provide the results to CDFW prior to the initiation of construction. Permittee shall follow the pre-construction survey monitoring schedule and requirements noted in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW Staff Report). For more information see, https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline.

If it is evident that the burrows are active within the buffers described in the CDFW Staff Report, the Permittee shall notify CDFW and fully avoid species by clearly delineating an Environmental Sensitive Area (ESA), no-disturbance buffer of 200 meters around all BUOW burrows such as roosting and satellite burrows within and adjacent to the Project area. The buffer will be delineated with posted signs demarking the area to avoid, using stakes, flags, and/or rope or cord to minimize disturbance of BUOW habitat prior to the start of project activities. Permittee shall delineate burrows with different materials than those used to delineate the Project Area. A current map of burrowing owl nesting and/or wintering locations on and near the project shall be kept on site at all times. Permittee shall remove and properly dispose of all materials used for delineation immediately upon completion of the Project.

Unless the Permittee can otherwise demonstrate compliance with CESA, an incidental take permit will need to be obtained if Permittee:

- requests alterations of these buffers and survey requirements
- cannot ensure BUOW and their burrows are fully avoided

2.28 Swainson's Hawk Assessment and Avoidance. If Project Activities are to be conducted between March 15 and September 15, the Permittee shall ensure a Qualified Biologist conducts focused surveys for Swainson's hawk. The following criteria for surveys shall be met:

- Surveys shall be conducted within 1/4-mile of the Project Site.
- Surveys shall be conducted in proposed work areas, staging, and storage areas.

Nest surveys for Swainson's hawks shall be conducted in a manner consistent with the recommended **timing and methodology** for Swainson's Hawk Nesting Surveys in California's Central Valley. For more information, see https://www.wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds.

If an active nest is identified, a 1/4-mile no-work buffer shall be maintained around the nest until the young fledge. If any active Swainson's hawk nests are found within 1/4-mile of the Project Site, CDFW shall immediately be contacted, and all work shall halt. Only if an Incidental Take Permit (ITP) is obtained by the Permittee will alterations of these buffers, seasonal restrictions and survey requirements be considered by CDFW.

2.29 Tri-colored Blackbird Observation and Avoidance. If a tricolored blackbird nest is detected during pre-construction surveys, or if a nest is subsequently discovered during implementation of project activities, then project activities within 500 feet of any tricolored blackbird nest shall halt until CDFW has been notified and Permittee is able to demonstrate compliance with the California Endangered Species Act to CDFW's satisfaction. If take of tricolored blackbird is expected to occur as a result of project related activities, then an Incidental Take Permit (ITP) may be obtained from CDFW to avoid disruptions to project activities.

2.30 White-tailed Kite (WTKI) Survey and Buffer. If suitable nesting habitat or wintering habitat features are present for WTKI on or within 1/4-mile of a Work Area, the Qualified Biologist shall conduct CDFW-approved protocol surveys within 1/4- mile of the Work Area no more than seven (7) calendar days prior to the start of Project Activities during the nesting season (February 1 – August 31). If Project Activities occur between December 1 through March 31, the Qualified Biologist shall survey for winter roosting activity of WTKI within 500 feet of the Work Area. Surveys shall be done during the appropriate time of day to maximize detectability and shall concentrate on suitable nesting structures for the species. The results of the survey and the survey methodology shall be provided to CDFW upon completion in a report due no later than two (2) days prior to the start of Project Activities. If an active nest is discovered during the survey or during construction, Permittee shall establish a minimum 1/4-mile no-disturbance buffer around active nests until the nesting season has ended or until the Qualified Biologist determines that all young have fledged and are no longer reliant upon the nest or parental care for survival. Permittee shall establish a minimum 1/4-mile no- disturbance buffer around active winter roost sites for WTKI until the overwintering season has ended or the Qualified Biologist determines that birds are no longer present. Permittee shall halt any Project Activities that could affect the foraging or feeding behavior of WTKI. If the minimum no-disturbance buffer cannot be maintained, Permittee shall adhere to Measure 2.25 of this Agreement.

2.31 Swallow Nesting Avoidance. Permittee shall exclude swallows from areas where construction activities cause nest damage or abandonment. Permittee shall conduct weekly inspection of the bridge for swallow presence and/or nesting activity by March 1st. Any nests from previous year present shall be inspected for bat presence prior to removal. If cliff swallows (*Petrochelidon pyrrhonota*) begin colonizing the bridge prior to beginning bridge work, all nest precursors (mud placed by swallows for construction of nests) shall be washed down at least once daily until swallows cease trying to construct nests. This activity shall not result in harm or death to adult swallows. If swallow nests are

approximately 75% constructed, nests will be considered protected under California Code, Fish and Game Code - FGC § 3503 and cannot be removed until deemed inactive.

Construction shall either occur outside of the swallow nesting period (March 15 through August 31), or Permittee shall use wildlife-safe exclusion methods (approved by the CDFW Representative identified in the Contact Information section of this Agreement) to suitable bridge nesting habitat before initiation of the breeding season to prevent nesting. Exclusion shall use mesh size no greater than 3/4-inches. Use of netting as an exclusion method is not permitted under this Agreement.

Exclusion method shall remain in place until August 31st or until construction activities at the site are complete. If swallows begin building nests on the structure after exclusion method is installed, the mud placed by the swallows shall be promptly removed.

A Qualified Biologist or Biological Monitor shall determine a safe buffer distance for active nests near construction activities to prevent harassment of nesting swallows (California Code of Regulations, Title 14, Section 251.1).

2.32 California Red-legged Frog Habitat Assessment Surveys. At least fifteen (15) days prior to the commencement of ground-disturbing activities, the Project activity area and nearby vicinity, including a minimum 500-foot radius surrounding the Project activity area, shall be assessed by a Qualified Biologist for the presence of California red-legged frog individuals and habitat features. Habitat features include both aquatic habitat such as plunge pools and ponds and terrestrial habitat such as burrows or other refugia. If habitat occurs, then no more than 48 hours prior to ground-disturbing activities the area shall be surveyed by a Qualified Biologist. The results of the habitat feature assessment and survey (with survey area map) shall be submitted to CDFW via email (see Contact Information) for written approval prior to starting Project activities. California red-legged frog and any other amphibian species encountered during surveys shall be documented in the results and their GPS location shall be documented and mapped in the results.

2.33 California Red-legged Frog Avoidance. Burrows and refugia sites shall be flagged or otherwise marked for avoidance. Project activities shall avoid habitat features to the extent feasible. If California red-legged frogs are found in the work area or enters the work area, all work within a 50-foot radius of the California red-legged frog(s) shall stop until 1) the frog, through its own volition, moves out of harm's way, and 2) wildlife agencies (United States Fish and Wildlife Service (USFWS) and CDFW) have been consulted. If within 24 hours the frog has not left within its own volition, relocation by a Qualified Biologist shall be conducted in consultation with CDFW. If the frog is found in a location abnormal of its natural habitat (e.g. on wrong side of exclusion fencing) where a Qualified Biologist has determined that the frog is unlikely to be able to move safely to suitable habitat, the Qualified Biologist may immediately relocate the frog in consultation with CDFW.

Any injuries of these species shall be reported to CDFW and USFWS within 24 hours before proceeding with project activities and Permittee shall consult with USFWS pursuant to the Federal Endangered Species Act. In this case, CDFW may require additional protection measures which shall be implemented by the Permittee.

2.34 Western Pond Turtle (WPT) Surveys. No more than 48 hours prior to the commencement of ground-disturbing activities in or within 100 feet of WPT habitat, a Qualified Biologist shall perform WPT surveys within aquatic and upland habitat at the Project site. Surveys shall encompass individual turtles and nest sites. If a WPT is detected at any time, CDFW shall be notified immediately. Survey results shall be submitted to CDFW prior to construction activities. All WPT observed on-site shall be avoided and allowed to leave the Project area of their own volition or may be relocated by a Qualified Biologist to a safe, suitable location within or near the project footprint. All WPT nests shall be avoided with an appropriate buffer established by a Qualified Biologist and approved by CDFW. If one or more WPT nests are found, the Permittee shall consult with CDFW to determine if a WPT Habitat Improvement Plan or other protection measures shall be prepared and implemented. Upon CDFW written approval, the WPT Turtle Habitat Improvement Plan or other protection measures shall be considered part of this Agreement.

2.35 Bats. For all project activities planned in potential bat roosting habitat such as bridges and/or involving woody vegetation modification or removal of any and all trees, a Qualified Biologist shall conduct daytime and evening acoustic surveys in addition to extensive visual surveys for bats and potential habitat for bats at least fourteen (14) days prior to initiation of construction activities. If bats are found on-site, a Qualified Biologist shall identify the species, estimated quantity present, roost type, and roost status, but shall avoid disturbing bats during surveys. Permittee or a Qualified Biologist shall notify CDFW within 24 hours if bats are found during surveys. A Qualified Biologist shall submit a Bat Mitigation and Monitoring Plan at least seven (7) days prior to the start of project activities for CDFW review and written approval. Project activities may not start until CDFW written approval has been provided to Permittee. The Bat Mitigation and Monitoring Plan shall include: (1) an assessment of all project impacts to bats, including noise disturbance during construction; (2) effective avoidance and minimization measures to protect bats; (3) compensatory mitigation for permanent impacts to maternity roosts if impacted. Upon CDFW written approval, the Bat Mitigation and Monitoring Plan shall be considered part of this Agreement. Non-maternity roost trees slated for removal shall be removed in accordance with the following methodology:

2.35.1 To ensure bats have left potential roosting trees, trees with a 24-inch DBH or greater shall be removed over the course of two (2) days. On the first day, limbs from the identified trees shall be removed in the late afternoon. This disturbance should cause potentially roosting bats to seek other roosts during their nighttime foraging. The remainder of the tree can then be removed on the second day as late in the afternoon as feasible. If bats are found injured, or if bat mortality occurs during the course of tree removal, a Qualified Biologist shall immediately notify CDFW of the event, the species recorded, and the number of individuals documented. Tree limbing or removal shall not be performed under any of the following conditions: a) during any precipitation events, b) when ambient temperatures are below 4.5 °C, c) when windspeeds exceed 11 miles per hour, and/or d) any other condition which may lead to bats seeking refuge.

2.36 Avoidance of Crotch's Bumble Bee. For all work proposed that may include ground disturbance or vegetation removal, the Permittee shall submit, for CDFW review and

approval, a Crotch's Bumble Bee Avoidance Plan (Plan) to ensure that no Crotch's bumble bees are taken during project implementation. The Plan shall provide project-level habitat evaluations that consider overwintering, nesting, and foraging habitats, and a survey protocol. Surveys for Crotch's bumble bee shall be done by a qualified entomologist familiar with their life history and behavior. Surveys shall occur at least 2 hours after sunrise (>60°F and <90°F with no rain) or two hours before sunset and the survey area shall include all suitable habitat within each of the project component areas and a surrounding 100-foot buffer area. The survey duration shall be appropriate to the size of the project site and buffer area based on the metric of a minimum of one person-hour of searching per three acres of suitable habitat; this will be an approximately 0.5-hour survey for an average sized project site. Bumble bees move nest sites each year, therefore, surveys shall be conducted each year that project work activities will occur. Further guidance on presence surveys can be found within *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee* Species, available online at Bumble Bee Survey Resources (ca.gov).

If construction is halted because bumble bees are in harm's way, construction may only recommence after it has been established that the bees present are not Crotch's bumble bee AND the bumble bees are not identified to be a special status species outside its current range (e.g. western bumble bee (*Bombus occidentalis*)). If Crotch's bumble bees are identified on the site, construction shall not resume until Permittee demonstrates compliance with CESA to CDFW's satisfaction.

2.37 Rare Plant Surveys. Prior to the initiation of any Project related activities, a CDFW approved biologist/botanist will conduct rare plant surveys and submit results to CDFW for review at least fifteen (15) days prior to Project initiation. Surveys will follow; *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*, CDFW, 03/2018 (Exhibit F). Alterations to the protocol may be authorized upon written request and written approval from CDFW (via e-mail). In the event rare, threatened or endangered plants are discovered CDFW reserves the right to provide additional measures to this Agreement, which may include work stoppage, flagging and avoidance of occurrences, collection of propagation material, and/or obtainment of an Incidental Take Permit (Fish and Game Code section 2081, subd., (b).) and restoration as determined by CDFW. In the event rare, threatened or endangered plants are discovered the CDFW representative (see Contact Information section of this Agreement) shall be contacted via e-mail within 24 hours of discovery.

2.38 Phytophthora (Sudden Oak Death) Prevention and Sanitation. If nursery stock purchased for revegetation was grown within a county that is quarantining or regulating nursery stock for interstate sales due to the presence of *Phytophthora ramorum*, the source nursery shall be in compliance with annual inspections under 7 CFR 301.92 et seq. Permittee shall check the California Department of Food and Agriculture website to view the most recent list of approved nurseries from quarantined and regulated counties, available online at CDFA - Plant Health - Statewide Sudden Oak Death Quarantine (ca.gov). Permittee shall request a copy of the annual inspection certificate under 7 CFR 301.92-f *et seq*., regarding *P. ramorum*. If a selected nursery cannot provide this annual certificate of inspection, the nursery shall not be used as a source for revegetation materials.

2.38.1 Permittee and all contractors shall follow sanitation protocol specified in the Sanitation Guidelines for Professional Crews issued by the California Oak Mortality Task Force (Sanitation and Reducing Spread - Sudden Oak Death) prior to entering, during construction, and prior to leaving the site. If the project site is within five miles of a confirmed sudden oak death infestation (refer to Maps - Sudden Oak Death or contact the appropriate County Agricultural Commissioner's Office). A discussion of sudden oak death shall be included in the pre-construction training.

2.39 Stranded Aquatic Life. The Permittee shall check daily for stranded aquatic life as the water level in the dewatering area drops. All reasonable efforts shall be made to capture and move all stranded aquatic life observed in the dewatered areas. A Qualified Biologist shall be available and/or onsite as necessary during all dewatering and diversion activities. If dewatered areas become inundated, additional aquatic species rescue efforts may be necessary following the installation of diversion equipment. This condition does not allow for the take or disturbance of any state or federally listed species, or species of special concern.

2.40 Channel Work Prohibition. No work shall occur within the channel unless the channel is dry or a temporary creek diversion system has been installed and verified as functioning by the resident engineer. The temporary creek diversion system and all related dewatering activities shall not occur if the water temperature exceeds 18 °C or the ambient air temperature exceeds 29 °C to avoid potential harm or injury to aquatic species.

2.41 Environmentally Sensitive Areas. Prior to the start of construction Environmentally Sensitive Areas (ESAs) shall be clearly delineated using high-visibility orange fencing, flagging, or reviewed during the training session for personnel to protect sensitive habitats. ESAs are defined as wetland, riparian areas, aquatic areas, raptor nesting locations, potential burrows, or dens, etc. The ESA delineation will remain in place throughout the duration of the Project. If any persons working on site observe ESA delineations to be damaged or appear not adequately visible, improvements to the ESA will be implemented immediately. The final Project plans will depict all locations where ESA fencing will be installed and how it will be installed. The bid solicitation package special provisions will clearly describe acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the ESA. ESA fencing shall be installed as directed by a Qualified Biologist and maintained throughout the Project as needed. The materials used to delineate ESAs and work boundaries shall be removed no later than 10 days following completion of construction.

2.42 Daily Clearance Surveys. A Qualified Biologist shall be required on-site at all times during work that may impact special status species habitat. Pre-construction clearance surveys shall be conducted daily by a Qualified Biologist or biological monitor immediately prior to the initiation of any ground disturbing activities within or adjacent to suitable habitat for the species noted in this Agreement. The frequency of daily biological monitoring will be assessed on an ongoing basis and will depend on the nature of the activities being conducted. The clearance surveys shall focus on species that could occur within the vicinity of the Project and shall adhere to the survey criteria noted in this Agreement for

species with the potential to inhabit the area. Survey notes shall be kept and submitted to CDFW in the Final Construction Report as required by the terms of this Agreement.

2.43 Temporary and Permanent Lighting Emission Restrictions. No new or replacement permanent lighting structure installations are authorized under the terms of this Agreement. Temporary lighting will be used only where necessary for safety and signage. When in use, temporary lighting shall be shielded and focused directly on work activities and minimize any artificial light shine on adjacent habitat and shall not exceed 2,000 lumens.

2.44 Aquatic Species Entrainment. Permittee will minimize the potential for aquatic species entrainment by employment of a screen. Pump intakes will be placed away from complex vegetated banks that may contain habitat for the aquatic species. Screen material may be constructed of any rigid woven, perforated, or slotted material that provides water passage while physically excluding aquatic species. Round openings in the screen will not exceed 3/32-inch diameter, square openings will not exceed 3/32-inch measured diagonally and slotted openings will not exceed 0.069 inches in width. Approach velocity will not exceed 0.33 feet per second.

2.45 Amphibian Handling Code of Practice. All personnel on site shall adhere to the following: The Declining Amphibian Task Force Fieldwork Code of Practice (Exhibit G), The Declining Amphibian Task Force Fieldwork Code of Practice) when on site and during the handling of amphibians by authorized individuals.

2.46 Trenching. To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1-foot deep will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks at an angle no greater than 30 degrees. Before such holes or trenches are filled they must be thoroughly inspected for trapped animals.

2.47 Culverts, Pipes, Hoses and Similar Structures. All culverts, pipes, hoses, and similar structures less than 12 inches in diameter shall be closed, covered or capped to prevent animal entry upon arrival to the Project site. All pipes, hoses, culverts or similar structures greater than 12 inches in diameter shall be inspected thoroughly for wildlife before it is buried, capped, used or moved.

2.48 Fence and Signpost Restriction. Any fencing posts or signs, or vertical (excluding wooden posts) installed temporarily or permanently throughout the course of the Project shall have the top of the post capped and/or the top three post holes covered or filled with screws or bolts to prevent the entrapment of wildlife, specifically birds of prey. A Qualified Biologist/biological monitor shall be responsible for ensuring compliance with this measure throughout the course of the Project and shall inspect each post or pole for compliance when at the Project site.

2.49 Prohibition Against the Use of Filter Fabric or Geo-Textile Erosion Control. No instances of permanent filter fabric, geo-textile fabric or plastic monofilament-based material is authorized for installation under the terms of this Agreement.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

3.1 Habitat Enhancement Plan. The Permittee shall submit a Restoration and Enhancement Plan (Plan) to CDFW for review and written concurrence forty-five (45) days prior to the dry season below-top-of-bank work window (described in Measure 2.1) for bridge construction or as approved by CDFW through bank credit purchase or in-lieu fee payment. The Plan shall detail the restoration, enhancement, and mitigation amounts for on- and off-site habitat enhancement, and include monitoring, success criteria, and an adaptive management process outlined (in the event the success criteria is not met).

3.1.1 On-Site Habitat Enhancement. Permittee shall enhance riparian area by planting perennial shrubs in the disturbed section of Suisun Creek. Approximately 0.06 acre of directly impacted riparian area above top of bank and will also create 0.19 acre of new riparian-shrub based habitat above top of bank in a currently grassy area.. The Plan shall restore and enhance a total of 0.25 acres of riparian planting areas above top of bank (Exhibit D). Riparian planting areas will exclude areas converted to hardscape such as rock slope protection, bridge deck, abutments, or new roadway, areas within the Solano Irrigation District (District) easement or Department of Water Resources easement, and any areas outside the new District Right-of-Way. The On-Site Habitat Enhancement will also exclude any drainage basins or trees being planted by the project as replacement for non-riparian trees being removed by the project.

3.1.2 Off-Site Habitat Enhancement. Approximately 0.282 acres of permanently disturbed riparian habitat using native species appropriate to the area at a 3:1 ratio (totaling 0.85 acres of mitigation) through purchase of riparian bank credits or in lieu fee payment, with the off-site mitigation requiring CDFW review and approval at least 45 days prior to the dry season below-top-of-bank work window (described in Measure 2.1) for bridge construction.

3.1.3 Monitoring and Success Criteria. All riparian plantings and hydroseeding shall be monitored annually for 3 years. Success criteria at the end of the 3-year monitoring period will also include 30% woody shrub cover compared to a nearby riparian reference site undisturbed by the project, and no more than 5% cover of invasive species rated as high ecological impact by Cal-IPC. Photo-monitoring points shall be established to illustrate images of the mitigation site before and after the onsite habitat enhancement. In reporting nearby riparian reference site undisturbed by the project shall be used as a metric of success. If hydro-seeding does not take hold within 6 months, additional applications and monitoring shall be conducted in consultation with CDFW. Monitoring reports shall be submitted to CDFW by January 31 of each year of monitoring and shall

include discussion of any necessary remedial or adaptive management actions prescribed by a Qualified Biologist.

Reference site analysis and final approval of an enhancement site(s) having met all obligations may be accepted upon written request and written approval from CDFW. Alternative concepts for enhancement, such as land acquisition or permanent protection of land may be considered upon written request and written approval to CDFW.

4. Reporting Measures

Permittee shall meet each reporting requirement described below (Exhibit H).

4.1 Final Construction Report. A Final Construction Report shall be submitted within sixty (60) days of Project completion. The final construction report shall document the results of pre-construction and clearance surveys, document the construction schedule of the Project, include an analysis of the success and failure of avoidance and minimization measures contained in this Agreement, and a summary of the implemented fish passage and stream channel restoration activities, including an appendix of daily construction reports. The Final Construction Report shall also contain pre-project photographs, a map showing the amount of area impacted post-project (including staging and access areas), post-project photographs, and biological survey notes (including construction monitoring), as noted in the Agreement. The pre- and post-project photographs shall be collected from at least eight (8) vantage points of the Project to include all Project elements from a before and after construction timeframe. The before and after photos shall be from the same vantage point and submitted with a reference key describing the locations of the photo, direction of the view, and whether the photo is pre- or post-construction.

4.2 On-Site and Off-site Habitat Enhancement Plan Reporting. The Permittee shall submit annual monitoring reports to CDFW for plant establishment and tree survivorship monitoring for a period of three (3) years. At the Projects location all monitoring reports shall be submitted by December 31 annually for ten-years, in years 0,1, 2, and 3 and/or additional years, as applicable. Year 0 is collected as post-construction (as-built survey conditions). The report shall include success criteria milestones as specified in this Agreement. The report shall also include a list of corrective actions that may be necessary to increase the probability of native plant recruitment or habitat improvement to the Project Site. This measure does not apply if the project mitigates with credits from a CDFW-approved mitigation bank or funding of a CDFW-approved dedicated off-site mitigation project.

4.3 Notification to the California Natural Diversity Database. If any listed, rare, or special status species are detected during Project surveys or on or around the Project site during Project activities, the Permittee shall submit CNDDB Field Survey Forms to CDFW in the manner described at the CNDDB website (https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data) within five (5) days of the sightings. Copies of such submittals shall also be submitted to the CDFW regional office as specified below.

4.4 Harm, Injury or Mortality to Wildlife. If any wildlife is encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed, relocation by a qualified biologist may be conducted for non-special status species. If any non-special status wildlife encountered is found harmed, injured or dead the Permittee shall contact CDFW immediately before proceeding on any action within a reasonable distance of the finding. Transport to the nearest wildlife care facility may be necessary in direction coordination with CDFW. If any special status or State listed species are encountered harmed, injured or dead the Permittee shall contact CDFW immediately and cease all Project activities in coordination with a Qualified Biologist and resident engineer.

4.5 Pre-Construction Surveys. As per the respective Conditions, submit survey results and plans as applicable for western burrowing owl, white-tailed kite, red-legged frog, western pond turtle, Crotch's bumble bee, nesting birds, bats, and rare plants.

4.6 Concrete Spill and Monitoring Plan. As per Condition in 2. Avoidance and Minimization Measures, submit plan at least forty-five (45) days prior to construction for CDFW review and consent.

CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail or email, or to such other address as Permittee or CDFW specifies by written notice to the other.

To Permittee:

Lindsay Vivian, Office Chief
California Department of Transportation, District 4
111 Grand Avenue, Oakland, CA 94612
(510) 715-8492
Lindsay.Vivaian@dot.ca.gov

To CDFW:

California Department of Fish and Wildlife
Bay Delta Region 3
2825 Cordelia Road #100,
Fairfield CA 94534
Karen Taylor, Senior Environmental Scientist-Specialist
Karen.Taylor@wildlife.ca.gov
EPIMS SOL-46344-R3
Regional EPIMS Email: R3LSA@wildlife.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with, or obtaining any other permits or authorizations that might be required under, other federal, state, or local laws or regulations before beginning the project or an activity related to it. For example, if the project causes take of a species listed as threatened or endangered under the Endangered Species Act (ESA), such take will be unlawful under the ESA absent a permit or other form of authorization from the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the Fish and Game Code including, but not limited to, Fish and Game Code sections 2050 *et seq*. (threatened and endangered species), section 3503 (bird nests and eggs), section 3503.5 (birds of prey), section 5650 (water

pollution), section 5652 (refuse disposal into water), section 5901 (fish passage), section 5937 (sufficient water for fish), and section 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). Submit the form and fee to the CDFW regional office that serves the area where the project is located.

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). Submit the form and fee to the CDFW regional office that serves the area where the project is located.

EXTENSIONS

In accordance with Fish and Game Code section 1605, subdivision (b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with Fish and Game Code section 1605, subdivisions (b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code § 1605, subd. (f)). Submit the form and fee to the CDFW regional office that serves the area where the project is located.

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable Fish and Game Code section 711.4 filing fee listed at https://www.wildlife.ca.gov/Conservation/CEQA/Fees.

TERM

This Agreement shall expire **December 31, 2029** unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as Fish and Game Code section 1605, subdivision (a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

A. Project Location Map

B. Project Impacts

C. Tree Removal Design Plans

D. On-Site Riparian Planting Area

E. CDFW Biologist Resume Form

F. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, CDFW, 03/2018

G. The Declining Amphibian Task Force Fieldwork Code of Practice

H. Summary of Reporting Requirements to CDFW

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

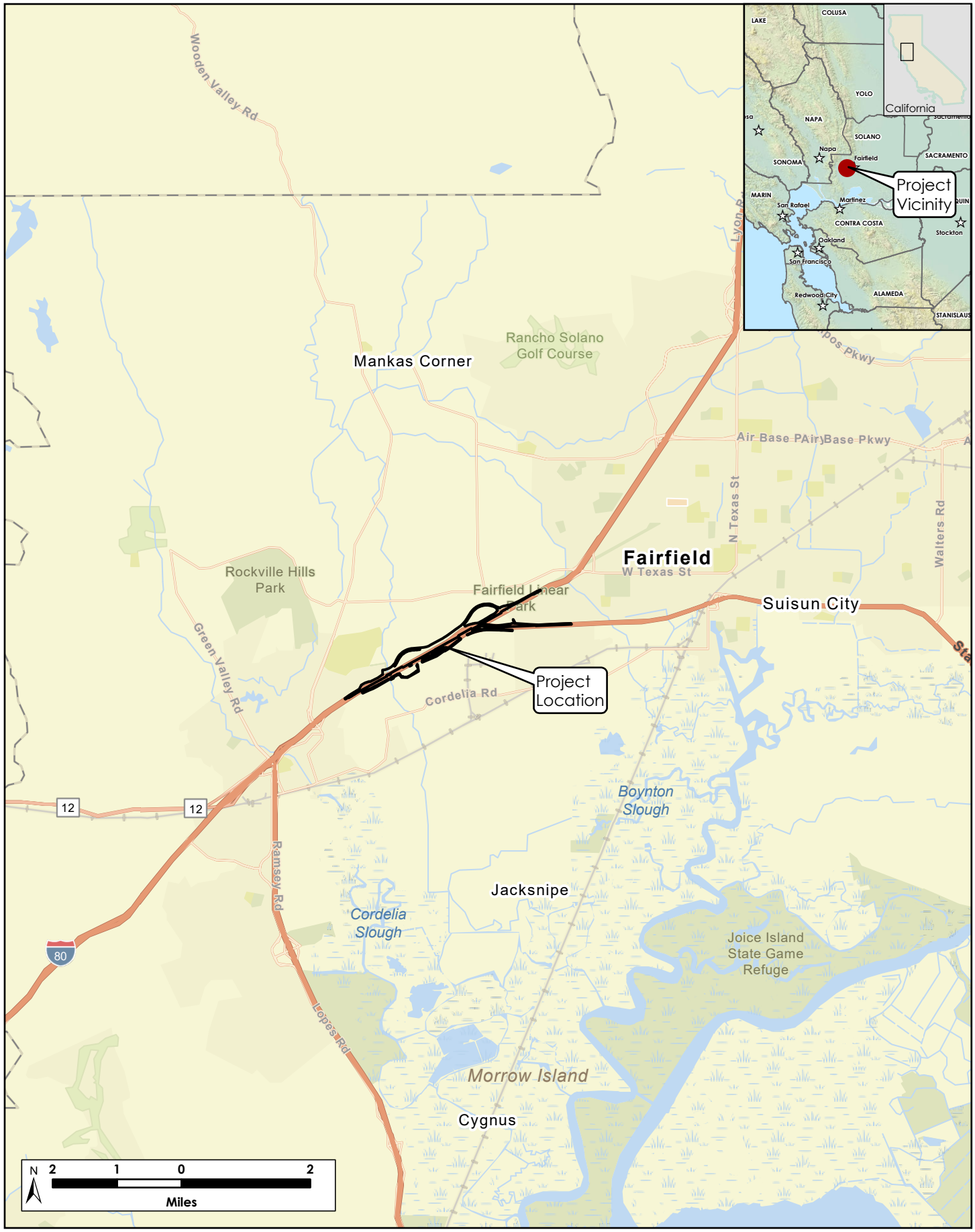
This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with Fish and Game Code section 1602.

CONCURRENCE

Through the electronic signature by the permittee or permittee's representative as evidenced by the attached concurrence from CDFW's Environmental Permit Information Management System (EPIMS), the permittee accepts and agrees to comply with all provisions contained herein.

The EPIMS concurrence page containing electronic signatures must be attached to this agreement to be valid.

Prepared by: Karen Taylor
Senior Environmental Scientist (Specialist)



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H. T. HARVEY & ASSOCIATES
Ecological Consultants

Exhibit A1. **Vicinity Map**
I-80 Westbound Cordelia Commercial Vehicle Enforcement Facility Project
1600 Notification (4598-01)February 2024



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H. T. HARVEY & ASSOCIATES
Ecological Consultants

Exhibit A2. Project Area
I-80 Westbound Cordelia Commercial Vehicle Enforcement Facility Project
1600 Notification (4598-01)February 2024

- Project Area
- ESA Fencing
- Limits of Cut / Fill
- Toe of Proposed Roadway Embankment Slope
- Rock Slope Protection
- Ordinary High Water Mark
- Top of Bank
- Existing Caltrans ROW
- Proposed Caltrans ROW
- Permanent Impacts
- New Permanent Impacts
- New Temporary Impacts

LSAA Riparian and Stream Habitats

- Perennial Drainage
- Riparian Woodland

Permanent Impacts	Acres
Perennial Drainage	0.013
Riparian Woodland	0.304
New Permanent Impacts	**Acres**
Riparian Woodland	0.001
New Temporary Impacts	**Acres**
Riparian Woodland	0.001



80

Suisun Creek

Inset

Abutment

New Bridge

Abutment

Existing Ped Bridge to be Removed

Tree Removal

80

50 25 0 50

Feet

N:\Projects4500\4598-01\Reports\LSAA\LSAA.aprx

H. T. HARVEY & ASSOCIATES

Ecological Consultants

Exhibit B. **Impacts to CDFW Jurisdiction**

I-80 Westbound Cordelia Commercial Vehicle Enforcement Facility Project
1600 Notification (4598-01) December 2024

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	12,80	L1.8/L3.2 13.4/17.2		

JOSEPH M. HOWARD — REGISTERED LANDSCAPE ARCH. — 9/20/24 DATE

PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT JOSEPH M. HOWARD 4598 Exp. 12/31/26 STATE OF CALIFORNIA

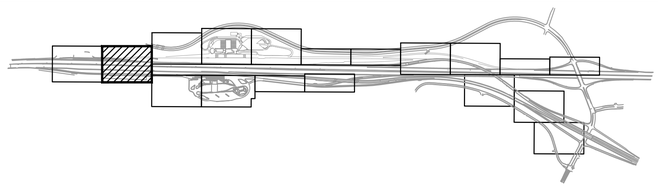
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

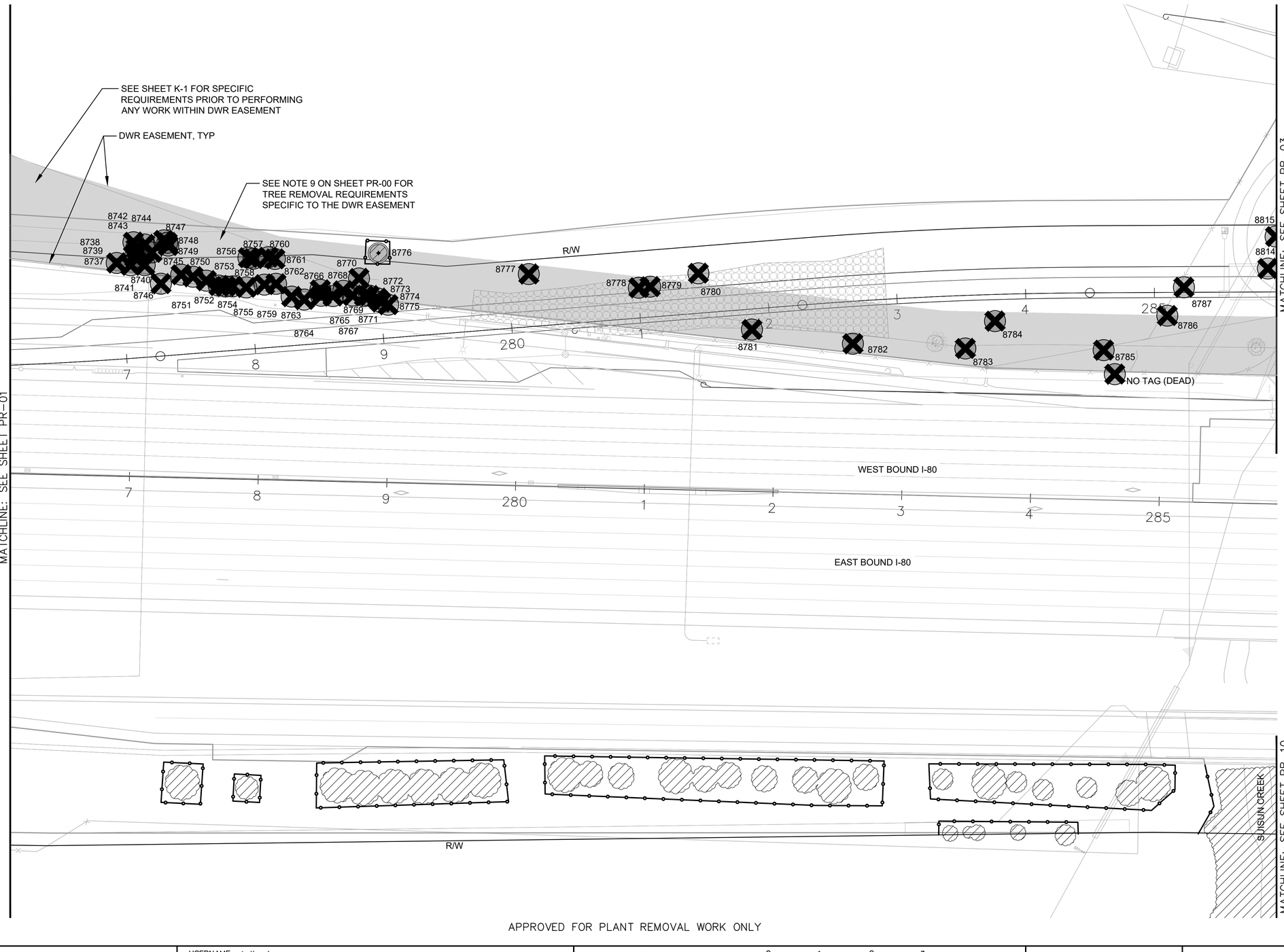
H. T. HARVEY & ASSOC.
983 UNIVERSITY AVE
BUILDING D
LOS GATOS, CA 95032

SOLANO TRANSPORTATION AUTHORITY
423 Main Street
SUISUN CITY, CA 94585

NOTE

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.





LEGEND

- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO REMAIN
- EXISTING TREE(S) TO REMAIN, LOCATION APPROXIMATE
- TEMPORARY TREE PROTECTION FENCING
- TREE PROTECTION ZONE (TPZ) - WITHOUT MULCH
- TREE PROTECTION ZONE (TPZ) - WITH MULCH

PLANT REMOVAL PLAN

SCALE: 1" = 40'

APPROVED FOR PLANT REMOVAL WORK ONLY

PR-02

REVISED BY	DATE REVISED
DT, LE	09/20/24

CHRIS STRASSER — CALCULATED–DESIGNED BY
JOE M. HOWARD — CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR
SEAN A. CHARLES

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 09-20-24
DATE PLOTTED => 9-27-2024
TIME PLOTTED => 11:52

BORDER LAST REVISED 7/2/2010

USERNAME =>dtruelsen
DGN FILE => 4598-02_01_TREE_20240923.DWG

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0711

PROJECT NUMBER & PHASE 04210001551

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	12,80	L1.8/L3.2 13.4/17.2		

JOSEPH M. HOWARD
REGISTERED LANDSCAPE ARCH.

9/20/24
DATE

PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT
JOSEPH M. HOWARD
4598
Exp. 12/31/26
STATE OF CALIFORNIA

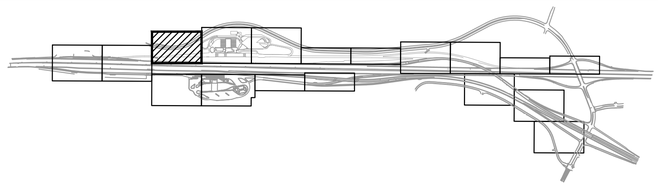
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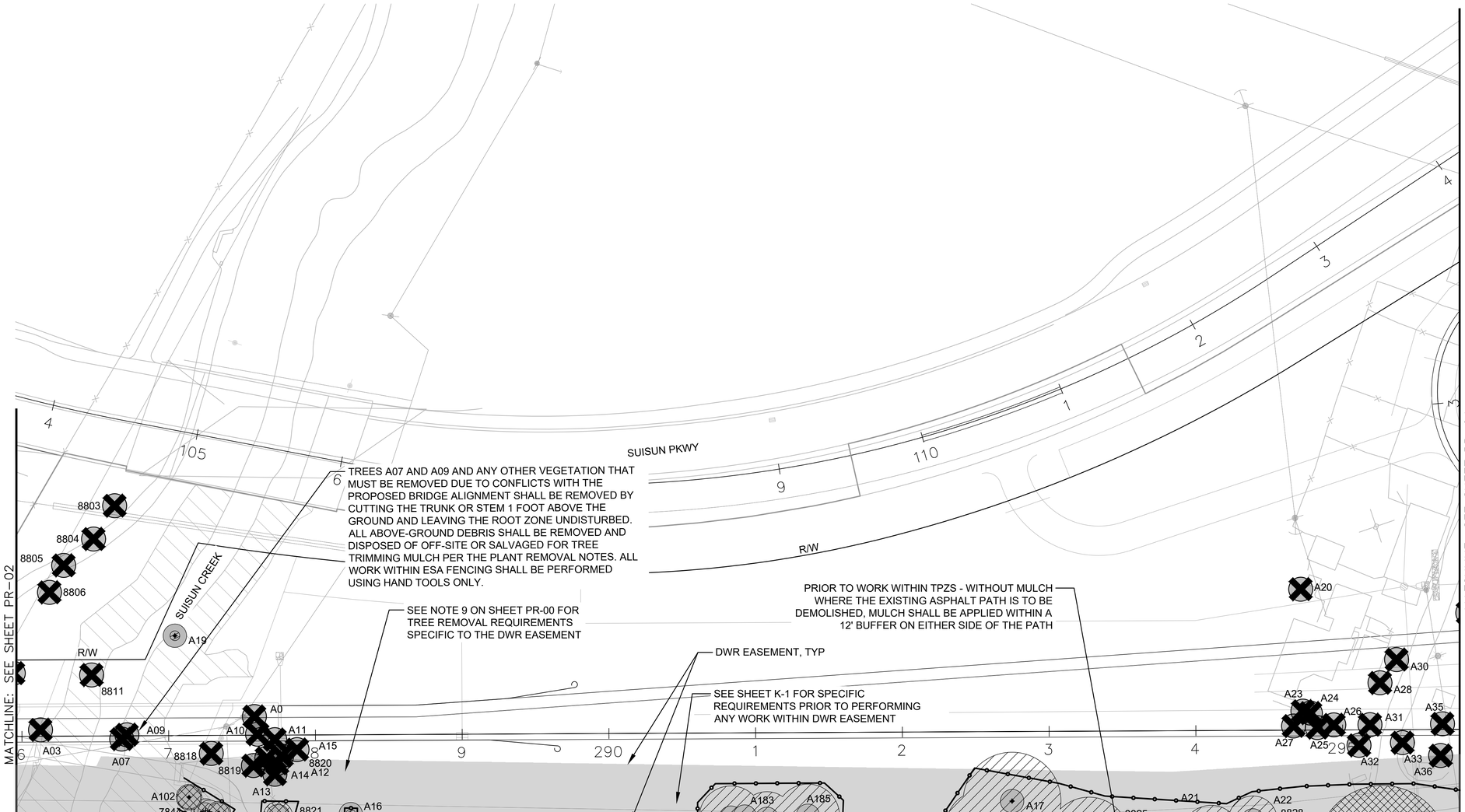
H. T. HARVEY & ASSOC.
983 UNIVERSITY AVE
BUILDING D
LOS GATOS, CA 95032

SOLANO TRANSPORTATION AUTHORITY
423 Main Street
SUISUN CITY, CA 94585

NOTE

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.





LEGEND

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- TEMPORARY TREE PROTECTION FENCING
- TREE PROTECTION ZONE (TPZ) - WITHOUT MULCH
- TREE PROTECTION ZONE (TPZ) - WITH MULCH

PLANT REMOVAL PLAN

SCALE: 1" = 40'

APPROVED FOR PLANT REMOVAL WORK ONLY

PR-03

CALCULATED–DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
CHRIS STRASSER	JOE M. HOWARD	DT, LE	09/20/24

CONSULTANT FUNCTIONAL SUPERVISOR: SEAN A. CHARLES

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION

LAST REVISION 09–20–24
DATE PLOTTED => 9–27–2024
TIME PLOTTED => 11:52

BORDER LAST REVISED 7/2/2010

USERNAME =>dtruelsen
DGN FILE => 4598–02_01_TREE_20240923.DWG

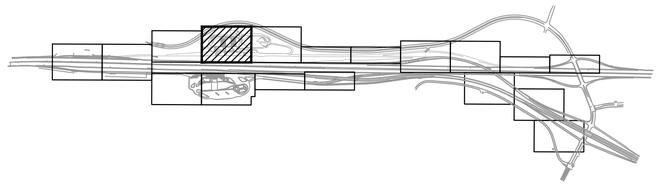
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0711

PROJECT NUMBER & PHASE 04210001551

NOTE

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	12,80	L1.8/L3.2 13.4/17.2		

JOSEPH M. HOWARD — 9/20/24
REGISTERED LANDSCAPE ARCH. — DATE

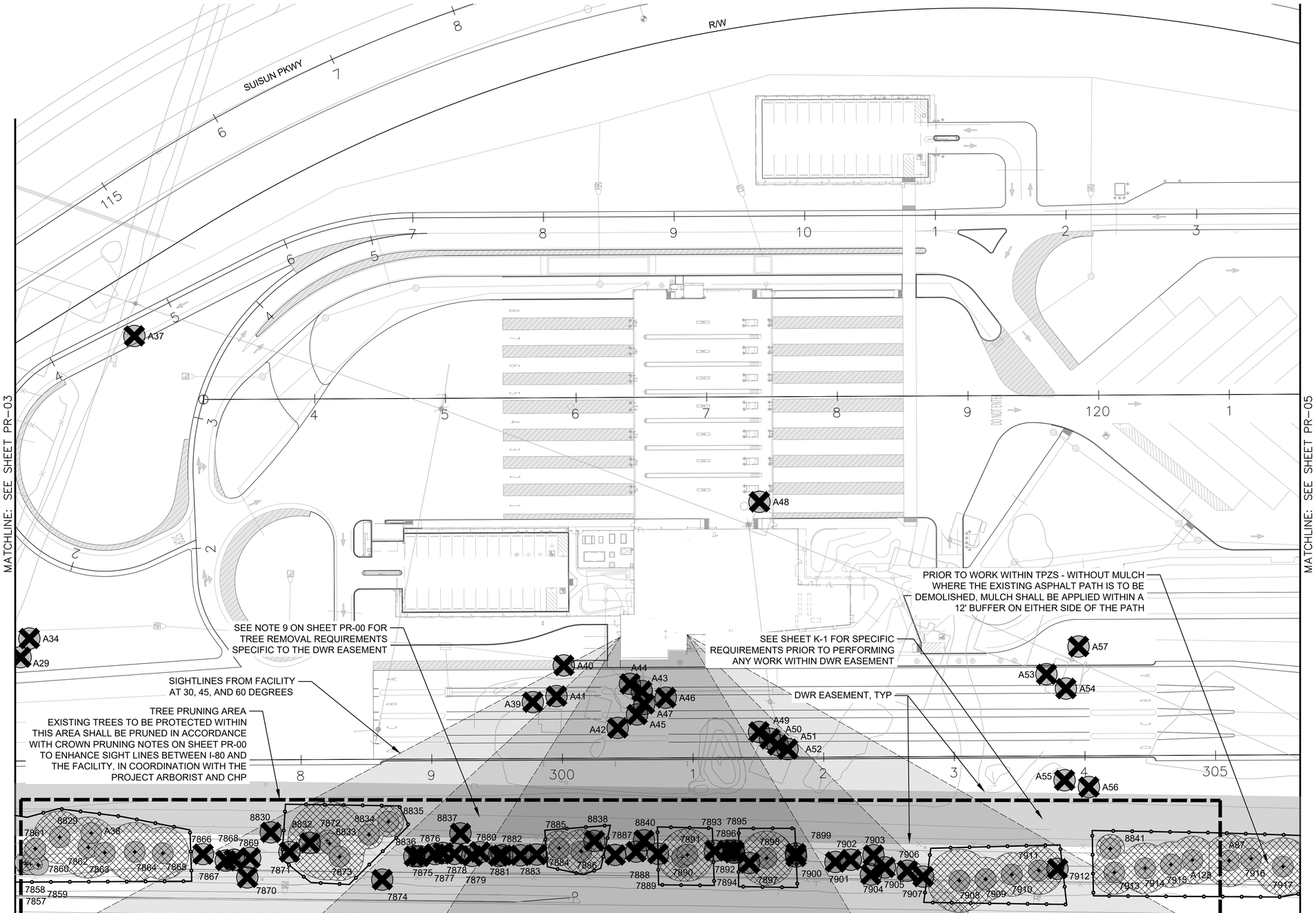
PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT JOSEPH M. HOWARD 4598 Exp. 12/31/26 STATE OF CALIFORNIA

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H. T. HARVEY & ASSOC.
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BUILDING D
LOS GATOS, CA 95032

SOLANO TRANSPORTATION AUTHORITY
423 Main Street
SUISUN CITY, CA 94585



APPROVED FOR PLANT REMOVAL WORK ONLY

LEGEND

- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO REMAIN
- EXISTING TREE(S) TO REMAIN, LOCATION APPROXIMATE
- TEMPORARY TREE PROTECTION FENCING
- TREE PROTECTION ZONE (TPZ) - WITHOUT MULCH
- TREE PROTECTION ZONE (TPZ) - WITH MULCH

PLANT REMOVAL PLAN

SCALE: 1" = 40'

PR-04

CHRIS STRASSER	DT, LE		
JOE M. HOWARD	09/20/24		
CALCULATED–DESIGNED BY	REVISED BY		
CHECKED BY	DATE REVISED		

CONSULTANT FUNCTIONAL SUPERVISOR: SEAN A. CHARLES

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION

LAST REVISION 09-20-24
DATE PLOTTED => 9-27-2024
TIME PLOTTED => 11:53

BORDER LAST REVISED 7/2/2010 | USERNAME =>dtruelsen | DGN FILE => 4598-02_01_TREE_20240923.DWG | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0711 | PROJECT NUMBER & PHASE 04210001551

EXISTING TREES

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
600	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	26	NON-NATIVE	YES
602	*QUERCUS LOBATA*	VALLEY OAK	23	NATIVE	YES
679	*QUERCUS LOBATA*	VALLEY OAK	11	NATIVE	YES
696	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
697	*QUERCUS LOBATA*	VALLEY OAK	25	NATIVE	YES
767	*QUERCUS LOBATA*	VALLEY OAK	21	NATIVE	YES
768	*QUERCUS LOBATA*	VALLEY OAK	13	NATIVE	YES
769	*QUERCUS LOBATA*	VALLEY OAK	23	NATIVE	YES
771	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	YES
772	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	YES
773	*QUERCUS LOBATA*	VALLEY OAK	17	NATIVE	YES
774	*QUERCUS LOBATA*	VALLEY OAK	28	NATIVE	YES
775	*QUERCUS LOBATA*	VALLEY OAK	21	NATIVE	YES
777	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
778	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
779	*PINUS HALEPENSIS*	ALEPPO PINE	43	NON-NATIVE	YES
780	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
782	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
784	*PINUS HALEPENSIS*	ALEPPO PINE	30	NON-NATIVE	YES
785	*PINUS HALEPENSIS*	ALEPPO PINE	36	NON-NATIVE	YES
787	*QUERCUS LOBATA*	VALLEY OAK	5	NATIVE	YES
789	*QUERCUS LOBATA*	VALLEY OAK	14	NATIVE	YES
790	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	YES
791	*QUERCUS LOBATA*	VALLEY OAK	28	NATIVE	YES
793	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
795	*QUERCUS LOBATA*	VALLEY OAK	22	NATIVE	NO
796	*QUERCUS LOBATA*	VALLEY OAK	27	NATIVE	YES
810	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
811	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
812	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
813	*QUERCUS LOBATA*	VALLEY OAK	19	NATIVE	NO
814	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
816	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	NO
819	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
820	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
821	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	NO
827	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16, 11	NATIVE	NO
834	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
849	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	NO
850	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
851	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	9, 5	NON-NATIVE	NO
859	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	4, 6	NON-NATIVE	NO
860	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
895	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	5, 5, 4, 4	NON-NATIVE	NO
4132	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	29	NATIVE	NO
4133	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	23	NATIVE	NO
4134	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
4135	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	35	NATIVE	NO
4136	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	25	NATIVE	NO
4137	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12, 8	NATIVE	NO
4138	*JUGLANS REGIA*	ENGLISH WALNUT	30	NON-NATIVE	NO
4139	*JUGLANS REGIA*	ENGLISH WALNUT	52	NON-NATIVE	NO
4140	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
4141	*PISTACIA CHINENSIS*	CHINESE PISTACHE	9	NON-NATIVE	NO
4142	*PISTACIA CHINENSIS*	CHINESE PISTACHE	11	NON-NATIVE	NO
4143	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	28	NATIVE	NO
4144	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	27	NATIVE	NO
4319	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	28	NATIVE	NO
4325	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	25	NATIVE	NO
4339	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	26	NATIVE	NO
4340	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	30	NATIVE	NO
4346	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	18	NATIVE	NO
4347	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	NO
4348	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
4439	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
4445	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
4446	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
4489	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14, 13	NATIVE	NO
4490	*QUERCUS SUBER*	CORK OAK	5	NON-NATIVE	NO
4496	*JUGLANS REGIA*	ENGLISH WALNUT	50	NON-NATIVE	NO
4498	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
4506	*JUGLANS REGIA*	ENGLISH WALNUT	40	NON-NATIVE	NO
4507	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	24	NON-NATIVE	NO
4514	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	12	NON-NATIVE	NO
4520	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	21	NON-NATIVE	NO
4527	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	30	NATIVE	NO
4532	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4, 4, 3	NATIVE	NO
4539	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4, 3	NATIVE	NO
4541	*RHAMNUS ALATERNUS*	MEDITERRANEAN BUCKTHORN	6, 6, 4, 4	INVASIVE - WATCH	NO
4544	*RHAMNUS ALATERNUS*	MEDITERRANEAN BUCKTHORN	4	INVASIVE - WATCH	NO
4547	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5, 4	NATIVE	NO
4548	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
4556	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
4849	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
7843	*CERATONIA SILIQUA*	CAROB TREE	7	NON-NATIVE	NO
7844	*CERATONIA SILIQUA*	CAROB TREE	6	NON-NATIVE	NO
7845	*OLEA EUROPAEA*	COMMON OLIVE	6, 5, 4	INVASIVE - LIMITED	NO
7846	*CERATONIA SILIQUA*	CAROB TREE	8	NON-NATIVE	NO
7847	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
7848	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
7850	*QUERCUS LOBATA*	VALLEY OAK	24	NATIVE	NO
7851	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
7852	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
7853	*UNKNOWN*	UNKNOWN	5	UNKNOWN	NO
7854	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	8	NATIVE	NO
7855	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
7856	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
7857	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	4	NON-NATIVE	NO
7858	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	4	NON-NATIVE	NO
7859	*UNKNOWN*	UNKNOWN	5	UNKNOWN	NO
7860	*AILANTHUS ALTISSIMA*	TREE-OF-HEAVEN	4	INVASIVE - MODERATE	NO
7861	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
7862	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	NO
7863	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
7864	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	27	NATIVE	NO
7865	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
7866	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	YES
7867	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
7868	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	YES
7869	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
7870	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
7871	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	29	NATIVE	YES
7872	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	36	NATIVE	NO
7873	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12, 10	NATIVE	NO
7874	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	YES
7875	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
7876	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
7877	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	17	NATIVE	YES
7878	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
7879	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	YES
7880	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
7881	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
7882	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	YES
7883	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
7884	*QUERCUS LOBATA*	VALLEY OAK	24	NATIVE	YES
7885	*QUERCUS KELLOGGII*	CALIFORNIA BLACK OAK	16	NATIVE	NO
7886	*QUERCUS KELLOGGII*	CALIFORNIA BLACK OAK	20	NATIVE	NO
7887	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
7888	*QUERCUS LOBATA*	VALLEY OAK	4	NATIVE	YES
7889	*QUERCUS LOBATA*	VALLEY OAK	16	NATIVE	YES
7890	*QUERCUS LOBATA*	VALLEY OAK	22	NATIVE	NO
7891	*QUERCUS LOBATA*	VALLEY OAK	24	NATIVE	NO
7892	*QUERCUS LOBATA*	VALLEY OAK	15	NATIVE	YES
7893	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
7894	*QUERCUS LOBATA*	VALLEY OAK	6	NATIVE	YES
7895	*QUERCUS LOBATA*	VALLEY OAK	5	NATIVE	YES
7896	*QUERCUS LOBATA*	VALLEY OAK	12	NATIVE	YES
7897	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
7898	*QUERCUS KELLOGGII*	CALIFORNIA BLACK OAK	25	NATIVE	NO
7899	*QUERCUS LOBATA*	VALLEY OAK	25	NATIVE	YES
7900	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
7901	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
7902	*QUERCUS LOBATA*	VALLEY OAK	14	NATIVE	YES
7903	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
7904	*QUERCUS LOBATA*	VALLEY OAK	14	NATIVE	YES
7905	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
7906	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
7907	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	YES
7908	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	29	NATIVE	NO
7909	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
7910	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
7911	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
7912	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	YES
7913	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
7914	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	23	NATIVE	NO
7915	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	NO
7916	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	NO
7917	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	NO
7918	*QUERCUS LOBATA*	VALLEY OAK	24	NATIVE	NO
7919	*QUERCUS LOBATA*	VALLEY OAK	26	NATIVE	NO
7920	*QUERCUS LOBATA*	VALLEY OAK	15	NATIVE	NO
7921	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
7922	*QUERCUS LOBATA*	VALLEY OAK	19	NATIVE	NO
7923	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
7924	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	NO
7925	*QUERCUS KELLOGGII*	CALIFORNIA BLACK OAK	19	NATIVE	NO
7926	*QUERCUS KELLOGGII*	CALIFORNIA BLACK OAK	18	NATIVE	NO
7927	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
7928	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
7929	*QUERCUS LOBATA*	VALLEY OAK	16	NATIVE	NO
7930	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
7931	*QUERCUS LOBATA*	VALLEY OAK	22	NATIVE	NO
7932	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
7933	*QUERCUS LOBATA*	VALLEY OAK	16	NATIVE	NO
7934	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
7935	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
7936	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
7937	*QUERCUS LOBATA*	VALLEY OAK	16	NATIVE	NO
7938	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	NO
7939	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
7940	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
7941	*QUERCUS LOBATA*	VALLEY OAK	22	NATIVE	NO
7942	*QUERCUS LOBATA*	VALLEY OAK	18	NATIVE	NO
7943	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
7944	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	12,80	L1.8/L3.2 13.4/17.2		

JOSEPH M. HOWARD — 9/20/24
REGISTERED LANDSCAPE ARCH. — DATE

PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT — JOSEPH M. HOWARD — 4598 — Exp. 12/31/26 — STATE OF CALIFORNIA

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H. T. HARVEY & ASSOC.
983 UNIVERSITY AVE
BUILDING D
LOS GATOS, CA 95032

SOLANO TRANSPORTATION AUTHORITY
423 Main Street
SUISUN CITY, CA 94585

PLANT REMOVAL PLAN

SCALE: NONE

PR-16

CALCULATED–DESIGNED BY		
CHECKED BY	DT, LE	09/20/24
CHRIS STRASSER	REVISED BY	DATE REVISED
JOE M. HOWARD		
CONSULTANT FUNCTIONAL SUPERVISOR	SEAN A. CHARLES	

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION — Caltrans

DATE PLOTTED => 9-27-2024
TIME PLOTTED => 11:52
LAST REVISION 09-20-24

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
7945	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
7946	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
7947	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	NO
7948	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
7949	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
7950	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
7951	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	23	NATIVE	NO
7952	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
7953	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	12	NON-NATIVE	NO
7954	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	21	NON-NATIVE	YES
7955	*LIQUIDAMBAR STYRACIFLUA*	SWEETGUM	13	NON-NATIVE	NO
7956	*LIQUIDAMBAR STYRACIFLUA*	SWEETGUM	18	NON-NATIVE	NO
7957	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
7958	*ARBUTUS UNEDO*	STRAWBERRY TREE	7, 4	NON-NATIVE	NO
7959	*ARBUTUS UNEDO*	STRAWBERRY TREE	7, 6, 6	NON-NATIVE	NO
7960	*PYRUS CALLERYANA*	CALLERY PEAR	20	INVASIVE - WATCH	NO
7961	*PINUS HALEPENSIS*	ALEPPO PINE	38	NON-NATIVE	NO
7962	*ARBUTUS UNEDO*	STRAWBERRY TREE	9, 7, 7, 6, 5	NON-NATIVE	NO
7963	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
7964	*ARBUTUS UNEDO*	STRAWBERRY TREE	4, 4	NON-NATIVE	NO
7965	*PINUS HALEPENSIS*	ALEPPO PINE	40	NON-NATIVE	NO
7966	*ARBUTUS UNEDO*	STRAWBERRY TREE	4, 4	NON-NATIVE	NO
7967	*ARBUTUS UNEDO*	STRAWBERRY TREE	10, 7	NON-NATIVE	NO
7968	*PINUS HALEPENSIS*	ALEPPO PINE	34	NON-NATIVE	NO
7969	*ARBUTUS UNEDO*	STRAWBERRY TREE	7, 4	NON-NATIVE	NO
7970	*ARBUTUS UNEDO*	STRAWBERRY TREE	5	NON-NATIVE	NO
7971	*PINUS HALEPENSIS*	ALEPPO PINE	25	NON-NATIVE	NO
7972	*PINUS HALEPENSIS*	ALEPPO PINE	24	NON-NATIVE	NO
7973	*PINUS HALEPENSIS*	ALEPPO PINE	28	NON-NATIVE	NO
7974	*ARBUTUS UNEDO*	STRAWBERRY TREE	9, 8, 5, 4	NON-NATIVE	NO
7975	*PINUS HALEPENSIS*	ALEPPO PINE	27	NON-NATIVE	NO
7976	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	NO
7977	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
7978	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	NO
7979	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
7980	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
7981	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
7982	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4, 3	NATIVE	NO
7983	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10, 9	NATIVE	NO
7984	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
7985	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	10	NON-NATIVE	NO
7986	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	10	NON-NATIVE	NO
7987	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	10	NON-NATIVE	NO
7988	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	8	NON-NATIVE	NO
7989	*PINUS HALEPENSIS*	ALEPPO PINE	30	NON-NATIVE	NO
7990	*PINUS HALEPENSIS*	ALEPPO PINE	30	NON-NATIVE	NO
7991	*PINUS HALEPENSIS*	ALEPPO PINE	26	NON-NATIVE	NO
7992	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
7993	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
7994	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	NO
7995	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	14	NON-NATIVE	NO
7996	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
7997	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	16	NON-NATIVE	NO
7998	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	14	NON-NATIVE	NO
7999	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	14	NON-NATIVE	NO
8000	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	16	NON-NATIVE	NO
8501	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
8502	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8503	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8504	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8505	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8506	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	NO
8507	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8508	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8509	*QUERCUS LOBATA*	VALLEY OAK	16	NATIVE	NO
8510	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	23	NATIVE	NO
8511	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	25	NATIVE	NO
8512	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	27	NATIVE	NO
8513	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
8514	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	YES
8515	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8516	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8517	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8518	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8519	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8520	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8521	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8522	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8524	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8525	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	5	NON-NATIVE	YES
8526	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	8	NON-NATIVE	YES
8527	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6, 4	NATIVE	YES
8528	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	YES
8529	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	YES
8530	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8532	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	14	NON-NATIVE	YES
8533	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8534	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5, 4	NATIVE	YES
8535	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8536	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	YES
8537	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	13	NON-NATIVE	YES
8538	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12, 4	NATIVE	YES
8539	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	11	NON-NATIVE	YES

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
8540	*UNKNOWN*	UNKNOWN	6	UNKNOWN	YES
8545	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	YES
8546	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8547	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8, 5	NATIVE	YES
8548	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7, 5	NATIVE	YES
8549	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8550	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8551	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8552	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	17	NATIVE	YES
8553	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	17	NATIVE	YES
8554	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
8555	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	YES
8556	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8557	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	YES
8558	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	YES
8559	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	YES
8560	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8561	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	YES
8562	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8563	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8564	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	YES
8565	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	YES
8567	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	27	NATIVE	YES
8568	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	YES
8569	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8570	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
8571	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
8572	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
8573	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5, 4, 4	NATIVE	YES
8574	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8575	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	27	NATIVE	YES
8576	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	YES
8577	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	19, 10	NATIVE	YES
8578	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	YES
8579	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	YES
8580	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	YES
8581	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8582	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	YES
8583	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8584	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	YES
8585	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8586	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	15	NON-NATIVE	YES
8587	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
8588	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	11	NON-NATIVE	YES
8589	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8590	*UNKNOWN*	UNKNOWN	7	UNKNOWN	YES
8591	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	10	NON-NATIVE	YES
8592	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
8593	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
8594	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8, 7, 4	NATIVE	YES
8595	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8596	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	YES
8597	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8598	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	28	NON-NATIVE	YES
8599	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	17	NON-NATIVE	YES
8600	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	26	NON-NATIVE	YES
8601	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	12	NON-NATIVE	NO
8602	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	NO
8603	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	8	NON-NATIVE	NO
8604	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8605	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	10	NON-NATIVE	NO
8606	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	7	NON-NATIVE	NO
8607	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8608	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	13	NON-NATIVE	NO
8609	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	8	NON-NATIVE	NO
8610	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	12	NON-NATIVE	NO
8611	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
8612	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
8613	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	NO
8614	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
8615	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8, 6	NATIVE	NO
8616	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8617	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
8618	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8619	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8620	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
8621	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	17	NATIVE	NO
8622	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	NO
8623	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8624	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
8625	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	NO
8626	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8627	*PINUS HALEPENSIS*	ALEPPO PINE	30	NON-NATIVE	NO
8628	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6, 6	NATIVE	NO
8629	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8630	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
8631	*PINUS HALEPENSIS*	ALEPPO PINE	30	NON-NATIVE	NO
8632	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8633	*PINUS HALEPENSIS*	ALEPPO PINE	8	NON-NATIVE	NO
8634	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8635	*PINUS HALEPENSIS*	ALEPPO PINE	24	NON-NATIVE	NO
8636	*PINUS HALEPENSIS*	ALEPPO PINE	23	NON-NATIVE	NO
8637	*PINUS HALEPENSIS*	ALEPPO PINE	24	NON-NATIVE	NO

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	12,80	L1.8/L3.2 13.4/17.2		

JOSEPH M. HOWARD — REGISTERED LANDSCAPE ARCH. — 9/20/24 DATE

PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT — JOSEPH M. HOWARD — 4598 — Exp. 12/31/26 — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

H. T. HARVEY & ASSOC.
983 UNIVERSITY AVE
BUILDING D
LOS GATOS, CA 95032

SOLANO TRANSPORTATION AUTHORITY
423 Main Street
SUISUN CITY, CA 94585

PLANT REMOVAL PLAN

SCALE: NONE

PR-17

CALCULATED–DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
CHRIS STRASSER	JOE M. HOWARD	DT, LE	09/20/24

CONSULTANT FUNCTIONAL SUPERVISOR: SEAN A. CHARLES

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION — Caltrans®

LAST REVISION — DATE PLOTTED => 9-27-2024 — TIME PLOTTED => 11:52 — 09-20-24

BORDER LAST REVISED 7/2/2010

USERNAME =>dtruelsen
DGN FILE => 4598-02_01_TREE INFO_20240923.DWG

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0711

PROJECT NUMBER & PHASE 04210001551

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
8638	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
8639	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	YES
8640	*QUERCUS LOBATA*	VALLEY OAK	12, 10, 8, 6, 3	NATIVE	YES
8641	*QUERCUS LOBATA*	VALLEY OAK	21	NATIVE	YES
8642	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	YES
8643	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8644	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	30	NATIVE	YES
8645	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8646	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8647	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5, 5	NATIVE	YES
8648	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	30	NATIVE	YES
8649	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	30	NATIVE	YES
8650	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	25	NATIVE	YES
8651	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8652	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8653	*CEDRUS DEODARA*	DEODAR CEDAR	15	NON-NATIVE	YES
8654	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8655	*CEDRUS DEODARA*	DEODAR CEDAR	21	NON-NATIVE	YES
8656	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9, 8	NATIVE	YES
8657	*CEDRUS DEODARA*	DEODAR CEDAR	18	NON-NATIVE	YES
8658	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	YES
8659	*CEDRUS DEODARA*	DEODAR CEDAR	24	NON-NATIVE	YES
8660	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
8661	*CEDRUS DEODARA*	DEODAR CEDAR	22	NON-NATIVE	YES
8662	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8663	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6, 5	NATIVE	YES
8664	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8665	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8666	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6, 4	NATIVE	YES
8667	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12, 12, 10, 8	NATIVE	YES
8668	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
8669	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	YES
8670	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8671	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8672	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10, 10, 8, 8, 6	NATIVE	YES
8673	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	YES
8674	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8675	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8676	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	YES
8677	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	YES
8678	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8679	*ACER SACCHARUM*	SUGAR MAPLE	4	NON-NATIVE	YES
8680	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
8681	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
8682	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	24	NON-NATIVE	NO
8683	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	20	NON-NATIVE	YES
8684	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
8685	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	23	NON-NATIVE	NO
8686	*QUERCUS LOBATA*	VALLEY OAK	27	NATIVE	YES
8687	*QUERCUS LOBATA*	VALLEY OAK	23	NATIVE	NO
8688	*QUERCUS LOBATA*	VALLEY OAK	28	NATIVE	NO
8689	*PINUS HALEPENSIS*	ALEPPO PINE	46	NON-NATIVE	YES
8690	*QUERCUS LOBATA*	VALLEY OAK	25	NATIVE	NO
8691	*QUERCUS LOBATA*	VALLEY OAK	28	NATIVE	NO
8692	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	7	INVASIVE - LIMITED	NO
8693	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	4, 4	INVASIVE - LIMITED	NO
8694	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8, 4	INVASIVE - LIMITED	NO
8695	*UNKNOWN*	UNKNOWN	6, 5, 3	UNKNOWN	NO
8696	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	NO
8697	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	6	INVASIVE - LIMITED	NO
8698	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	INVASIVE - LIMITED	NO
8699	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	INVASIVE - LIMITED	NO
8700	*QUERCUS LOBATA*	VALLEY OAK	16	NATIVE	NO
8701	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
8702	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
8703	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9, 6	NATIVE	NO
8704	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
8705	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
8706	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8707	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5, 14	NATIVE	NO
8708	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8709	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8710	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8711	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8712	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8713	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8714	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8715	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	NO
8716	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8717	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	31	NATIVE	NO
8718	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
8719	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8720	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8721	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8722	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8723	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8724	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	23	NATIVE	NO
8725	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	34	NATIVE	NO
8726	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8727	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8728	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	27	NATIVE	NO
8729	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	NO
8730	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	NO

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
8731	*UNKNOWN*	UNKNOWN	UNKNOWN	DEAD	YES
8732	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	16	NATIVE	YES
8733	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	18	NATIVE	YES
8734	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	YES
8735	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	YES
8736	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	25	NATIVE	YES
8737	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8738	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8739	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
8740	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8741	*PYRUS SP*	COMMON PEAR	7, 5, 5, 5, 4, 4, 2	NON-NATIVE	YES
8742	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8743	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8744	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8745	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8746	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	44	NATIVE	YES
8747	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8748	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8749	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8750	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
8751	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	YES
8752	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8, 5	NATIVE	YES
8753	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22, 19	NATIVE	YES
8754	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8755	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8756	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8757	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8758	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	YES
8759	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	46	NATIVE	YES
8760	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8761	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
8762	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8763	*PYRUS SP*	COMMON PEAR	8, 8, 7	NON-NATIVE	YES
8764	*PYRUS SP*	COMMON PEAR	8, 6	NON-NATIVE	YES
8765	*PYRUS SP*	COMMON PEAR	10, 7	NON-NATIVE	YES
8766	*PYRUS SP*	COMMON PEAR	6	NON-NATIVE	YES
8767	*PYRUS SP*	COMMON PEAR	8	NON-NATIVE	YES
8768	*PYRUS SP*	COMMON PEAR	7, 4	NON-NATIVE	YES
8769	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
8770	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8771	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
8772	*PYRUS SP*	COMMON PEAR	8, 5	NON-NATIVE	YES
8773	*PYRUS SP*	COMMON PEAR	9	NON-NATIVE	YES
8774	*PYRUS SP*	COMMON PEAR	12	NON-NATIVE	YES
8775	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8776	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	16	NATIVE	NO
8777	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	26, 14, 4	NATIVE	YES
8778	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	8	NATIVE	YES
8779	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	7, 7	NATIVE	YES
8780	*SALIX LAEVIGATA*	RED WILLOW	10, 7, 6, 6, 5, 5	NATIVE	YES
8781	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8782	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	40	NATIVE	YES
8783	*AESCULUS CALIFORNICA*	CALIFORNIA BUCKEYE	6, 5, 5, 4, 4	NATIVE	YES
8784	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	8, 6, 5	NATIVE	YES
8785	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
8786	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	14	NON-NATIVE	YES
8787	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	7, 6	NATIVE	YES
8788	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8789	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8790	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8791	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	16	NATIVE	NO
8803	*QUERCUS LOBATA*	VALLEY OAK	20	NATIVE	YES
8804	*QUERCUS LOBATA*	VALLEY OAK	21	NATIVE	YES
8805	*QUERCUS LOBATA*	VALLEY OAK	18	NATIVE	YES
8806	*QUERCUS LOBATA*	VALLEY OAK	8, 6, 4, 3, 3, 3	NATIVE	YES
8811	*QUERCUS LOBATA*	VALLEY OAK	25, 19	NATIVE	YES
8814	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	6	NON-NATIVE	YES
8815	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	42	NATIVE	YES
8818	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	7	NON-NATIVE	YES
8819	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	11	NON-NATIVE	YES
8820	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	8	NON-NATIVE	YES
8821	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
8822	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	30	NATIVE	NO
8823	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8824	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	33	NATIVE	NO
8825	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7, 6	NATIVE	NO
8826	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
8827	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
8828	*ALBIZIA JULIBRISSIN*	SILK TREE	4, 4, 3, 2, 2	NON-NATIVE	NO

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	12,80	L1.8/L3.2 13.4/17.2		

JOSEPH M. HOWARD — 9/20/24
REGISTERED LANDSCAPE ARCH. — DATE

PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT — JOSEPH M. HOWARD — 4598 — Exp. 12/31/26 — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

H. T. HARVEY & ASSOC.
983 UNIVERSITY AVE
BUILDING D
LOS GATOS, CA 95032

SOLANO TRANSPORTATION AUTHORITY
423 Main Street
SUISUN CITY, CA 94585

PLANT REMOVAL PLAN

SCALE: NONE

PR-18

DATE PLOTTED => 9-27-2024
TIME PLOTTED => 11:52
LAST REVISION 09-20-24

CHECKED BY	CALCULATED–DESIGNED BY	DRAWN BY	CHECKED BY	REVISED BY	DATE REVISED
CHRIS STRASSER		JOE M. HOWARD		DT, LE	09/20/24

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION — Caltrans®

CONSULTANT FUNCTIONAL SUPERVISOR: SEAN A. CHARLES

BORDER LAST REVISED 7/2/2010

USERNAME => dtruelsen
DGN FILE => 4598-02_01_TREE INFO_20240923.DWG

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0711

PROJECT NUMBER & PHASE 04210001551

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
8829	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
8830	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	YES
8832	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8833	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14, 7, 6	NATIVE	NO
8834	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8, 5	NATIVE	NO
8835	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
8836	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
8837	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10, 7	NATIVE	YES
8838	*QUERCUS LOBATA*	VALLEY OAK	5	NATIVE	YES
8839	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	27	NATIVE	NO
8840	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
8841	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8842	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10, 7	NATIVE	NO
8843	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	NO
8844	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8845	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
8846	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8847	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8848	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14, 8	NATIVE	NO
8849	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	NO
8850	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	NO
8851	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
8852	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8854	*ARBUTUS UNEDO*	STRAWBERRY TREE	11, 7, 6, 4, 4	NON-NATIVE	NO
8855	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
8856	*ARBUTUS UNEDO*	STRAWBERRY TREE	9, 6, 5, 5, 4	NON-NATIVE	YES
8857	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
8858	*LIQUIDAMBAR STYRACIFLUA*	SWEETGUM	12	NON-NATIVE	NO
8859	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8860	*LIQUIDAMBAR STYRACIFLUA*	SWEETGUM	12	NON-NATIVE	NO
8861	*LIQUIDAMBAR STYRACIFLUA*	SWEETGUM	8	NON-NATIVE	NO
8862	*MELALEUCA VIMINALIS*	WEEPING BOTTLEBRUSH	6, 4, 4, 2	NON-NATIVE	NO
8863	*PYRUS CALLERYANA*	CALLERY PEAR	18	INVASIVE - WATCH	NO
8864	*PYRUS CALLERYANA*	CALLERY PEAR	15	INVASIVE - WATCH	NO
8865	*PYRUS CALLERYANA*	CALLERY PEAR	16	INVASIVE - WATCH	NO
8866	*PINUS HALEPENSIS*	ALEPPO PINE	26	NON-NATIVE	NO
8867	*PINUS HALEPENSIS*	ALEPPO PINE	26, 15, 13	NON-NATIVE	NO
8868	*PINUS HALEPENSIS*	ALEPPO PINE	29	NON-NATIVE	NO
8869	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8870	*PINUS HALEPENSIS*	ALEPPO PINE	32	NON-NATIVE	NO
8871	*PINUS HALEPENSIS*	ALEPPO PINE	26, 17, 12	NON-NATIVE	NO
8872	*PINUS HALEPENSIS*	ALEPPO PINE	28	NON-NATIVE	NO
8873	*PINUS HALEPENSIS*	ALEPPO PINE	22	NON-NATIVE	NO
8874	*PINUS HALEPENSIS*	ALEPPO PINE	13, 9	NON-NATIVE	NO
8875	*PINUS HALEPENSIS*	ALEPPO PINE	21	NON-NATIVE	NO
8876	*PINUS HALEPENSIS*	ALEPPO PINE	25	NON-NATIVE	NO
8877	*PINUS HALEPENSIS*	ALEPPO PINE	16	NON-NATIVE	NO
8878	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
8879	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	23	NATIVE	NO
8880	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	23	NATIVE	NO
8881	*PINUS HALEPENSIS*	ALEPPO PINE	24	NON-NATIVE	NO
8882	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
8883	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
8884	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
8885	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8886	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
8887	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8888	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
8889	*CERATONIA SILIQUA*	CAROB TREE	6, 4, 4, 9	NON-NATIVE	NO
8890	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	30	NATIVE	NO
8891	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	28	NATIVE	NO
8892	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	NO
8893	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	26	NATIVE	NO
8894	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8895	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
8896	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	NO
8897	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	NO
8898	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	19	NATIVE	NO
8899	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8900	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
8901	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	31	NATIVE	NO
8902	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	33	NATIVE	NO
8903	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8904	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
8905	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
8906	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8907	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8908	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	NO
8909	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	NO
8910	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
8911	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
8912	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8913	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	7	NON-NATIVE	NO
8914	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8, 5	NATIVE	NO
8915	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	NO
8916	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	9	NON-NATIVE	NO
8917	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8918	*GLEDITSIA TRIACANTHOS*	HONEY LOCUST	12	NON-NATIVE	NO
8919	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12, 11	NATIVE	NO
8920	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8921	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	34	NATIVE	NO
8922	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8923	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	14	NON-NATIVE	NO
8924	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	23	NON-NATIVE	NO
8925	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	27	NATIVE	NO
8926	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12, 10	NATIVE	NO
8927	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6, 25	NATIVE	NO
8928	*CALOCEDRUS DECURRENS*	INCENSE CEDAR	15	NON-NATIVE	NO

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
8929	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8930	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8931	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16, 16	NATIVE	NO
8932	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8933	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8934	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
8935	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
8936	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
8937	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5, 6	NATIVE	NO
8938	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	33	NATIVE	NO
8939	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	NO
8945	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22, 16	NATIVE	NO
8946	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
8947	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	NO
8948	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	18	NATIVE	NO
8949	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	36	NATIVE	NO
8950	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
8951	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8952	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10, 8	NATIVE	NO
8953	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
8954	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8955	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8957	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8, 6	NATIVE	NO
8958	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8959	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
8960	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8961	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12, 12	NATIVE	NO
8962	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
8963	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
8964	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	NO
8965	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8966	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
8967	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4, 4	NATIVE	NO
8968	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8969	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
8970	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
8971	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
8972	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8973	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
8974	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8975	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8976	*PINUS HALEPENSIS*	ALEPPO PINE	19, 15	NON-NATIVE	NO
8977	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8978	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8979	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8980	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8981	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8982	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6, 4	NATIVE	NO
8983	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
8984	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8985	*PINUS HALEPENSIS*	ALEPPO PINE	28	NON-NATIVE	NO
8986	*PINUS HALEPENSIS*	ALEPPO PINE	20	NON-NATIVE	NO
8987	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8988	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8989	*PINUS HALEPENSIS*	ALEPPO PINE	30	NON-NATIVE	NO
8990	*PINUS HALEPENSIS*	ALEPPO PINE	36	NON-NATIVE	NO
8991	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10, 7	NATIVE	NO
8992	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
8993	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
8994	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
8995	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8996	*PINUS HALEPENSIS*	ALEPPO PINE	26	NON-NATIVE	NO
8997	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
8998	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	NO
8999	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
9000	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
8940B	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
8940C	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	YES
8941B	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
8941C	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	YES
8942B	*UNKNOWN*	UNKNOWN	5	UNKNOWN	NO
8942C	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
8943B	*FRAXINUS ANGUSTIFOLIA*	NARROW-LEAVED ASH	12	NON-NATIVE	NO
8943C	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
8944B	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
8944C	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
8956B	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	17	NATIVE	NO
8956C	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	25	NATIVE	YES
A0	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	21	NATIVE	YES
A03	*SALIX LAEVIGATA*	RED WILLOW	5	NATIVE	YES
A07	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	18	NATIVE	YES
A08	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	10	NATIVE	YES
A10	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
A11	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
A12	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
A13	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A14	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	YES
A15	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
A16	*QUERCUS LOBATA*	VALLEY OAK	4	NATIVE	NO
A17	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	40	NATIVE	NO
A18	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	12,80	L1.8/L3.2 13.4/17.2		

JOSEPH M. HOWARD — REGISTERED LANDSCAPE ARCH. — 9/20/24 DATE

PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT JOSEPH M. HOWARD 4598 Exp. 12/31/26 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

H. T. HARVEY & ASSOC.
983 UNIVERSITY AVE
BUILDING D
LOS GATOS, CA 95032

SOLANO TRANSPORTATION AUTHORITY
423 Main Street
SUISUN CITY, CA 94585

PLANT REMOVAL PLAN

SCALE: NONE

PR-19

REVISED BY	DATE REVISED
DT, LE	09/20/24

CHRIS STRASSER — CALCULATED–DESIGNED BY
JOE M. HOWARD — CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR: SEAN A. CHARLES

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 09-20-24 — DATE PLOTTED => 9-27-2024 — TIME PLOTTED => 11:52

BORDER LAST REVISED 7/2/2010 | USERNAME =>dtruelsen | DGN FILE => 4598-02_01_TREE INFO_20240923.DWG | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0711 | PROJECT NUMBER & PHASE 04210001551

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
A19	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	10, 10	NATIVE	NO
A20	*JUGLANS REGIA*	ENGLISH WALNUT	22	NON-NATIVE	YES
A21	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
A22	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14, 6	NATIVE	NO
A23	*UNKNOWN*	UNKNOWN	14	UNKNOWN	YES
A24	*UNKNOWN*	UNKNOWN	7	UNKNOWN	YES
A25	*UNKNOWN*	UNKNOWN	18	UNKNOWN	YES
A26	*UNKNOWN*	UNKNOWN	22	UNKNOWN	YES
A27	*UNKNOWN*	UNKNOWN	14	UNKNOWN	YES
A28	*UNKNOWN*	UNKNOWN	20	UNKNOWN	YES
A29	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	10	NATIVE	YES
A30	*UNKNOWN*	UNKNOWN	24	UNKNOWN	YES
A31	*PINUS HALEPENSIS*	ALEPPO PINE	19	NON-NATIVE	YES
A32	*UNKNOWN*	UNKNOWN	9	UNKNOWN	YES
A33	*ALBIZIA JULIBRISSIN*	SILK TREE	18	NON-NATIVE	YES
A34	*UNKNOWN*	UNKNOWN	9	UNKNOWN	YES
A35	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	31	NATIVE	YES
A36	*ALBIZIA JULIBRISSIN*	SILK TREE	10	NON-NATIVE	YES
A37	*UNKNOWN*	UNKNOWN	8	UNKNOWN	YES
A38	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	NO
A39	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	25	NATIVE	YES
A40	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
A41	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
A42	*UNKNOWN*	UNKNOWN	30	UNKNOWN	YES
A43	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	YES
A44	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
A45	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	YES
A46	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
A47	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	YES
A48	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	25	NATIVE	YES
A49	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
A50	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
A51	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	6	NATIVE	YES
A52	*QUERCUS SP.*	OAK	6, 6	UNKNOWN	YES
A53	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
A54	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
A55	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13, 13	NATIVE	YES
A56	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
A57	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	YES
A58	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4, 4	NATIVE	YES
A59	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
A60	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
A61	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
A62	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
A63	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
A64	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	YES
A65	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
A66	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
A67	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A68	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A69	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A70	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
A71	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A72	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A73	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
A74	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A75	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
A76	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A77	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
A78	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A79	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8, 6, 5	NATIVE	YES
A80	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
A81	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
A82	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	26	NATIVE	NO
A83	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
A84	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	NO
A85	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	20	NATIVE	NO
A86	*ACER NEGUNDO*	BOX EDLER	5	NATIVE	
A87	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	23	NATIVE	NO
A88	*RHAMNUS ALATERNUS*	MEDITERRANEAN BUCKTHORN	6, 5, 4	INVASIVE - WATCH	NO
A89	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
A90	*CERATONIA SILIQUA*	CAROB TREE	4, 4	NON-NATIVE	NO
A91	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
A92	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	24	NATIVE	NO
A93	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
A94	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9	NATIVE	NO
A95	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
A96	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
A97	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
A98	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
A99	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	10	NATIVE	NO
A100	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
A101	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
A102	*JUGLANS HINDSII*	NORTHERN CALIFORNIA BLACK WALNUT	10	NATIVE	NO
A103	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	YES
A104	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
A105	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
A106	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4, 6	NATIVE	YES

TREE ID	SCIENTIFIC NAME	COMMON NAME	DBH	NATIVE STATUS	REMOVED?
A107	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4, 4	NATIVE	YES
A108	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A109	*COTONEASTER CORIACEUS*	LATE COTONEASTER	5, 4	NON-NATIVE	YES
A110	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
A111	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	YES
A112	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
A113	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	YES
A114	*QUERCUS LOBATA*	VALLEY OAK	18	NATIVE	YES
A115	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	7	NATIVE	YES
A116	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	YES
A117	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	12	NATIVE	NO
A118	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	NO
A119	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	9, 7	NATIVE	NO
A120	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
A121	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4, 4	NATIVE	NO
A122	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	4	NATIVE	NO
A123	*QUERCUS LOBATA*	VALLEY OAK	9	NATIVE	YES
A124	*UNKNOWN*	UNKNOWN	8	UNKNOWN	NO
A125	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	NO
A126	*FRAXINUS UHDEI*	SHAMEL ASH	12, 10, 6	NON-NATIVE	NO
A127	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	30, 23	NATIVE	NO
A128	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	22	NATIVE	NO
A129	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16	NATIVE	YES
A130	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	16	NATIVE	YES
A131	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	YES
A132	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
A133	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	20	NATIVE	YES
A134	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
A135	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	14	NATIVE	YES
A136	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	14	NATIVE	NO
A137	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	16, 12	NATIVE	YES
A138	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
A139	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	12	NATIVE	NO
A140	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	8	NATIVE	NO
A141	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	19	NATIVE	NO
A142	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
A143	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	10	NATIVE	NO
A144	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	8	NATIVE	NO
A145	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	9	NATIVE	NO
A146	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	12	NATIVE	NO
A147	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	26	NATIVE	NO
A148	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	11	NATIVE	NO
A149	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	20	NATIVE	NO
A150	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	12	NATIVE	NO
A151	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	10	NATIVE	NO
A152	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	11, 9	NATIVE	NO
A153	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	15	NATIVE	NO
A154	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
A155	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	27	NATIVE	NO
A156	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	32	NATIVE	NO
A157	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	17	NATIVE	NO
A158	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6, 5	NATIVE	NO
A159	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
A160	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	6	NATIVE	NO
A161	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	20, 20	NATIVE	NO
A162	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	16	NATIVE	NO
A163	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	42	NATIVE	NO
A164	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	15	NATIVE	NO
A165	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
A166	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	13	NATIVE	NO
A167	*PRUNUS SP.*	PLUM SPECIES	7, 7, 6	INVASIVE - LIMITED	NO
A168	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	19	NATIVE	NO
A169	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	8	NATIVE	NO
A170	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	8	NATIVE	NO
A171	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	20	NATIVE	NO
A172	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	19	NATIVE	NO
A173	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	21	NATIVE	NO
A174	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	31	NATIVE	NO
A175	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	48	NATIVE	NO
A176	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	15	NATIVE	YES
A177	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	13	NATIVE	YES
A178	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	18	NATIVE	YES
A179	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	11	NATIVE	YES
A180	*PLATANUS RACEMOSA*	CALIFORNIA SYCAMORE	31	NATIVE	YES
A181	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	5	NATIVE	NO
A182	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	UNKNOWN	NATIVE	NO
A183	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	UNKNOWN	NATIVE	NO
A184	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	UNKNOWN	NATIVE	NO
A185	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	UNKNOWN	NATIVE	NO
A186	*QUERCUS AGRIFOLIA*	COAST LIVE OAK	UNKNOWN	NATIVE	YES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Sol	12,80	L1.8/L3.2 13.4/17.2		

JOSEPH M. HOWARD — 9/20/24
REGISTERED LANDSCAPE ARCH. — DATE

PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT — JOSEPH M. HOWARD — 4598 — Exp. 12/31/26 — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

H. T. HARVEY & ASSOC.
983 UNIVERSITY AVE
BUILDING D
LOS GATOS, CA 95032

SOLANO TRANSPORTATION AUTHORITY
423 Main Street
SUISUN CITY, CA 94585

PLANT REMOVAL PLAN

SCALE: NONE

PR-20

DATE PLOTTED => 9-27-2024
TIME PLOTTED => 11:52
LAST REVISION 09-20-24

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION — Caltrans®
CONSULTANT FUNCTIONAL SUPERVISOR: SEAN A. CHARLES
CALCULATED–DESIGNED BY: CHRIS STRASSER
CHECKED BY: JOE M. HOWARD
REVISED BY: DT, LE
DATE REVISED: 09/20/24

Project Area
Top of Bank
Permanent Impacts
New Permanent Impacts
New Temporary Impacts
Riparian Planting Areas (0.25 acre)

LSAA Riparian and Stream Habitats

Perennial Drainage
Riparian Woodland



80

Suisun Creek

Riparian Reference Site

Inset

80

50 25 0 50
Feet

Imagery: NearMap June 20, 2024

N:\Projects4500\4598-01\Reports\LSAA\LSAA.aprx

H. T. HARVEY & ASSOCIATES
Ecological Consultants

Exhibit D. Riparian Planting Areas
I-80 Westbound Cordelia Commercial Vehicle Enforcement Facility Project
LSAA Report (4598-01)
January 2025

Project Name: Click or tap here to enter text.
LSA Agreement/ITP Number(s): Click or tap here to enter text.

COVER SHEET

SUBMIT EACH RESUME AS A SEPARATE DOCUMENT

Name	Requested Role(s)[1]	Species/Resource(s)

This form requests information about the qualifications of the Qualified Biologist, Designated Biologist and Biological Monitor specified in California Endangered Species Act Incidental Take Permits (ITP) and Lake or Streambed Alteration (LSA) Agreements issued by California Department of Fish and Wildlife (CDFW). **Completing this form will ensure the receipt of adequate information and expedite CDFW review of qualifications.**

[1] Requested roles correspond to the biological staffing requirements indicated in the Lake and Streambed Alteration (LSA) Agreement or California Endangered Species Act Incidental Take Permit (ITP). Roles may include a "Qualified Biologist" or "Designated Biologist" with the necessary experience to survey for special status species, or a "Biological Monitor" with the necessary experience to monitor construction activities for special status species. An individual may request more than one role.

Project Name: Click or tap here to enter text.
LSA Agreement/ITP Number(s): Click or tap here to enter text.

SECTION I. NAME AND CONTACT INFORMATION	
Name:	**Title:**
Company Name & Address:	
Phone:	**Email:**

SECTION II. EDUCATION
College/University & Degree Type Related to Natural Resource Science:
Other Relevant Workshops & Training:

SECTION III. ROLE(S) AND PERMIT REQUIREMENTS
Requested Role(s):
Relevant LSA Agreement Measures or ITP Conditions[2]:

SECTION IV. SPECIES AND RESOURCE EXPERIENCE – SUMMARY

This section summarizes experience by special status species and other resource. Use one row for each species or other resource where surveys or special protections are required in the CESA ITP or LSA Agreement for which biologist approval is requested.[3] If more space is needed, add rows to this table. Provide details in Section V.

Species or Resource	**Number of Field Seasons & Hours, Life Stages Observed** Provide project details in Section 5	**Life History Knowledge** Describe formal workshops & training with dates, or informal training details	**CDFW SCP, MOU, & USFWS 10a1a Authorization Number & Authorized Activities** This form does not fulfill SCP, MOU, & USFWS 10a1a reporting requirements	
Insert Species or Resource 1	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:
Insert Species or Resource 2	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:
Insert Species or Resource 3	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:

[2] List all measures and conditions from the LSA Agreement or ITP requiring biological staff (i.e., Qualified Biologist, Designated Biologist, or Biological Monitor).
[3] Often LSA Agreements/ITPs require surveys and other protections for multiple species and other resources. Include only those for which the biologist has experience and is requesting approval.

Project Name: Click or tap here to enter text.
LSA Agreement/ITP Number(s): Click or tap here to enter text.

SECTION V. SPECIES AND RESOURCE EXPERIENCE – DETAILS

This section details experience from the three most recent and relevant projects for each species and resource identified in Section IV. If more space is needed, attach additional pages in the same table format (i.e., copy/paste format).

SPECIES OR RESOURCE 1:	
Project 1 Name & Location:	
Project Start Date:	**Project End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	
Role(s)[4]:	
Survey Type(s)[5]:	
Construction Monitoring[6] **Days:** **Activities:**	
Species Life Stages Observed & Handled, Number of Each **Life Stage:** **Number Observed:** **Number Handled:** **Reported to CNDDB[7] (Y/N):**	**Company Name, Professional Reference Name, Phone, Email:**
If not reported to CNDDB, why:	
CDFW and Other Agency Email:	
Project 2 Name & Location:	
Project Start Date:	**Project End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	
Role(s):	
Survey Type(s):	
Construction Monitoring: **Days:** **Activities:**	
Species Life Stages Observed & Handled, Number of Each Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	**Company Name, Professional Reference Name, Phone, Email:**

[4] Insert the role as described in the associated LSA Agreement, ITP or other agency permit. If these permits were not issued, describe the role based on the duties, e.g., "lead biologist with handling authorization" or "biological monitor."
[5] For example, pre-construction survey or description of the protocol or guideline followed.
[6] Include the number of days and describe the types of activities monitored (e.g., heavy equipment operation).
[7] CNDDB is the abbreviation for California Natural Diversity Database.

Project Name: Click or tap here to enter text.
LSA Agreement/ITP Number(s): Click or tap here to enter text.

If <u>not</u> reported to CNDDB, why:	
CDFW and Other Agency Email:	
Project 3 Name & Location:	
Project Start Date:	**Project End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	
Role(s):	
Survey Type(s):	
Construction Monitoring **Days:** **Activities:**	
Species Life Stages Observed & Handled, Number of Each **Life Stage:** **Number Observed:** **Number Handled:** **Reported to CNDDB (Y/N):**	**Company Name, Professional Reference Name, Phone, Email:**
If <u>not</u> reported to CNDDB, why:	
CDFW and Other Agency Email:	
Additional Information:	
SPECIES OR RESOURCE 2:	
Project 1 Name & Location:	
Project Start Date:	**Project End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	
Role(s):	
Survey Type(s):	
Construction Monitoring **Days:** **Activities:**	
Species Life Stages Observed & Handled, Number of Each **Life Stage:** **Number Observed:** **Number Handled:** **Reported to CNDDB (Y/N):**	**Company Name, Professional Reference Name, Phone, Email:**
If <u>not</u> reported to CNDDB, why:	
CDFW and Other Agency Email:	

Project Name: Click or tap here to enter text.
LSA Agreement/ITP Number(s): Click or tap here to enter text.

Project 2 Name & Location:	
Project Start Date:	**Project End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	
Role(s):	
Survey Type(s):	
Construction Monitoring **Days:** **Activities:**	
Species Life Stages Observed & Handled, Number of Each **Life Stage:** **Number Observed:** **Number Handled:** **Reported to CNDDB (Y/N):**	**Company Name, Professional Reference Name, Phone, Email:**
If <u>not</u> reported to CNDDB, why:	
CDFW and Other Agency Email:	
Project 3 Name & Location:	
Project Start Date:	**Project End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	
Role(s):	
Survey Type(s):	
Construction Monitoring **Days:** **Activities:**	
Species Life Stages Observed & Handled, Number of Each **Life Stage:** **Number Observed:** **Number Handled:** **Reported to CNDDB (Y/N):**	**Company Name, Professional Reference Name, Phone, Email:**
If <u>not</u> reported to CNDDB, why:	
CDFW and Other Agency Email:	
SPECIES OR RESOURCE 3:	
Project 1 Name & Location:	
Project Start Date:	**Project End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	

Project Name: Click or tap here to enter text.
LSA Agreement/ITP Number(s): Click or tap here to enter text.

Role(s):	
Survey Type(s):	
Construction Monitoring **Days:** **Activities:**	
Species Life Stages Observed & Handled, Number of Each **Life Stage:** **Number Observed:** **Number Handled:** **Reported to CNDDB (Y/N):**	**Company Name, Professional Reference Name, Phone, Email:**
If <u>not</u> reported to CNDDB, why:	
CDFW and Other Agency Email:	
Project 2 Name & Location:	
Project Start Date:	**End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	
Role(s):	
Survey Type(s):	
Construction Monitoring **Days:** **Activities:**	
Species Life Stages Observed & Handled, Number of Each **Life Stage:** **Number Observed:** **Number Handled:** **Reported to CNDDB (Y/N):**	**Company Name, Professional Reference Name, Phone, Email:**
If <u>not</u> reported to CNDDB, why:	
CDFW and Other Agency Email:	
Project 3 Name & Location:	
Project Start Date:	**Project End Date:**
LSA Agreement, ITP, or Other Agency Permit Number:	
Role(s):	
Survey Type(s):	
Construction Monitoring:	

Project Name: Click or tap here to enter text.
LSA Agreement/ITP Number(s): Click or tap here to enter text.

Days: **Activities:**	
Species Life Stages Observed & Handled, Number of Each **Life Stage:** **Number Observed:** **Number Handled:** **Reported to CNDDB (Y/N):**	**Company Name, Professional Reference Name, Phone, Email:**
If <u>not</u> reported to CNDDB, why:	
CDFW and Other Agency Email:	

Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities

STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF FISH AND WILDLIFE

DATE: March 20, 2018*

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1. INTRODUCTION AND PURPOSE

The conservation of special status native plants and their habitats, as well as sensitive natural communities, is integral to maintaining biological diversity. The purpose of these protocols is to facilitate a consistent and systematic approach to botanical field surveys and assessments of special status plants and sensitive natural communities so that reliable information is produced and the potential for locating special status plants and sensitive natural communities is maximized. These protocols may also help those who prepare and review environmental documents determine when botanical field surveys are needed, how botanical field surveys may be conducted, what information to include in a botanical survey report, and what qualifications to consider for botanical field surveyors. These protocols are meant to help people meet California Environmental Quality Act (CEQA)[1] requirements for adequate disclosure of potential impacts to plants and sensitive natural communities. These protocols may be used in conjunction with protocols formulated by other agencies, for example, those developed by the U.S. Army Corps of Engineers to delineate jurisdictional wetlands[2] or by the U.S. Fish and Wildlife Service to survey for the presence of special status plants.[3]

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* Minor editorial revisions were made to this document on February 3, 2021

1 Available at: https://files.resources.ca.gov/ceqa/

2 Available at: https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/techbio/

3 U.S. Fish and Wildlife Service Survey Guidelines: https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/

Department of Fish and Wildlife Trustee and Responsible Agency Mission

The mission of the California Department of Fish and Wildlife (CDFW) is to manage California's diverse wildlife and native plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. CDFW has jurisdiction over the conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations (Fish & G. Code, § 1802). CDFW, as trustee agency under CEQA Guidelines section 15386, provides expertise in reviewing and commenting on environmental documents and provides protocols regarding potential negative impacts to those resources held in trust for the people of California.

Certain species are in danger of extinction because their habitats have been severely reduced in acreage, are threatened with destruction or adverse modification, or because of a combination of these and other factors. The California Endangered Species Act (CESA) and Native Plant Protection Act (NPPA) provide additional protections for such species, including take prohibitions (Fish & G. Code, § 2050 *et seq.*; Fish & G. Code, § 1908). As a responsible agency, CDFW has the authority to issue permits for the take of species listed under CESA and NPPA if the take is incidental to an otherwise lawful activity; CDFW has determined that the impacts of the take have been minimized and fully mitigated; and the take would not jeopardize the continued existence of the species (Fish & G. Code, § 2081, subd. (b); Cal. Code Regs., tit. 14 § 786.9, subd. (b)). Botanical field surveys are one of the preliminary steps to detect special status plant species and sensitive natural communities that may be impacted by a project.

Definitions

Botanical field surveys provide information used to determine the potential environmental effects of proposed projects on special status plants and sensitive natural communities as required by law (e.g., CEQA, CESA, and federal Endangered Species Act (ESA)).

Special status plants, for the purposes of this document, include all plants that meet one or more of the following criteria:

- Listed or proposed for listing as threatened or endangered under the ESA or candidates for possible future listing as threatened or endangered under the ESA (50 C.F.R., § 17.12).
- Listed or candidates for listing by the State of California as threatened or endangered under CESA (Fish & G. Code, § 2050 et seq.).[4] In CESA, “endangered species” means a native species or subspecies of plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (Fish & G. Code, § 2062). “Threatened species” means a native species or subspecies of plant that,

[4] Refer to current online published lists available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline

although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by CESA (Fish & G. Code, § 2067). "Candidate species" means a native species or subspecies of plant that the California Fish and Game Commission has formally noticed as being under review by CDFW for addition to either the list of endangered species or the list of threatened species, or a species for which the California Fish and Game Commission has published a notice of proposed regulation to add the species to either list (Fish & G. Code, § 2068).

- Listed as rare under the California Native Plant Protection Act (Fish & G. Code, § 1900 et seq.). A plant is rare when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens (Fish & G. Code, § 1901).
- Meet the definition of endangered, rare, or threatened species under CEQA Guidelines section 15380, subdivisions (b) and (d), which may include:
    - Plants tracked by the California Natural Diversity Database (CNDDB) as California Rare Plant Rank (CRPR) 1 or 2;[5] and
    - Plants that may warrant consideration on the basis of declining trends, recent taxonomic information, or other factors. This includes plants tracked by the CNDDB as CRPR 3 or 4.[6]
- Considered locally significant plants, that is, plants that are not rare from a statewide perspective but are rare or uncommon in a local context such as within a county or region (CEQA Guidelines, § 15125, subd. (c)), or as designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include plants that are at the outer limits of their known geographic range or plants occurring on an atypical soil type.

Sensitive natural communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status plants or their habitat. CDFW's *List of California Terrestrial Natural Communities*[7] is based on the best available information, and indicates which natural communities are considered sensitive at the current stage of the California vegetation classification effort. See the Vegetation

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5 See CNDDB's Special Vascular Plants, Bryophytes, and Lichens List for plant taxa with a CRPR of 1 or 2: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline

6 CRPR 3 plants (plants about which more information is needed) and CRPR 4 plants (plants of limited distribution) may warrant consideration under CEQA Guidelines section 15380. Impacts to CRPR 3 plants may warrant consideration under CEQA if sufficient information is available to assess potential impacts to such plants. Impacts to CRPR 4 plants may warrant consideration under CEQA if cumulative impacts to such plants are significant enough to affect their overall rarity. Data on CRPR 3 and 4 plants should be submitted to CNDDB. Such data aids in determining and revising the CRPR of plants. See CNDDB's Special Vascular Plants, Bryophytes, and Lichens List for plant taxa with a CRPR of 3 or 4: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline

7 Available at: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#natural communities lists

Classification and Mapping Program (VegCAMP) website for additional information on natural communities and vegetation classification.[8]

2. BOTANICAL FIELD SURVEYS

Evaluate the need for botanical field surveys prior to the commencement of any activities that may modify vegetation, such as clearing, mowing, or ground-breaking activities. It is appropriate to conduct a botanical field survey when:

- Natural (or naturalized) vegetation occurs in an area that may be directly or indirectly affected by a project (project area), and it is unknown whether or not special status plants or sensitive natural communities occur in the project area;
- Special status plants or sensitive natural communities have historically been identified in a project area; or
- Special status plants or sensitive natural communities occur in areas with similar physical and biological properties as a project area.

Survey Objectives

Conduct botanical field surveys in a manner which maximizes the likelihood of locating special status plants and sensitive natural communities that may be present. Botanical field surveys should be floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. “Focused surveys” that are limited to habitats known to support special status plants or that are restricted to lists of likely potential special status plants are not considered floristic in nature and are not adequate to identify all plants in a project area to the level necessary to determine if they are special status plants.

For each botanical field survey conducted, include a list of all plants and natural communities detected in the project area. More than one field visit is usually necessary to adequately capture the floristic diversity of a project area. An indication of the prevalence (estimated total numbers, percent cover, density, etc.) of the special status plants and sensitive natural communities in the project area is also useful to assess the significance of a particular plant population or natural community.

Survey Preparation

Before botanical field surveys are conducted, the botanical field surveyors should compile relevant botanical information in the general project area to provide a regional context. Consult the CNDDB[9] and BIOS[10] for known occurrences of special status plants and sensitive natural communities in the project area prior to botanical field surveys. Generally, identify vegetation and habitat types potentially occurring in the project area based on biological and physical properties (e.g., soils) of the project area

[8] Available at: https://www.wildlife.ca.gov/Data/VegCAMP
[9] Available at: https://www.wildlife.ca.gov/Data/CNDDB
[10] Available at: https://www.wildlife.ca.gov/Data/BIOS

and surrounding ecoregion.[11] Then, develop a list of special status plants and sensitive natural communities with the potential to occur within the vegetation and habitat types identified. The list of special status plants with the potential to occur in the project area can be created with the help of the CNDDB QuickView Tool[12] which allows the user to generate lists of CNDDB-tracked elements that occur within a particular U.S. Geological Survey 7.5' topographic quad, surrounding quads, and counties within California. Resulting lists should only be used as a tool to facilitate the use of reference sites, with the understanding that special status plants and sensitive natural communities in a project area may not be limited to those on the list. Botanical field surveys and subsequent reporting should be comprehensive and floristic in nature and not restricted to or focused only on a list. Include in the botanical survey report the list of potential special status plants and sensitive natural communities that was created, and the list of references used to compile the background botanical information for the project area.

Survey Extent

Botanical field surveys should be comprehensive over the entire project area, including areas that will be directly or indirectly impacted by the project. Adjoining properties should also be surveyed where direct or indirect project effects could occur, such as those from fuel modification, herbicide application, invasive species, and altered hydrology. Surveys restricted to known locations of special status plants may not identify all special status plants and sensitive natural communities present, and therefore do not provide a sufficient level of information to determine potential impacts.

Field Survey Method

Conduct botanical field surveys using systematic field techniques in all habitats of the project area to ensure thorough coverage. The level of effort required per given area and habitat is dependent upon the vegetation and its overall diversity and structural complexity, which determines the distance at which plants can be identified. Conduct botanical field surveys by traversing the entire project area to ensure thorough coverage, documenting all plant taxa observed. Parallel survey transects may be necessary to ensure thorough survey coverage in some habitats. The level of effort should be sufficient to provide comprehensive reporting. Additional time should be allocated for plant identification in the field.

Timing and Number of Visits

Conduct botanical field surveys in the field at the times of year when plants will be both evident and identifiable. Usually this is during flowering or fruiting. Space botanical field survey visits throughout the growing season to accurately determine what plants exist in the project area. This usually involves multiple visits to the project area (e.g., in early, mid, and late-season) to capture the floristic diversity at a level necessary to determine

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[11] Ecological Subregions of the United States, available at: http://www.fs.fed.us/land/pubs/ecoregions/toc.html

[12] Available at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. When creating a list of special status plants with the potential to occur in a project area, special care should be taken to search all quads with similar geology, habitats, and vegetation to those found in the project area.

if special status plants are present.[13] The timing and number of visits necessary to determine if special status plants are present is determined by geographic location, the natural communities present, and the weather patterns of the year(s) in which botanical field surveys are conducted.

Reference Sites

When special status plants are known to occur in the type(s) of habitat present in a project area, observe reference sites (nearby accessible occurrences of the plants) to determine whether those special status plants are identifiable at the times of year the botanical field surveys take place and to obtain a visual image of the special status plants, associated habitat, and associated natural communities.

Use of Existing Surveys

For some project areas, floristic inventories or botanical survey reports may already exist. Additional botanical field surveys may be necessary for one or more of the following reasons:

- Botanical field surveys are not current;[14]
- Botanical field surveys were conducted in natural systems that commonly experience year to year fluctuations such as periods of drought or flooding (e.g., vernal pool habitats or riverine systems);
- Botanical field surveys did not cover the entire project area;
- Botanical field surveys did not occur at the appropriate times of year;
- Botanical field surveys were not conducted for a sufficient number of years to detect plants that are not evident and identifiable every year (e.g., geophytes, annuals, and some short-lived plants);
- Botanical field surveys did not identify all plants in the project area to the taxonomic level necessary to determine rarity and listing status;
- Fire history, land use, or the physical or climatic conditions of the project area have changed since the last botanical field survey was conducted;
- Changes in vegetation or plant distribution have occurred since the last botanical field surveys were conducted, such as those related to habitat alteration, fluctuations in abundance, invasive species, seed bank dynamics, or other factors; or

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[13] U.S. Fish and Wildlife Service Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants available at: https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/

[14] Habitats, such as grasslands or desert plant communities that have annual and short-lived perennial plants as major floristic components, may require multiple annual surveys to fully capture baseline conditions. In habitats dominated by long-lived perennial plants, such as forests, surveys that were not conducted within the previous five years may not adequately represent the current baseline conditions and should be re-conducted.

- Recent taxonomic studies, status reviews or other scientific information has resulted in a revised understanding of the special status plants with potential to occur in the project area.

Negative Surveys

Adverse conditions from yearly weather patterns may prevent botanical field surveyors from determining the presence of, or accurately identifying, some special status plants in the project area. Disease, drought, predation, fire, herbivory, or other disturbance may also preclude the presence or identification of special status plants in any given year. Discuss all adverse conditions in the botanical survey report.[15]

The failure to locate a known special status plant occurrence during one field season does not constitute evidence that the plant occurrence no longer exists at a location, particularly if adverse conditions are present. For example, botanical field surveys over a number of years may be necessary if the special status plant is an annual or short-lived plant having a persistent, long-lived seed bank and populations of the plant are known to not germinate every year. Visiting the project area in more than one year increases the likelihood of detecting special status plants, particularly if conditions change. To further substantiate negative findings for a known occurrence, a visit to a nearby reference site may help ensure that the timing of botanical field surveys was appropriate.

3. REPORTING AND DATA COLLECTION

Adequate information about special status plants and sensitive natural communities present in a project area will enable reviewing agencies and the public to effectively assess potential impacts to special status plants and sensitive natural communities and will guide the development of avoidance, minimization, and mitigation measures. The information necessary to assess impacts to special status plants and sensitive natural communities is described below. For comprehensive, systematic botanical field surveys where no special status plants or sensitive natural communities were found, reporting and data collection responsibilities for botanical field surveyor remain as described below, excluding specific occurrence information.

Special Status Plant and Sensitive Natural Community Observations

Record the following information for locations of each special status plant and sensitive natural community detected during a botanical field survey of a project area.

- The specific geographic locations where the special status plants and sensitive natural communities were found. Preferably this will be done by use of global positioning system (GPS) and include the datum[16] in which the spatial data was

[15] U.S. Fish and Wildlife Service Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants available at: https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/

[16] NAD83, NAD27 or WGS84

collected and any uncertainty or error associated with the data. If GPS is not available, a detailed map (1:24,000 or larger) showing locations and boundaries of each special status plant population and sensitive natural community in relation to the project area is acceptable. Mark occurrences and boundaries as accurately as possible;

- The site-specific characteristics of occurrences, such as associated species, habitat and microhabitat, structure of vegetation, topographic features, soil type, texture, and soil parent material. If a special status plant is associated with a wetland, provide a description of the direction of flow and integrity of surface or subsurface hydrology and adjacent off-site hydrological influences as appropriate;
- The number of individuals in each special status plant population as counted (if population is small) or estimated (if population is large);
- If applicable, information about the percentage of each special status plant in each life stage such as seedling, vegetative, flowering, and fruiting;
- The density of special status plants, identifying areas of relatively high, medium and low density of each special status plant in the project area; and
- Digital images of special status plants and sensitive natural communities in the project area, with diagnostic features.

Special Status Plant and Sensitive Natural Community Documentation

When a special status plant is located, data must be submitted to the CNDDB. Data may be submitted in a variety of formats depending on the amount and type of data that is collected.[17] The most common way to submit data is the Online CNDDB Field Survey Form,[18] or equivalent written report, accompanied by geographic locality information (GPS coordinates, GIS shapefiles, KML files, topographic map, etc.). Data submitted in digital form must include the datum[19] in which it was collected.

If a sensitive natural community is found in a project area, document it with a Combined Vegetation Rapid Assessment and Relevé Field Form[20] and submit the form to VegCAMP.[21]

Voucher Collection

Voucher specimens provide verifiable documentation of special status plant presence and identification and a scientific record. This information is vital to conservation efforts and valuable for scientific research. Collection of voucher specimens should be

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17 See https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data for information on acceptable data submission formats.

18 Available at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data

19 NAD83, NAD27 or WGS84

20 Available at: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit

21 Combined Vegetation Rapid Assessment and Releve Field Forms can be emailed to VegCAMP staff. Contact information available at: https://www.wildlife.ca.gov/Data/VegCAMP

conducted in a manner that is consistent with conservation ethics, and in accordance with applicable state and federal permit requirements (e.g., scientific, educational, or management permits pursuant to Fish & G. Code, § 2081, subd. (a)). Voucher collections of special status plants (or possible special status plants) should only be made when such actions would not jeopardize the continued existence of the population. A plant voucher collecting permit[22] is required from CDFW prior to the take or possession of a state-listed plant for voucher collection purposes, and the permittee must comply with all permit conditions.

Voucher specimens should be deposited in herbaria that are members of the Consortium of California Herbaria[23] no later than 120 days after the collections have been made. Digital imagery can be used to supplement plant identification and document habitat. Record all relevant collector names and permit numbers on specimen labels (if applicable).

Botanical Survey Reports

Botanical survey reports provide an important record of botanical field survey results and project area conditions. Botanical survey reports containing the following information should be prepared whenever botanical field surveys take place, and should also be submitted with project environmental documents:

Project and location description

- A description of the proposed project;
- A detailed map of the project area that identifies topographic and landscape features and includes a north arrow and bar scale;
- A vegetation map of the project area using Survey of California Vegetation Classification and Mapping Standards[24] at a thematic and spatial scale that allows the display of all sensitive natural communities;
- A soil map of the project area; and
- A written description of the biological setting, including all natural communities; geological and hydrological characteristics; and land use or management history.

Detailed description of survey methodology and results

- Names and qualifications of botanical field surveyor(s);
- Dates of botanical field surveys (indicating the botanical field surveyor(s) that surveyed each area on each survey date), and total person-hours spent;
- A discussion of the survey preparation methodology;
- A list of special status plants and sensitive natural communities with potential to

[22] Applications available at: https://www.wildlife.ca.gov/Conservation/Plants/Permits

[23] A list of Consortium of California Herbaria participants is available at: http://ucjeps.berkeley.edu/consortium/participants.html

[24] Available at: https://www.wildlife.ca.gov/data/vegcamp/publications-and-protocols

occur in the region;

- Description(s) of reference site(s), if visited, and the phenological development of special status plant(s) at those reference sites;
- A description and map of the area surveyed relative to the project area;
- A list of all plant taxa occurring in the project area, with all taxa identified to the taxonomic level necessary to determine whether or not they are a special status plant;
- Detailed data and maps for all special status plants and sensitive natural communities detected. Information specified above under the headings "Special Status Plant and Sensitive Natural Community Observations," and "Special Status Plant and Sensitive Natural Community Documentation," should be provided for the locations of each special status plant and sensitive natural community detected. Copies of all California Native Species Field Survey Forms and Combined Vegetation Rapid Assessment and Relevé Field Forms should be sent to the CNDDB and VegCAMP, respectively, and included in the project environmental document as an Appendix;[25]
- A discussion of the potential for a false negative botanical field survey;
- A discussion of how climatic conditions may have affected the botanical field survey results;
- A discussion of how the timing of botanical field surveys may affect the comprehensiveness of botanical field surveys;
- Any use of existing botanical field surveys and a discussion of their applicability to the project;
- The deposition locations of voucher specimens, if collected; and
- A list of references used, including persons contacted and herbaria visited.

Assessment of potential project impacts

- A discussion of the significance of special status plant populations in the project area considering nearby populations and total range and distribution;
- A discussion of the significance of sensitive natural communities in the project area considering nearby occurrences and natural community distribution;
- A discussion of project related direct, indirect, and cumulative impacts to special status plants and sensitive natural communities;
- A discussion of the degree and immediacy of all threats to special status plants and sensitive natural communities, including those from invasive species;
- A discussion of the degree of impact, if any, of the project on unoccupied,

[25] It is not necessary to submit entire environmental documents to the CNDDB.

potential habitat for special status plants; and

- Recommended measures to avoid, minimize, or mitigate impacts to special status plants and sensitive natural communities.

4. BOTANICAL FIELD SURVEYOR QUALIFICATIONS

Botanical field surveyors should possess the following qualifications:

- Knowledge of plant taxonomy and natural community ecology;
- Familiarity with plants of the region, including special status plants;
- Familiarity with natural communities of the region, including sensitive natural communities;
- Experience with the CNDDB, BIOS, and Survey of California Vegetation Classification and Mapping Standards;
- Experience conducting floristic botanical field surveys as described in this document, or experience conducting such botanical field surveys under the direction of an experienced botanical field surveyor;
- Familiarity with federal, state, and local statutes and regulations related to plants and plant collecting; and
- Experience analyzing the impacts of projects on native plant species and sensitive natural communities.

5. SUGGESTED REFERENCES

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Exhibit G

The Declining Amphibian Task Force Fieldwork Code of Practice

A code of practice, prepared by the Declining Amphibian Task Force (DAPTF) to provide guidelines for use by anyone conducting field work at amphibian breeding sites or in other aquatic habitats. Observations of diseased and parasite-infected amphibians are now being frequently reported from sites all over the world. This has given rise to concerns that releasing amphibians following a period of captivity, during which time they can pick up unapparent infections of novel disease agents, may cause an increased risk of mortality in wild populations. Amphibian pathogens and parasites can also be carried in a variety of ways between habitats on the hands, footwear, or equipment of fieldworkers, which can spread them to novel localities containing species which have had little or no prior contact with such pathogens or parasites. Such occurrences may be implicated in some instances where amphibian populations have declined. Therefore, it is vitally important for those involved in amphibian research (and other wetland/pond studies including those on fish, invertebrates and plants) to take steps to minimize the spread of disease and parasites between study sites.

1. Remove mud, snails, algae, and other debris from nets, traps, boots, vehicle tires and all other surfaces. Rinse cleaned items with sterilized (e.g. boiled or treated) water before leaving each study site.

2. Boots, nets, traps, etc., should then be scrubbed with 70% ethanol solution (or sodium hypochlorite 3 to 6%) and rinsed clean with sterilized water between study sites. Avoid cleaning equipment in the immediate vicinity of a pond or wetland.

3. In remote locations, clean all equipment as described above upon return to the lab or "base camp". Elsewhere, when washing machine facilities are available, remove nets from poles and wash with bleach on a "delicates" cycle, contained in a protective mesh laundry bag.

4. When working at sites with known or suspected disease problems, or when sampling populations of rare or isolates species, wear disposable gloves and change them between handling each animal. Dedicate sets of nets, boots, traps, and other equipment to each site being visited. Clean and store them separately and the end of each field day.

5. When amphibians are collected, ensure the separation of animals from different sites and take great care to avoid indirect contact between them (e.g. via handling, reuse of containers) or with other captive animals. Isolation from un-sterilized plants or soils which have been taken from other sites is also essential. Always use disinfected/disposable husbandry equipment.

6. Examine collected amphibians for the presence of diseases and parasites soon after capture. Prior to their release or the release of any progeny, amphibians should be quarantined for a period and thoroughly screened for the presence of any potential disease agents.

7. Used cleaning materials (liquids, etc.) should be disposed of safely and if necessary taken back to the lab for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.

Exhibit H. Summary of Reporting Requirements to CDFW

Document	Due to CDFW	Measure	Additional Notes
Concrete Spill and Monitoring Plan	Forty-five (45) days prior to initiation of construction	2.17, 4.7	
Qualified Biologist and Monitor Resumes	Forty-five (45) days prior to initiation of construction	2.20	
Nesting Bird Survey Results	Survey no more than seven (7) days prior to construction	2.25, 4.5	
WBOW Inspection Results	Prior to construction	2.27, 4.5	
WTKI Surveys Results	Seven (7) days prior to start of project activities*	2.30	*If suitable nesting habitat or wintering habitat features are present for WTKI on or within 14-mile of work area and project activities occur between Dec 1 and March 31
CRLF Habitat Assessment Survey Results	Survey at least fifteen (15) days prior to any ground-disturbing activities	2.32, 4.5	
Western Pond Turtle Survey Results	Survey no more than 48 hours prior to any ground-disturbing activities	2.34, 4.5	*If a WPT nest is found, consult with CDFW as a WPT Habitat Improvement Plan may be required.
Bat Mitigation and Monitoring Plan	Seven (7) days prior to start of project activities*	2.35, 4.5	*If bats are found on-site during pre-construction surveys conducted at least fourteen (14) days prior to initiation of construction activities.
Crotch's Bumble Bee Avoidance Plan	Prior to ground disturbance or vegetation removal work*	2.36, 4.5	*Only for work that may include ground disturbance or vegetation removal.
Rare Plant Survey Results	Survey at least 15 days prior to Project initiation.	2.37, 4.5	
Habitat Enhancement Plan	Forty-five (45) days prior to any project activities related to construction	3.1	
Final Construction Report	Sixty (60) days after Project completion	4.1	
Habitat Enhancement Plan Reporting	Monitor for a period annually for 10-years*	4.2	*Site(s) monitoring annually for 10-years. Monitoring reports submitted by December 31 in years 0,1,3,5,7, and 10 and/or additional years