

COOPERATIVE AGREEMENT

This AGREEMENT, effective on _____, 2021, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "CALTRANS," the

SONOMA RESOURCE CONSERVATION DISTRICT, a government special district, referred to herein as "SRCD," and the

CITY OF SANTA ROSA, a body politic and municipal corporation of the State of California, referred to herein as "CITY."

RECITALS

1. CALTRANS, SRCD and CITY, hereinafter collectively referred to as "PARTIES," pursuant to California Streets and Highways Code sections 114 and/or 130, are authorized to enter into this Agreement.
2. CALTRANS is replacing the Laguna De Santa Rosa Bridge No. 20-0035 at PM 9.6 on State Route 12 (SR 12) in Sebastopol, in Sonoma County, referred to herein as PROJECT.
3. Pursuant to consultation with the California Department of Fish and Wildlife, Lake and Streambed Alteration Agreement No. 1600-2012-0159-3, dated January 16, 2013, was issued for PROJECT, referred to herein as LSAA 1600 and attached hereto as Exhibit A.
4. Pursuant to consultation with the California Regional Water Quality Control Board-North Coast Region ("NCRWQCB"), Water Quality Certification No. 1B12122WNSO, dated February 7, 2013, was issued for PROJECT disturbances to the waters of the United States and waters of the State associated with the Russian River Hydrologic Unit No. 1114. Water Quality Certification No. 1B12122WNSO is referred to herein as 401 CERTIFICATION and is attached hereto as Exhibit B.
5. CALTRANS desires to enter into this Agreement in order to satisfy Condition 3.2 of the LSAA 1600 and Condition 32(ii) of the 401 CERTIFICATION, hereinafter referred to collectively as PERMIT CONDITIONS.

6. Specifically, CALTRANS desires to have SRCD satisfy the PERMIT CONDITIONS by implementing the Laguna de Santa Rosa Off-site Mitigation Project Proposal on a portion of property that is owned by the CITY, hereinafter referred to as MITIGATION PROJECT. A copy of the Laguna de Santa Rosa Off-site Mitigation Project Proposal is attached hereto and incorporated herein as Exhibit C. Photographs which depict the specific portion of the CITY's property, commonly known as Brown Farm, on which the Santa Rosa Off-site Mitigation Project Proposal will be implemented on, is attached hereto and incorporated herein as Exhibit D, and such location will hereafter be referred to as the PROJECT SITE.
7. As set forth in Exhibit A-1 and Exhibit B-1, which are attached hereto and incorporated herein, CDFW and NCRWQB have agreed that the implementation of MITIGATION PROJECT will satisfy PERMIT CONDITIONS.
8. PARTIES agree that the total cost of SRCD completing MITIGATION PROJECT on CITY property is \$380,000.00.
9. The terms of this Agreement shall supersede any inconsistent terms of any prior Memorandum of Understanding (MOU) or agreement relating to MITIGATION PROJECT.
10. PARTIES now define herein below the terms and conditions under which this Agreement will be implemented.

SECTION I

SRCD AGREES:

1. To satisfy PERMIT CONDITIONS by ensuring all of the work described in the Laguna de Santa Rosa Off-site Mitigation Project Proposal and herein this Agreement, is completed.
2. All work performed by SRCD, or performed on SRCD's behalf, shall be performed in accordance with all state and federal laws, regulations, policies, procedures, and standards, as well as the existing conservation easement in favor of the Sonoma County Agricultural Preservation and Open Space District, referred to herein as CONSERVATION EASEMENT, and attached hereto as Exhibit E, and the settlement with California River Watch referred to herein as SETTLEMENT and attached hereto as Exhibit F. Further, SRCD shall take all steps necessary to assure that the performance of such work is in compliance with all permits, applicable covenants and restrictions on the CITY property and applicable law, including but not limited to the Endangered Species Act and the protection of California Tiger Salamander habitat as well as other protected species.

3. To coordinate any and all work with CITY staff, including but not limited to providing a proposed staging plan for prior approval by CITY, to allow CITY staff oversight of any work to be performed on CITY's property to comply with these requirements.
4. To obtain any and all necessary property rights and/or rights of entry required to complete the MITIGATION PROJECT. Said rights shall also include rights of entry for CALTRANS and resource agency personnel. SRCD shall work with CITY to obtain a license agreement in accordance with CITY requirements for any long-term encroachment onto CITY property to allow reasonable access to the PROJECT SITE, as necessary and appropriate to implement the MITIGATION PROJECT.
5. To obtain any and all environmental approvals and/or resource agency agreements, permits, and/or approvals required for MITIGATION PROJECT prior to commencement of work and to fully comply with any terms and conditions thereof.
6. To submit draft monitoring reports to CALTRANS, with a copy to CITY, for ten (10) years (with monitoring anticipated to begin in the year 2021 and end ten [10] years later, currently anticipated to be year 2030) by December 31st of each year. Said reports shall contain all of the information described in Exhibit C.
7. To address CALTRANS' comments on the draft monitoring report and thereafter submit a final draft monitoring report to CALTRANS, with a copy to CITY, by March 1st for ten (10) years (with monitoring anticipated to begin in the year 2021 and end ten [10] years later, currently anticipated to be year 2030) for CALTRANS' review and approval, if appropriate.
8. If at any time during the ten (10) year monitoring period (with monitoring anticipated to begin in the year 2021 and end ten [10] years later currently anticipated to be year 2030) it is determined that progress towards the success criteria, which success criteria is described in Exhibit C, is not being achieved then SRCD shall implement any remedial or adaptive management measures necessary to meet the success criteria.
9. To submit an initial invoice in the amount of \$200,000.00 to CALTRANS within thirty (30) days of execution of this Agreement. A second and final invoice in the amount of \$155,000 shall be submitted to CALTRANS one year after work commences on MITIGATION PROJECT. SRCD agrees that CALTRANS' total financial obligations to SRCD for completing all of the work described herein, including MITIGATION PROJECT, shall not exceed the amount of \$355,000.00.
10. All invoices submitted by SRCD shall meet the format and content requirements specified by CALTRANS and shall be submitted to the contract person identified in Section IV, article 3.
11. To submit a final report of all expenditures within ninety (90) days after completion of MITIGATION PROJECT. Any of the funds remaining on deposit after the final report

of expenditures shall be returned to CALTRANS within thirty (30) days of said accounting.

12. If the work performed under this Agreement is done under contract and falls within the Labor Code section 1720(a)(1) definition of "public works" in that it is construction, alteration, demolition, installation, or repair; or maintenance work under Labor Code section 1771, SRCD must conform to the provisions of Labor Code sections 1720 through 1815, and all applicable provisions of California Code of Regulations found in Title 8, Chapter 8, Subchapter 3, Articles 1-7.
13. To include prevailing wage requirements in its contracts for public work. Work performed by SRCD's own forces is exempt from the Labor Code's Prevailing Wage requirements.
14. If work performed under this Agreement is done under contract, is paid for in whole or part with federal funds and is of the type of work subject to federal prevailing wage requirements, SRCD must conform to the provisions of the Davis-Bacon and Related Acts, 40 U.S.C. § 276(a) in addition to Labor Code provisions.
15. SRCD agrees to include federal prevailing wage requirements in its contracts for public work. Work performed by SRCD's own forces is exempt from federal prevailing wage requirements.
16. To retain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred, including support data for cost proposals, and to make such materials available at the respective offices of CALTRANS, and the CITY if requested, at all reasonable times for three (3) years after the termination date of this Agreement. CALTRANS, the Federal Highway Administration, or any duly authorized representative of the Federal Government shall have access to any books, records, and documents of SRCD that are pertinent to this Agreement for audits, examinations, excerpts, and transactions, and copies thereof shall be furnished when requested.

SECTION II

CITY AGREES:

1. To coordinate with SRCD for the grant of license as necessary for SRCD to implement the MITIGATION PROJECT. Further, CITY agrees that, subject to the terms, conditions and requirements of this Agreement, SRCD can implement the Laguna de Santa Rosa Off-site Mitigation Project Proposal at the PROJECT SITE, which site is a limited and specific reach of Gravenstein Creek that is identified in Exhibits C and D. Further, CITY agrees that implementation of the MITIGATION PROJECT will not conflict with the terms of the CONSERVATION EASEMENT or the SETTLEMENT.

2. To provide training and oversight on MITIGATION PROJECT to assure that SRCD is complying with the, CONSERVATION EASEMENT, SETTLEMENT, applicable covenants and restrictions on the CITY's property and applicable law.
3. To review, comment and approve, the proposed staging plan provided to CITY by SRCD before commencement of work.
4. To submit an invoice in the amount of \$25,000.00 to CALTRANS within thirty (30) days of execution of this Agreement, which amount represents CITY's total cost to provide oversight of MITIGATION PROJECT implementation.
5. To allow CALTRANS and resource agency personnel full reasonable access to the PROJECT SITE pursuant to the license agreement to be obtained by SRCD hereunder.
6. That after acceptance of the MITIGATION PROJECT by CDFW and NCRWQCB, CITY shall not intentionally remove or destroy riparian trees and shrubs planted pursuant to this Agreement. CITY further agrees that with acceptance by CDFW and NCRWQB, the MITIGATION PROJECT will be deemed incorporated into and maintained pursuant to the terms of CONSERVATION EASEMENT.

SECTION III

CALTRANS AGREES:

1. To pay SRCD within forty-five (45) days of receipt of a signed invoice, the amount of \$200,000.00, which figure represents the initial payment of the total cost of MITIGATION PROJECT. Within forty-five (45) days of receipt of the second and final signed invoice, which shall not be submitted until at least one year after commencement of work, CALTRANS will deposit with SRCD the amount of \$155,000.00. CALTRANS' total financial obligation to SRCD for the cost of MITIGATION PROJECT shall not exceed the amount of \$355,000.00.
2. To pay the CITY within forty-five (45) days of the full execution of this Agreement by PARTIES, the amount of \$25,000.00 to reimburse CITY for costs associated with approval of the MITIGATION PROJECT and use of CITY property for MITIGATION PROJECT.
3. To review and provide comments to SRCD by February 1st on the draft monitoring reports prepared by SRCD and submitted to CALTRANS for ten (10) years (with monitoring anticipated to begin in the year 2021 and end ten [10] years later, currently anticipated to be year 2030).
4. Within fourteen (14) calendar days of receipt, to review and approve, if appropriate, the draft final monitoring report submitted by SRCD to CALTRANS for ten (10) years (with monitoring anticipated to begin in the year 2021 and end ten [10] years later, currently anticipated to be year 2030).

5. CALTRANS will obtain written confirmation from CDFW and the NCRWQCB that PERMIT CONDITIONS have been met and provide a copy to SRCD and the CITY.

SECTION IV

IT IS MUTUALLY AGREED:

1. All obligations of CALTRANS under the terms of this Agreement are subject to the appropriation of resources by the Legislature, State Budget Act authority and the allocation of funds by the California Transportation Commission (CTC), provided however, that if for some reason the funds to be paid hereunder are unavailable, the CITY or SRCD may terminate this Agreement.
2. All applicable laws, rules and policies relating to the use of federal or state funds shall apply notwithstanding other provisions of this Agreement.
3. All reports, invoices or other correspondence shall be sent to the contacts listed in this article 3. The PARTIES agree to notify each other in writing of any personnel or address changes. It is further agreed that a change in contact information shall not require an amendment to this Agreement.

CALTRANS:

Lilian Acorda, Regional Project Manager
111 Grand Avenue
Oakland, CA 94612
Office Phone: (510) 290-7581
Email: lilian.a.acorda@dot.ca.gov

SRCD:

Kevin Cullinen, Project Manager
1221 Farmers Lane, Suite F
Santa Rosa, CA 95405
Office Phone: (707) 569-1448 ext. 103
Email: kcullinen@sonomarc.org

CITY:

Sean McNeil, Deputy Director Environmental Services
69 Stony Cr
Santa Rosa, CA 95401
Office Phone: (707) 543-3938
Email: smcneil@srcity.org

4. The party that discovers hazardous material (HM) will immediately notify the other party(ies) to this Agreement. HM-1 is defined as hazardous material (including but not limited to hazardous waste) that may require removal and disposal pursuant to federal or state law, whether it is disturbed by MITIGATION PROJECT or not. HM-2 is defined as hazardous material (including but not limited to hazardous waste) that may require removal and disposal pursuant to federal or state law, only if disturbed by MITIGATION PROJECT. Management activities associated with either HM-1 or HM-2 include, without limitation, any necessary manifest requirements and designation of disposal facility.
5. CALTRANS, independent of MITIGATION PROJECT, is responsible for any HM-1 found within existing State Highway System (SHS) right of way. CALTRANS will undertake, or cause to be undertaken, HM-1 management activities with minimum impact to PROJECT schedule and will pay, or cause to be paid, all costs associated with HM-1 management activities.
6. CALTRANS has no responsibility for management activities or costs associated with HM-1 found outside the existing SHS right of way. If HM-1 is found outside existing SHS right of way, under state and federal law responsibility for such HM-1 rests with the owner(s) of the parcel(s) on which the HM-1 is found. If HM-1 is found outside the existing SHS right of way, PARTIES will reassess the feasibility of the MITIGATION PROJECT and mutually agree on a course of action prior to the commencement of any additional work.
7. SRCD is responsible for the management of any HM-2 found within MITIGATION PROJECT limits. SRCD may use up to 5% of the funds already obligated by CALTRANS under this agreement for the costs associated with HM-2 management activities. In no event shall CITY be responsible for the management or cost of any HM-2, which shall be fully addressed prior to proceeding with completion of the MITIGATION PROJECT.
8. CALTRANS' acquisition of or acceptance of title to any property on which any hazardous material is found will proceed in accordance with CALTRANS' policy on such acquisition.
9. Neither CITY, SRCD nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by CALTRANS and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon CALTRANS under this agreement. It is understood and agreed that CALTRANS, to the extent permitted by law, will defend, indemnify, and save harmless CITY, SRCD and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories or assertions of liability

occurring by reason of anything done or omitted to be done by CALTRANS and/or its agents under this agreement.

10. Neither SRCD, CALTRANS nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by CITY, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon CITY under this agreement. It is understood and agreed that CITY, to the extent permitted by law, will defend, indemnify, and save harmless SRCD, CALTRANS and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, arising out of or caused by CITY's breach of its obligations hereunder.
11. Neither CITY, CALTRANS nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by SRCD, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon SRCD under this agreement. It is understood and agreed that SRCD, to the extent permitted by law, will defend, indemnify, and save harmless CITY, CALTRANS and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories or assertions of liability occurring by reason of anything done or omitted to be done by SRCD, its contractors, sub-contractors, and/or its agents under this agreement.
12. In the event of any breach of this Agreement by any party, the other parties may enforce this Agreement by any means available at law or in equity. In the event of litigation, mediation or arbitration to resolve any breach of, or dispute related to this Agreement, each party agrees to pay for their own attorneys' cost and expenses, without regard to who prevails.
13. A failure by any party to enforce any provision of this Agreement shall not be construed as a continuing waiver, or as a waiver of the right to compel enforcement of that provision.
14. This Agreement may be executed by wet-ink signature, electronic signature or pdf signature and said signatures shall be binding all PARTIES. Further, the PARTIES agree that this Agreement may be executed in several counterparts and all counterparts so executed shall constitute one Agreement that shall be binding on all PARTIES, notwithstanding that all the PARTIES are not signatory to the original or the same counterpart. If any provision of this Agreement is held invalid, the other provisions shall not be affected thereby.
15. No alteration or variation of the terms of this Agreement shall be valid unless made by a formal amendment executed by the parties hereto and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.

16. Nothing within the provisions of this Agreement is intended to create duties or obligations to or rights in third parties not party to this Agreement or to affect the legal liability of any party to the Agreement by imposing any standard of care different from the standard of care imposed by law.
17. This Agreement shall terminate after CALTRANS provides a copy of CDFW's and NCRWQCB's written confirmation that PERMIT REQUIREMENTS have been met to SRCD and CITY. However, all indemnification, document retention, audit, claims, environmental, legal challenge, hazardous material, operation, maintenance, management, and ownership articles will remain in effect until terminated or modified in writing by mutual agreement.

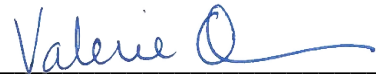
SIGNATURES

PARTIES are empowered by CA Streets and Highways Code Section 114 and 130 to enter into this Agreement and have delegated to the undersigned the authority to execute this Agreement on behalf of the respective agencies and covenants to have followed all the necessary legal requirements to validly execute this Agreement.

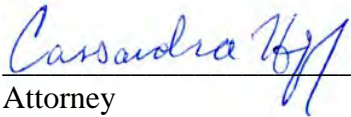
**STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION**

**SONOMA RESOURCE
CONSERVATION DISTRICT**

By: _____
Helena (Lenka) Culik-Caro
Deputy District Director

By:  _____
Valerie Minton Quinto
Executive Director

Approved as to form and procedure:



Attorney
Department of Transportation

Certified as to budgeting of funds:

Jeffrey Kuehnel
District Budget Manager

CITY OF SANTA ROSA

By: _____

Title: _____

Attest:

City Clerk

Approved as to form:

Santa Rosa City Attorney's Office

EXHIBIT A

Lake or Streambed Alteration Agreement

(Notification No. 1600-2012-0159-3)



State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5500
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



January 16, 2013

Jeffrey G. Jensen
California Department of Transportation
111 Grand Avenue
Oakland, CA 94623

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2012-0159-3
Laguna de Santa Rosa Bridge Replacement

Dear Mr. Jensen:

Enclosed is the final Streambed Alteration Agreement ("Agreement") for the Laguna de Santa Rosa Bridge Replacement ("Project"). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act ("CEQA"). In this case, the Department, acting as a responsible agency, filed a notice of determination ("NOD") on January 16, 2013, based on information contained in Laguna de Santa Rosa Bridge Replacement Project Negative Declaration, the lead agency prepared for the Project.

Under CEQA, filing a NOD starts a 30-day period within which a party may challenge the filing agency's approval of the project. You may begin your project before the 30-day period expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact, Melissa Escaron, Staff Environmental Scientist, at (707)339-0334 or Melissa.Escaron@wildlife.ca.gov.

Sincerely,

Craig J. Weightman
Acting Environmental Program Manager
Bay Delta Region

cc: Chris Jannusch
California Department of Transportation

Lieutenant Jones
Warden Esquivel
Melissa Escaron

Conserving California's Wildlife Since 1870

CALIFORNIA DEPARTMENT OF FISH AND GAME
BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5520
WWW.DFG.CA.GOV



STREAMBED ALTERATION AGREEMENT
NOTIFICATION No. 1600-2012-0159-R3
Laguna de Santa Rosa

CALIFORNIA DEPARTMENT OF TRANSPORTATION
LAGUNA DE SANTA ROSA BRIDGE REPLACEMENT PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Game (DFG) and California Department of Transportation (Permittee) or as represented Jeffrey G. Jensen.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on May 12, 2012 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, DFG 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 project is located where State Route 12 crosses the Laguna de Santa Rosa, at Post Mile 9.63, east of the City of Sebastopol, in the County of Sonoma, State of California;

PROJECT DESCRIPTION

Caltrans proposes to replace the existing 33.5-foot-wide, 220.25-foot-long, two-lane Bridge over Laguna de Santa Rosa (stream) with a new 58-foot-wide, 236-foot-long, two-lane bridge. The proposed bridge will have three spans and two bents. Four retaining walls are also proposed at the corners of the new bridge to minimize the amount of earthwork, land acquisitions, and impacts to environment. The new bridge alignment will shift to the south to minimize impacts to state and federally listed plant species, riparian trees, wetlands and other aquatic resources, and the bridge elevation will be increased by 3.5 feet. Caltrans proposes to construct half of the new bridge on the south side of the existing one, demolish the existing bridge, and then build the second half of the new bridge.

The Pacific Gas and Electric Company, AT&T, and Comcast plan to relocate gas, electric, telephone, and cable utilities during the summer of 2013, prior to the replacement of the bridge. The bridge replacement will be constructed in three stages over two construction seasons

Bridge Replacement Project Overview

Stage 1

Following the relocation of the utilities, which will occur in 2013, the majority of the work during Stage 1 construction (the first bridge replacement construction season) will be along the southern side of the new bridge alignment. To accommodate Stage 1 work a southern temporary access road will be cleared and graded for access of large equipment, such as pile-driving equipment, cranes, drill rigs, bulldozers, excavators, trucks, etc. Once the temporary access road is created, a temporary access pad will be built. Stage 1 work will include installing sheet piling to create eight temporary cofferdams, cast-in-steel-shell (CISS) concrete piling, and temporary formworks. Once the bents and abutments are completed, the superstructure will be constructed which will consist of setting pre-cast girders and casting a concrete bridge deck. Concurrent with the bridge construction, permanent retaining walls and embankments will be constructed on the southeast and southwest sides from the southern temporary access road. Temporary fill materials such as a temporary water diversion, temporary access road, temporary access pad, and temporary cofferdams, will be removed by October 15. Erosion control measures will then be implemented to stabilize disturbed natural areas. The shoring between the existing and new abutment will be left in place between the first season and second season to protect the abutments and roadway embankment behind the abutments from scour. Once the southern half of the new bridge is completed, traffic will be shifted from the existing structure to the new structure. Depending on the construction progress and schedule, construction may start on the northern portion (Stage 2) of the new structure during the first construction season.

Stage 2

During Stage 2 most of the work will occur along the northern side of the new replacement bridge alignment. The northern temporary access road will be constructed, the southern temporary access road and temporary access pad will be reestablished, and the existing bridge structure will be removed, including the footing piles to at least 3 feet below the existing grade. A protective cover (heavy plastic or plywood) will be placed on the creek bottom as part of the temporary access pad to prevent concrete debris from falling onto the waterway during bridge demolition. The northern half of the bridge will be built similarly to the southern half. A closure concrete pour will be required to connect the Stage 1 and Stage 2 bridges together.

Stage 3

Stage 3 work within DFG jurisdiction includes the removal of all temporary fills and other temporary works. Any voids within the creek remaining from the removal of the original bridge footings will be filled with native soil material.

Utility Relocation

The utilities, including poles and electrical lines, will be relocated during 2013, the season prior to Stage 1 construction. Electrical lines will be rerouted from along the south side of the bridge to the north side. Most of the poles will be relocated to the north side of SR 12, and set with a crane from the existing SR 12 or from an existing dirt path. An alternate access route will be used if a crane is infeasible. A gas line, currently attached to the existing bridge, will be relocated and bored underground on the north side using directional drilling techniques. The bore will be approximately 850 feet long, up to 32 feet deep, and at least 20 feet below the bottom of the creek channel. The bore holes will be located within developed areas outside of DFG jurisdiction.

Temporary Construction Access Road

Two temporary construction access roads are required for project construction and equipment access and will be between 15 and 30 feet wide. Clearing and grading of the temporary access road will be required to construct an access that is safe for large equipment such as pile-driving equipment, cranes, drill rigs, bulldozers, excavators, and trucks. The temporary construction access roads will consist of a bottom pavement-reinforcing fabric with a layer of 6-inch rock (type A) or railroad ballast no. 25 (type B). The temporary construction access roads will be located both north and south of SR 12. The southern temporary access road will be constructed on the south side of the road during the first construction season to allow access for the Stage 1 bridge construction. This temporary access road will start at the Village Campground driveway, extend across the streambed and end on the east side of the stream. The southern temporary construction access road will be removed by October 15 of the first construction season, and be re-established up to the eastern bridge abutment during the second construction season. During Stage 2, the southern temporary construction access will require passing under the Stage 1 bridge construction, which will limit the use to small equipment and foot traffic. Large equipment will operate from the existing bridge, new bridge, and through the development of the northern temporary

construction access road. The northern temporary access road will extend from the staging area to the stream, then turn and extend to the east for the length of the proposed northeast retaining wall 2.

Temporary Access Pad, Stream Diversion, and Trestle

A temporary stream access pad will be constructed to access the area under the bridge. The temporary stream access pad will be approximately 235 feet by 62 feet during Stage 1, and approximately 230 feet by 28 feet during Stage 2. The temporary access pad will consist of a bottom layer of subgrade enhancement textile with a layer of 6-inch rock overlaid with another subgrade enhancement textile and a top layer of aggregate base. Crane mats may be placed over the gravel pad to provide support. The final design of the temporary stream access pad will depend on water level in the Laguna de Santa Rosa

To create a dry work area and divert flows around the work area, grading of wetted areas of the streambed will be necessary and gravel bags will be placed as needed to direct flows towards the main channel. A temporary crossing over the main channel will be required as part of the temporary access pad during Stages 1 and 2. Construction of a 62 foot by 60 foot temporary trestle is proposed for Stage 1, and a 43 foot by 60 foot temporary trestle is proposed for Stage 2. The temporary trestle will be removed by October 15 of each year.

Sheet Piling Cofferdams

Sheet piling will be installed at the abutments, bents, and wing walls prior to foundation work. The sheet pilings will be vibrated or driven to elevation around the new foundation locations. Sheet piling will be used to create eight cofferdams for dewatering activities, and to protect the new abutments from scour. Four cofferdams totaling approximately 5,913 cubic yards on the southern side of the bridge will occupy approximately 3,493 square feet (0.08 ac) during the first season. Another four cofferdams totaling approximately 7,052 cubic yards on the northern side of the bridge will occupy approximately 4,108 square feet (0.09 ac) during the second season. The temporary sheet piles will be removed through the use of vibratory hammer, direct pull, or clamshell grab. Approximately 6,795 cubic yards of sheet pile shoring will remain permanently below the original grade along approximately 6,601 square feet (0.15 ac) of the banks of the creek.

The temporary sheet piling between the existing and new roadway will remain in place between the first season and second season to protect the existing roadway and structure from scour and erosion caused by the offset of the new abutments. The top of the shoring will be installed to the existing roadway grade or higher and will be installed or cut flush with the abutments so that the sheet pilings do not obstruct the waterway during higher winter flows.

Foundation Work

Once the cofferdams are in place, construction activities associated with the

construction of the permanent foundations for abutments, bents, and wing walls, will consist of pumping out excess water, excavating for the footings, installing Cast In Steel Shell (CISS) piling, placing pile concrete, reinforcement steel, concrete forms, and footing concrete.

Retaining Walls

Four retaining walls approximately 20 feet long, 160 feet long, 193 feet long, and 298 feet long will be constructed at each of the bridge corners. These retaining walls will total 660 cubic yards. The retaining walls will also contain the roadway widening cut/fill activities, which will require clearing and grubbing vegetated areas north and south of SR 12. The retaining walls will be constructed from the temporary access roads with the methods described above for Foundation Work. The area behind the retaining walls will then be backfilled with approximately 3,856 cubic yards of clean soil to support the proposed roadway.

Erosion Control

All disturbed areas will be treated with standard Caltrans erosion control methods during and after construction, including the period between Stages 1 and 2. At the wing wall on the north side of the west abutment, exposed slopes will be protected from erosion by installing coir netting secured with wooden stakes. In areas of frequent inundation, coir logs will also be installed. The slopes will be hydroseeded with a suitable mix of native plant species appropriate to the area.

Drainage

The existing pipe and two drainage inlets south of SR 12 will be removed to facilitate widening of the south side of the road west of the bridge. A new 18-inch Alternative Pipe Culvert (APC) will be constructed across the roadway to drain stormwater flows north and into the proposed 18-inch APC, which will be installed north of SR 12 to replace the existing APC on the south side. Overside drains are proposed on the north side and south sides of SR 12 to drain stormwater flows into the waterway.

Proposed Equipment

Cranes will be used for multiple parts of the construction from setting up of the trestle and pile driving to delivery of materials and setting precast girders. Excavators will operate from the temporary construction access roads and temporary access pad and will be used for excavation at the abutments. Drilling equipment will operate from the temporary access pad and be used to clean out the CISS piles. Concrete pumps will operate from the existing roadway, temporary construction access roads, and temporary access pad and will be used to pour concrete for the structure. Baker tanks will be located at the temporary access pad and may be used to store water prior to discharge from dewatered excavations and cleaned out piles. Directional drilling equipment will be used to bore under the creek for utility relocation activities. Other equipment may include loaders, manlifts, paver, hoeram, jackhammers, backhoes, dozers, gradalls, and compaction equipment.

Staging

All project staging will occur outside of DFG 1602 jurisdiction.

Project Schedule

The relocation of utilities is scheduled for summer 2013. Construction of the bridge will span over 2 years and is scheduled to start June 2014 and end December 2015. Construction activities in the stream will occur between June 15 and October 15 of each year to minimize potential impacts to sensitive species. Caltrans will remove riparian trees between September 1 and February 15 to avoid impacts to nesting birds. Tree trimming will precede utility relocation and tree removal will precede road construction activities. The project area to the south of SR 12 will be cleared of vegetation between September 1 and October 15 in 2013 and grubbed in June 2014. The project area to the north of SR 12 will be cleared of vegetation between September 1 and October 15 in 2014 and grubbed in June 2015.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

- Riparian habitat
- Native trees
- Arroyo willow thicket habitat
- Oregon ash thicket habitat
- North coast riparian forest
- Central California Coastal Steelhead habitat
- Central California Coast Coho habitat
- California Coastal Chinook Salmon habitat
- Aquatic invertebrates
- Amphibians
- Black crowned night herons
- Double crested cormorants
- Migratory bird nesting
- Raptors
- Western pond turtles and habitat
- Bats and habitat
- Emergent wetlands

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

- Tree removal
 - Increased shading
 - Permanent and temporary loss of natural bed and bank
 - Permanent and temporary loss of riparian habitat
 - Loss of avian nesting, foraging, and roosting sites
 - Disruption of nesting
-

- Loss of bat habitat
- Loss of Western pond turtle habitat
- Loss of amphibian habitat
- Degradation and/or loss of salmonid habitat
- Water quality degradation
- Short-term release of contaminants

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 DFG personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. This Agreement and any extension and amendments shall be onsite at all times during Project activities.
- 1.3 Access to DFG Lands. This Agreement does not authorize entry to DFG-owned lands. Permittee shall obtain written permission from DFG before entering DFG-owned lands.
- 1.4 Notification of Conflicting Provisions. Permittee shall notify DFG 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, DFG shall contact Permittee to resolve any conflict.
- 1.5 Project Site Entry. Permittee agrees that DFG personnel may, with notification of the Resident Engineer, enter the project site at any time to verify compliance with the Agreement.

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. These conditions apply to DFG jurisdiction as described in the Project Description above.

- 2.1 To minimize adverse impacts to fish and wildlife all work within the bed, bank, channel, and associated riparian habitat shall be confined to the period of June 15 to October 15. Trees and shrubs may be removed using mechanical hand tools between
-

January 1 and June 14, and between August 31 and December 31, as long as tree removal activities are consistent with Conditions 2.3 and 2.5 below. Stumps shall remain in place until ground disturbing activities begin. Trees and shrubs can be removed between June 15 and August 30 as long as activities are consistent with Conditions 2.3 and 2.5 below. Revegetation work is not confined to this time period.

2.2 At least 30-days prior to commencing project activities covered by this Agreement, the Permittee shall submit to DFG, for review and approval, the qualifications for a number of biologists (Qualified Biologist) that shall oversee the implementation of the conditions in this Agreement. At a minimum, the Qualified Biologists shall have a combination of academic training and professional experience in biological sciences and related resource management activities. The Qualified Biologists shall communicate to the Resident Engineer when any activity is not in compliance with this Agreement and the Resident Engineer shall immediately stop the activity that is not in compliance with this Agreement.

2.3 To protect nesting birds, no project activities shall occur from February 15 through August 31 unless nesting bird surveys have been completed by a Qualified Biologist. To prevent nest abandonment, a Qualified Biologist shall survey within 500 feet of the proposed Project for nesting birds. If nests are found within the Project site or 500 feet from the Project then a Qualified Biologist shall establish a 50-foot buffer radius for nests of non-raptor bird species or a 300-foot buffer radius for raptor nests. A Qualified Biologist shall monitor the nesting birds and shall increase the buffer, through the Resident Engineer, if it is determined the birds are showing signs of unusual or distressed behavior that may be the result of Project activities. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. Surveys shall be conducted during periods of peak activity (early morning, dusk) and shall be of sufficient duration to observe movement patterns. Identified nests shall be reported to DFG. The buffer area shall be marked with high visibility material, protected from work activities and avoided until the young have fledged, as determined by a Qualified Biologist. During work, should birds indicate unusual or distressed behavior that could be indicative of future nest abandonment, a Qualified Biologist shall stop work immediately, through the Resident Engineer, and consult DFG on how to proceed.

2.4 Within 48 hours prior to construction, a Qualified Biologist shall conduct a wildlife survey, at the appropriate time of day, focusing on presence of Western pond turtle (*Clemmys marmorata*) and Foothill yellow legged frog (*Rana boylei*). If any Western pond turtles or Foothill yellow legged frogs are found, a Qualified Biologist shall relocate the animal downstream of the project site in appropriate habitat.

2.5 A Qualified Biologist shall conduct a habitat assessment for potentially suitable bat roosting habitat, including within the open expansion joints of the bridge and trees, March 1 to April 15 or August 31 to October 15 prior to bridge construction activities. If the habitat assessment reveals the bridge structure is

suitable roosting habitat for bats, then appropriate exclusionary measures will be implemented prior to bridge construction during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance efforts may include exclusionary blocking or filling potential roosting cavities with foam, visual monitoring, and staging project work to avoid bats. If bats are known to use the bridge structure, exclusion netting shall not be used. If the habitat assessment reveals suitable bat habitat within trees, and tree removal is scheduled from April 16 through August 30 and/or October 16 through February 28, then presence/absence surveys shall be conducted two to three days prior to any tree removal or trimming. If presence/absence surveys are negative, then tree removal may be conducted by following a two-phased tree removal system. If presence/absence surveys indicate bat occupancy, then the occupied trees shall only be removed from March 1 through April 15 and/or August 31 through October 15 by following the two-phased tree removal system. The two-phased removal system shall be conducted over 2 consecutive days. The first day (in the afternoon), limbs and branches are removed by a tree cutter using chainsaws or other hand tools only. Limbs with cavities, crevices, or deep bark fissures are avoided, and only branches or limbs without those features are removed. On the second day, the entire tree shall be removed.

2.6 If any wildlife is encountered during the course of project activities, said wildlife shall be allowed to leave the area unharmed and on their own volition.

2.7 The Resident Engineer or designated representative and a Qualified Biologist shall be onsite during dewatering and aquatic species relocation activities. Capture and relocation shall be conducted in a manner that minimizes stress and injury to captured animals. Capture methods may include dip nets. All nets shall be made of a soft braded nylon material that is non-abrasive. Electrofishing shall be used as a last resort. A relocation site shall be identified and the most direct transportation route shall be determined prior to any capture. The number of animals captured and moved at any one time shall be limited to the number that can be relocated without stress or injury. Prior to handling animals, all hands and equipment shall be wetted down with stream water and shall be free of any materials including hand sanitizers, sunscreen or insect repellent. No animals shall be handled with dry hands or dry equipment. Exclusionary netting or other barriers shall be used to prevent relocated animals from re-entering the dewatered work area. An aeration system shall be used in any live well or other holding facility. Dissolved oxygen levels shall be maintained above 6 parts per million. Water from the local collection site shall be used in live wells or other holding facilities during loading and transport. At no time shall chlorinated tap water be used. Water temperatures within any live well or other holding facility shall be kept at or below water temperature at the collection site. No non-native animals captured shall be returned to the stream or released alive.

2.8 Permittee shall comply with all applicable state and federal laws, including the California and Federal Endangered Species Act. This Agreement does not authorize the take of any state or federally endangered listed species. Liability for any take or

incidental take of such species remains the responsibility of the Permittee for the duration of the project. Any unauthorized take of listed species may result in prosecution and nullification of the Agreement.

2.9 The perimeter of the work site shall be adequately fenced using high visibility Environmentally Sensitive Area (ESA) fencing to prevent damage to adjacent riparian habitat. No construction activities, within the riparian zone, will be allowed within the habitat protected by the ESA fencing (this does not preclude activities from occurring on the bridge or deck work above the ESA area).

2.10 Permittee shall conduct work defined in the above 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 $\frac{1}{4}$ inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No activity of the project 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 30% forecast for precipitation for the following 24-hour period.

2.11 Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waterways. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control installations shall be monitored for effectiveness and shall be repaired or replaced as recommended by a Qualified Biologist or Water Quality Monitor to the Resident Engineer. As needed to prevent sediment transport, Permittee shall deploy soil stabilizer such as hydroseeding, netting, erosion control mats, mulch, fiber rolls, silt fences, check dams, and flow velocity dissipation devices. Permittee shall stabilize and equip construction site entrances and exits with tire washing capability. Materials containing monofilament or plastic shall not be used. Erosion and sediment control measures shall be installed prior to unseasonable rain storms.

2.12 To the extent practicable, Permittee shall leave the root masses of removed trees and shrubs in place. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations.

2.13 To the extent practicable Permittee shall not remove oak trees. Oak trees within the project site that can be avoided shall be fenced along their drip line with high visibility ESA fencing.

2.14 Pending accessibility for maintenance activities, and roadway and bridge geometrics, biofiltration swales or strips shall be installed on both bridge approaches, and on both sides of the roadway, and maintained in perpetuity.

2.15 Permittee shall not permit the operation of equipment within the main channel of the Laguna de Santa Rosa at any time.

2.16 The site shall be dewatered as necessary to provide an adequately dry work area. Any muddy or otherwise contaminated water shall be pumped to a settling tank prior to re-entering the creek. Work site dewatering can be accomplished using pumps and or siphons.

2.17 Permittee shall design the horizontal directional drilling operation in such a way as to minimize the risk of spills of all types. Permittee shall use lower pressure and greater boring depths in areas with frac out potential. If the potential for frac out exists, the Permittee shall prepare a contingency plan to address the release of drilling lubricants. The frac out contingency plan shall include a containment and remediation plan, include staging location of vacuum trucks and equipment, equipment list, and necessary hose lengths. The contingency plan shall include emergency contact phone numbers for prompt response by biological monitors. Permittee shall call biological monitors as soon as a spill is suspected. Permittee shall notify the United State Fish and Wildlife Service (USFWS) and DFG in the event of a frac out. Permittee shall not resume project activities until the spill has been remediated and approval to resume has been granted by the USFWS and DFG.

2.18 If, as currently anticipated, utility relocation commences the year prior to bridge construction activities, all utility relocation will occur from the existing pavement, the existing dirt path on the northeast side of the highway, or from the proposed Alternative Access Route described in the Streambed Alteration Agreement Notification Package (Figure 1).

2.19 If the gradient of the streambed is altered during project operations, Permittee shall return its contours as close as possible to pre-project conditions. Pre-project condition shall be defined (e.g. by engineered plans, LIDAR, geomorphological cross-sections) and dated prior to the commencement of the project. Permittee shall be liable for restoration of contours to pre-project conditions in the event that subsequent erosion is caused by the project.

2.20 Concrete shall be excluded from surface water for a period of 30-days after it is poured/sprayed. During that time the concrete shall be kept moist and runoff from the concrete shall not be allowed to enter any water body. Commercial sealants may be applied to the concrete surface where difficulty in excluding flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is cured. If groundwater comes into contact with fresh concrete, it shall be prevented from flowing towards surface water.

2.21 Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the creek channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.

2.22 Refueling of mobile construction equipment and vehicles shall not occur within 50 feet of any water body, or anywhere that spilled fuel could drain to a water body. Refueling of stationary equipment requiring breakdown and setup to move will remain in place. All equipment shall be refueled with appropriate drip pans, absorbent pads, and water quality Best Management Practices. Equipment and vehicles operating in the project area shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

2.23 Permittee shall plan appropriately to ensure all work within DFG jurisdiction be completed by October 15 of each year. DFG will not grant work extensions beyond October 15 of each year.

3. Compensatory Measures

3.1 Permittee shall submit an Onsite Restoration Plan for temporary impacts within 3 months of the issuance of this Agreement. The Onsite Restoration Plan shall be based on the Tree Survey Results for the State Route 12 Laguna de Santa Rosa Bridge Replacement Project, prepared by CH2MHill, dated December 3, 2007 (Attachment 1). The Onsite Restoration plan shall include a plant palette of native species to be used, success criteria, a monitoring a reporting schedule, and corrective actions to be taken if mitigation measures do not meet the approved success criteria. All plantings shall be derived from locally available genotypes. The Permittee shall monitor the survival and vigor of onsite plantings for a period of 10 years to ensure attainment of 75% survivorship. Permittee shall control invasive species as needed to ensure attainment of 75% survivorship after 10 years.

3.2 At the issuance of this Agreement DFG has not approved an offsite mitigation location. At least 60 days prior to commencement of construction the Permittee shall submit a detailed North Coast Riparian Forest Habitat Mitigation Plan (Habitat Mitigation Plan) to DFG for review and written approval. The Habitat Mitigation Plan shall mitigate permanent north coast riparian forest habitat impacts at a minimum of a 3:1 acreage ratio. Mitigation shall be based on all trees regardless of diameter at breast height. The Habitat Mitigation Plan shall include proposed mitigation locations, a plant palette of native species to be used, success criteria, a monitoring a reporting schedule, and corrective actions to be taken if mitigation measures do not meet the approved success criteria. The Permittee shall monitor the survival and vigor of offsite plantings for a period of 10 years to ensure attainment of 75% survivorship. Offsite mitigation may

include a combination of habitat restoration, creation, enhancement, and/or preservation of habitat that will support a similar plant community to that found at the project site, including but not limited to the following species: red willow; valley oak; coast live oak; California walnut, black oak; California rose; arroyo willow; Oregon ash; blue elderberry; and hawthorn. The Habitat Mitigation Plan shall be based on the Tree Survey Results for the State Route 12 Laguna de Santa Rosa Bridge Replacement Project, prepared by CH2MHill, dated December 3, 2007 (Attachment 1).

CONTACT INFORMATION

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

To Permittee:

California Department of Transportation
Jeffrey G. Jensen
111 Grand Ave.
(510)622-8729
Jeffrey_jensen@dot.ca.gov

To DFG:

Department of Fish and Game
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
Attn: Lake and Streambed Alteration Program – Melissa Escaron
Notification #1600-2012-0159-R3
mescaron@dfg.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 DFG'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

DFG 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 DFG 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 DFG 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 DFG to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes DFG 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 DFG'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 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.

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 FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 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

DFG may amend the Agreement at any time during its term if DFG 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 DFG and Permittee. To request an amendment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

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 DFG 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 DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(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 DFG a completed DFG "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). DFG shall process the extension request in accordance with FGC 1605(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)).

EFFECTIVE DATE

The Agreement becomes effective on the date of DFG's signature, which shall be: 1) after Permittee's signature; 2) after DFG complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall expire on December 31, 2017, 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 FGC section 1605(a)(2) requires.

EXHIBITS

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

- A. Figure 1. Utility Relocation Access Map

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 DFG in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

**FOR CALIFORNIA DEPARTMENT OF
TRANSPORTATION**



Jeffrey G. Jensen
Office Chief Biological Sciences and Permits

1/14/2013
Date

FOR DEPARTMENT OF FISH AND GAME



Craig Weightman
Acting Environmental Program Manager

1/16/13
Date

Prepared by: Melissa Escaron
Staff Environmental Scientist

Date Sent: August 13, 2012
Revision Sent: October 16, 2012
Revision Sent: January 14, 2013

FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Notification No.
5/21/12	\$ 4482.75	\$		1600-2012-0159-3



State of California
Dept of Transportation
Check # 082-201449

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME
M. Escobron
LT. Jones
WDN Esquivel



NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Fish & Game

Name	Jeffrey G. Jensen	MAY 21 2012		
Business/Agency	Caltrans District 4	Yountville		
Street Address	111 Grand Avenue			
City, State, Zip	Oakland, CA 94612			
Telephone	(510) 622-8729	Fax	(510) 286-6374	
Email	jeffrey_jensen@dot.ca.gov			

2. CONTACT PERSON (Complete only if different from applicant)

Name	Chris Jannusch			
Street Address	111 Grand Avenue			
City, State, Zip	Oakland, CA 94612			
Telephone	(510) 286-5230	Fax	(510) 286-6301	
Email	christopher_jannusch@dot.ca.gov			

3. PROPERTY OWNER (Complete only if different from applicant)

Name				
Street Address				
City, State, Zip				
Telephone		Fax		
Email				

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name		Laguna de Santa Rosa Bridge Replacement Project		
B. Agreement Term Requested		<input checked="" type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
2012	2016	06/15	10/15	200.00

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.

A.	<input checked="" type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)	
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A)	Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B)	THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C)	SWRCB Number: _____
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)	
F.	<input type="checkbox"/> DFG Fisheries Restoration Grant Program (FRGP)	FRGP Contract Number: _____
G.	<input type="checkbox"/> Master	
H.	<input type="checkbox"/> Master Timber Harvesting	

6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. **Note: The Department may not process this notification until the correct fee has been received.**

	A. Project	B. Project Cost	C. Project Fee
1	Laguna de Santa Rosa Bridge Replacement Project	\$14,079,000.00	\$4,482.75
2			
3			
4			
5			
		D. Base Fee (if applicable)	
		E. TOTAL FEE ENCLOSED	\$4,482.75

7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

Yes (Provide the information below) No

Applicant: _____ Notification Number: _____ Date: _____

B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?

No Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)

Continued on additional page(s)

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

8. PROJECT LOCATION

<p>A. Address or description of project location. <i>(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)</i></p> <p>The Laguna de Santa Rosa Bridge (Caltrans Bridge Number 20-0035) is located at PM 9.63 on State Route (SR) 12 near Morris Street, which is east of the City of Sebastopol in Sonoma County, California as shown on Figure 1-1 of the attached supplemental document. From the CDFG Bay Delta Region 3 office, travel northwest on Silverado Trail toward Oakville Cross Rd., Turn left onto Oakville Cross Rd., Turn left onto St Helena Hwy/CA-29., Turn right onto Oakville Grade, Oakville Grade becomes Dry Creek Rd., Turn right to stay on Trinity Rd. Turn right onto Sonoma Hwy/CA-12 E, Turn left onto Farmers Ln/CA-12. Merge onto CA-12 W toward Eureka/San Francisco/Sebastopol and travel for about eight miles to Morris Street.</p> <p style="text-align: right;"><input checked="" type="checkbox"/> Continued on additional page(s)</p>				
B. River, stream, or lake affected by the project.		Laguna de Santa Rosa		
C. What water body is the river, stream, or lake tributary to?		Russian River		
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		
E. County	Sonoma			
F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Sebastopol	7N	9W	35	
<input type="checkbox"/> Continued on additional page(s)				
K. Meridian (check one)	<input type="checkbox"/> Humboldt <input checked="" type="checkbox"/> Mt. Diablo <input type="checkbox"/> San Bernardino			
L. Assessor's Parcel Number(s)				
060-060-001, 060-060-060, 060-010-033, 060-010-017, 004-011-047, 004-011-042, and 004-011-037				
<input type="checkbox"/> Continued on additional page(s)				
M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)				
Latitude/Longitude	Latitude: 38.40348 N		Longitude: -122.81616 W	
	<input type="checkbox"/> Degrees/Minutes/Seconds		<input checked="" type="checkbox"/> Decimal Degrees	
UTM	<input type="checkbox"/> Decimal Minutes		<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11	
	Easting:		Northing:	
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 or WGS 84		

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

9. PROJECT CATEGORY AND WORK TYPE (Check each box that applies)

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal – pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify): Temporary access roads	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

The California Department of Transportation (Caltrans) proposes to replace an existing 33.5 ft wide and 220.25 ft long, 2-lane Laguna de Santa Rosa Bridge with a new 58 ft wide, 236 ft long, two-lane precast/prestress (PC/PS) I-girder bridge, consisting of three spans and two bents within an 8.49 acre temporary construction easement (i.e., project boundary). Prior to construction of the bridge, PG&E, AT&T and Comcast will relocate utilities as early as July 2012 within the project boundary. PG&E will deactivate and abandon an existing main line, then bore a gas line underground on the north side of SR 12, using a directional drill. The bore will be approximately 850 feet long, as deep as approximately 32 feet from the ground, and 20 feet below the bottom of the creek channel. The bore holes will be located away from CDFG jurisdiction.

The bridge will be constructed in three stages over two construction seasons. Construction of the bridge is scheduled to start June 2013 and end December 2015. Construction activities in the stream will occur between June 15 and October 15 of each year to minimize potential impacts to federal and state listed salmonids. Caltrans proposes to construct half of the new bridge on the south side of the existing one, demolish the existing bridge, and rebuild the second half of the new bridge on the north side. The new bridge profile will be elevated approximately 3.3 feet, which will require a new roadway overlay. The proposed bridge design includes constructing four retaining walls on the new structure to minimize the footprint within riparian areas. Temporary access ramps and a temporary stream access pad with a trestle creek diversion are proposed within the stream to allow direct access across the creek during each construction season within CDFG jurisdictional areas. A temporary gravelbag diversion may be used in the creek to direct flows into the channel beneath the temporary trestle. A 30 foot wide temporary access road will be constructed. Sheet pilings will be used at the abutments, bents and retaining walls to create eight cofferdams within the creek. Post-construction operations and maintenance activities will remain the same as pre-project actions. A complete and detailed project description is provided in Chapter 2 of the attached Supplement.

Continued on additional page(s)

B. Specify the equipment and machinery that will be used to complete the project.

Cranes, excavators, drilling equipment, concrete pumps, loaders, manlifts, paver, hoeram, jackhammers, backhoes, dozers, gradalls, and compaction equipment. Equipment use is described in detail in Chapter 2.4.9.1 of the attached Supplement.

Continued on additional page(s)

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).

Yes No (*Skip to box 11*)

D. Will the proposed project require work in the wetted portion of the channel?

Yes (*Enclose a plan to divert water around work site*)
 No

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Utility/Bridge project activities will result in: Stream Permanent Impact = 0.05 ac, 301 lf; Stream Temporary Impact = 0.98 ac (includes 0.87 ac in Laguna de Santa Rosa Creek and 0.11 ac in Waters 01, Waters 02 and Water/Wetland D, 600 lf; Stream Shade Impact = up to 0.12 ac, 30 linear feet; Riparian Permanent Impact = 0.56 ac, 301 lf; Riparian Temporary Impact 1.47 ac, 725 lf (1.39 ac, 600 lf bridge; 0.08 ac, 125 lf utility)

Continued on additional page(s)

B. Will the project affect any vegetation? *Yes (Complete the tables below)* *No*

Vegetation Type	Temporary Impact	Permanent Impact
North Coast Riparian Forest and 0.23 ac of emergent seasonal wetlands	Linear feet: <u>725</u> Total area: <u>1.47 ac</u>	Linear feet: <u>301</u> Total area: <u>0.56 ac</u>
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
See Table 3-2 in the attached Supplement		

Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Yes (List each species and/or describe the habitat below) *No* *Unknown*

Unoccupied, potential habitat for special-status plants (i.e., Sonoma sunshine, Burke's goldfields, Sebastopol meadowfoam), federal listed salmonids, See Chapter 3.6 of the attached Supplement.

Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

Special-status Rare Plant Surveys, USFWS Biological Opinion, Caltrans No effect Determinations and agency concurrences. See the attached Supplement.

Continued on additional page(s)

E. Has a biological study been completed for the project site?

Yes (Enclose the biological study) *No*

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

Yes (Enclose the hydrological study) *No*

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Pavement Reinforcing Fabric will underlay all temporary roadway material. Erosion control procedures will be used as appropriate, such as the placement of mulch on all disturbed area, fiber rolls along slopes, silt fences at the boundaries of the construction site, stabilized construction entrances and exits equipped with tire washing capability, and diversions placed strategically to reduce flow velocity and to filter flows in defined drainage-ways. Erosion control measures will be implemented to address soil stabilization and sedimentation. Typical measures include applying soil stabilizer such as hydroseeding, netting, erosion control mats, velocity dissipation devices, flared end sections for culverts and others. See Chapter 4 in the Supplement.

Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

The project design has been revised from earlier concepts in part due to early coordination with the resource agencies. The project will install retaining walls to minimize the amount of earthwork, ROW acquisitions, and impacts to biologically sensitive resources within the project footprint. Heavy equipment will use crane mats within streams to minimize disturbance. A temporary diversion structure with a trestle (platform) will be used to divert the stream and minimize hydrologic impacts in Laguna de Santa Rosa Creek. A temporary access road constructed of six inch minus rock over filter fabric will be used to preserve the integrity of jurisdictional wetlands on the top of the bank. Refer to Chapter 4.0 in the Supplement.

Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

Refer to Chapter 4.0 for a description of avoidance, minimization and compensation measures to protect fish and wildlife in the attached Supplement.

Continued on additional page(s)

13. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

- A. USFWS Biological Opinion Applied Issued
- B. USACE 404 Nationwide Permits #14 and #33 Applied Issued
- C. RWQCB 401 Water Quality Certification Applied Issued
- D. Unknown whether local, state, or federal permit is needed for the project. (Check each box that applies)

Continued on additional page(s)

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

14. ENVIRONMENTAL REVIEW

<p>A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?</p>			
<p><input checked="" type="checkbox"/> Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each)</p> <p><input type="checkbox"/> No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)</p>			
<input type="checkbox"/> Notice of Exemption	<input type="checkbox"/> Mitigated Negative Declaration	<input checked="" type="checkbox"/> NEPA document (type): <u>CE(6004)</u>	
<input checked="" type="checkbox"/> Initial Study	<input type="checkbox"/> Environmental Impact Report	<input type="checkbox"/> CESA document (type): _____	
<input checked="" type="checkbox"/> Negative Declaration	<input checked="" type="checkbox"/> Notice of Determination (Enclose)	<input checked="" type="checkbox"/> ESA document (type): <u>Biological Opinion</u>	
<input type="checkbox"/> THP/ NTMP	<input type="checkbox"/> Mitigation, Monitoring, Reporting Plan		
B. State Clearinghouse Number (if applicable)		2008012074	
C. Has a CEQA lead agency been determined?		<input checked="" type="checkbox"/> Yes (Complete boxes D, E, and F) <input type="checkbox"/> No (Skip to box 14.G)	
D. CEQA Lead Agency	Caltrans		
E. Contact Person	Valerie Shearer	F. Telephone Number	(510) 286-5594
G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.			
N/A			
<input type="checkbox"/> Continued on additional page(s)			
H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?			
<input checked="" type="checkbox"/> Yes (Enclose proof of payment) <input type="checkbox"/> No (Briefly explain below the reason a filing fee has not been paid)			
<p><i>Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.</i></p>			

15. SITE INSPECTION

<p>Check one box only.</p> <p><input type="checkbox"/> In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.</p> <p><input checked="" type="checkbox"/> I request the Department to first contact (insert name) <u>Chris Jannusch</u> at (insert telephone number) <u>(510) 286-5230</u> to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.</p>
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NOTIFICATION OF LAKE OR STREAMBED ALTERATION

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?
<input checked="" type="checkbox"/> Yes (Please enclose the information via digital media with the completed notification form)
<input type="checkbox"/> No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

 _____ Date 6/27/12

Signature of Applicant or Applicant's Authorized Representative

Signed for

Jeffrey G. Jensen _____

Print Name

Fish & Game
JUN 29 2012
Yountville

EXHIBIT A-1

Lake or Streambed Alteration Agreement

(Notification No. 1600-2012-0159-3)

CDFW Mitigation Plan Approval

From: Jannusch, Christopher@DOT
To: Atanasio, Robert@DOT;
Subject: FW: CDFW approval of Laguna de Santa Rosa HMP, Agreement #1600-2012-0159-R3
Date: Thursday, January 09, 2014 4:34:35 PM

Hi BJ,
I'll upload this message to STEVE.

-Chris

From: Escaron, Melissa@Wildlife
Sent: Thursday, January 09, 2014 4:16 PM
To: Jannusch, Christopher@DOT
Cc: Harais, Diane@Wildlife; Montero, Carie@DOT
Subject: CDFW approval of Laguna de Santa Rosa HMP, Agreement #1600-2012-0159-R3

Chris- CDFW hereby approves the attached mitigation plan in accordance Streambed Alteration Agreement #1600-2012-0159-R3 to offset permanent impacts associated with the Laguna de Santa Rosa Bridge Replacement Project. Thank you for coordinating with the Department- Melissa

Diane- please file thanks.

Melissa Escaron
Staff Environmental Scientist
California Department of Fish and Wildlife
Melissa.escaron@wildlife.ca.gov
(925)786-3045

EXHIBIT B

Water Quality Certification

(Certification No. 1B12122WNSO)



North Coast Regional Water Quality Control Board

February 7, 2013

In the Matter of
Water Quality Certification
for the
California Department of Transportation
Highway 12, Laguna de Santa Rosa Bridge Replacement Project
WDID No. 1B12122WNSO

APPLICANT: California Department of Transportation
RECEIVING WATER: Laguna de Santa Rosa
HYDROLOGIC AREA: Russian River Hydrologic Unit No.1114
COUNTY: Sonoma
FILE NAME: CDOT – HWY 12, Laguna de Santa Rosa Bridge Replacement Project

BY THE EXECUTIVE OFFICER:

1. On May 30, 2012, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the California Department of Transportation (Caltrans), requesting Federal Clean Water Act (CWA), section 401, Water Quality Certification (certification) for activities related to the proposed Highway 12 – Laguna de Santa Rosa Project (project). The proposed project would cause disturbances to waters of the United States (U.S.) and waters of the State associated with the Russian River Hydrologic Unit No.1114 (Laguna Hydrologic Sub-Area 114.21). The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on January 14, 2013, and posted information describing the project on the Regional Water Board's website. No comments were received.
2. The proposed project is located in Sonoma County on State Route 12 (SR12) between post miles (PM) 9.2 and 10.0. The purpose of the project is to replace the existing, deteriorating two-lane bridge with a new two-lane bridge built to current design standards. The scope of work includes: demolishing the existing bridge; constructing a new 236-foot-long bridge using two bents, two abutments, and two retaining walls; utility relocation; and resurfacing and widening the bridge approaches. The Project would be divided into utility relocation and bridge construction contracts. The utility relocation phase would occur over a one year

DAVID M. NORRIS, CHAIR | MATTHIAS BY JOHN, EXECUTIVE DIRECTOR

3500 Skyway Blvd., Suite A, Santa Rosa, CA 95403 | www.waterboards.ca.gov/northcoast/

period (approximately July 2013 through October 2013) and the bridge replacement phase would occur over a two-year period (approximately June 2013 through December 2015).

3. Caltrans has determined that the proposed project would result in 0.04 acres of permanent impacts to U.S. wetlands and 70 linear feet (0.01 acres) of permanent impacts to Other Waters of the U.S. (Laguna de Santa Rosa). The proposed project would also permanently impact approximately 0.57 acres (317 linear feet) of riparian vegetation.
 4. Caltrans has determined that the proposed project would result in 0.26 acres (11,361 feet²) of temporary impacts to U.S. wetlands, 68 linear feet (0.45 acres, 25,069 feet²) of temporary impacts to Other Waters of the U.S. (Laguna de Santa Rosa), and 21 linear feet (0.004 acres, 160 feet²) of temporary impacts to Other Waters of the U.S. that are tributary to the Laguna de Santa Rosa. The project would also result in approximately 0.80 acres (425 linear feet) of temporary impacts to riparian vegetation.
 5. On-site mitigation for temporary impacts to jurisdictional wetlands and waters would include re-vegetation and monitoring of disturbed areas. Mitigation for permanent and temporary wetland impacts would be provided by purchase of 0.5 acres of mitigation bank credits. Off-site mitigation for permanent impacts to riparian habitat would involve restoration of approximately 1.7 acres of riparian habitat in the Laguna de Santa Rosa watershed.
 6. Project implementation would result in approximately 0.55 acres of new and 0.26 acres of reworked impervious surface area (0.81 acre treatment obligation). Caltrans has proposed using a vegetated filter strip to treat 0.31 acres of impervious area. Because Caltrans was unable to reduce the filter strip slope and thereby increase treatment performance, a fifty percent treatment credit will be given (0.155 acres). Additionally, because Caltrans cannot provide treatment of impervious area for direct discharges to the Laguna de Santa Rosa, an additional 0.50 acres of stormwater treatment shall be required. Caltrans will off-set the overall treatment deficit of 1.31 acres by using treatment credits from the Caltrans-funded Sonoma County Fairground low impact development (LID) retrofit project. Caltrans currently holds 2.23 acres of treatment credit from the LID retrofit Project and 0.92 acres of treatment credit would remain after applying the treatment credit for this project.
 7. The proposed project would be divided into utility relocation and bridge replacement phases. The utility relocation phase would occur over a one year period (approximately July 2013 through October 2013) and the bridge replacement phase would occur over a two-year period (approximately June 2013 through December 2015). The project would result in approximately 3.2 acres of disturbed soil area. Caltrans will prepare a Stormwater Pollution Prevention Plan detailing Best Management Practices to control pollution from the project area during construction. All disturbed areas within the project will be appropriately stabilized and/or replanted with appropriate native vegetation.
 8. Caltrans received authorization from the U.S. Army Corps of Engineers on January 11, 2013, to implement the project under Nationwide Permit Nos. 12 (*utility line*
-

activities) and 14 (*linear transportation projects*) pursuant to Clean Water Act, section 404. Caltrans has also entered into a 1602 Streambed Alteration Agreement with the California Department of Fish and Game. On May 10, 2010, Caltrans, acting as lead agency, certified a Negative Declaration for the proposed project in order to comply with the California Environmental Quality Act (CEQA) (State Clearing House No. 2008012074). The Regional Water Board has considered the environmental documentation, including any proposed changes, and incorporates any avoidance, minimization, and mitigation measures into the project as a condition of approval to avoid significant affects to the environment.

9. The Laguna de Santa Rosa watershed is listed on the Clean Water Act section 303(d) list as impaired for sediment, temperature, nitrogen, phosphorus, indicator bacteria, dissolved oxygen, and mercury. In addition, activities that impact the riparian zone and reduce riparian vegetation are identified as sources contributing to increased stream temperatures. A focus on measures to reduce sediment discharges to surface waters from construction areas, and measures to avoid, minimize, and mitigate impacts on riparian zones is essential for achieving TMDL, Basin Plan, and CEQA compliance.
 10. Pursuant to Regional Water Board Resolution R1-2004-0087, Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters within the North Coast Region (Sediment TMDL Implementation Policy), the Executive Officer is directed to "rely on the use of all available authorities, including existing regulatory standards, and permitting and enforcement tools to more effectively and efficaciously pursue compliance with sediment-related standards by all dischargers of sediment waste."
 11. Pursuant to Regional Water Board Resolution R1-2012-0013, Implementation of the Water Quality Objective for Temperature in the North Coast Region (Temperature Implementation Policy), Regional Water Board staff is directed to address factors that contribute to elevated water temperatures when issuing 401 certifications or WDRs (permits) for individual projects. Any permit should be consistent with the assumptions and requirements of temperature shade load allocations in areas subject to existing temperature TMDLs, including EPA- established temperature TMDLs, as appropriate. If applicable, any permit or order should implement similar shade controls in areas listed as impaired for temperature but lacking a TMDL and region-wide as appropriate and necessary to prevent future impairments and to comply with the intrastate temperature objective.
 12. The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. This certification is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater, and does not otherwise authorize degradation of the waters affected by this project.
-

13. To ensure compliance with Water Quality Objectives within the Basin Plan, adequate wetland and riparian protection and stringent requirements to avoid, minimize, and mitigate the sediment and temperature impacts associated with the proposed project will be incorporated as enforceable conditions in this Water Quality Certification. In addition, Caltrans will be required to conduct surface water monitoring, sampling, and analysis in accordance with the conditions of the Water Quality Certification. Additionally, storm water runoff monitoring, sampling, and analysis will be conducted as required by the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges from the State of California, Department of Transportation (Caltrans) Properties, Facilities and Activities Order No. 99 - 06 - DWQ. The surface water data collected will be utilized to assess the adequacy of BMPs during construction as well as site specific mitigation measures proposed to minimize impacts to the environment, including sediment and temperature impacts.
14. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this certification.

Receiving Waters: Laguna de Santa Rosa in Russian River Hydrologic Unit No. 1114

Filled and/or

Excavated Areas: Permanent – streams (Waters of U.S.): 70 linear feet (0.01 acres)
Permanent – wetlands (Waters of U.S.): 0.04 acres
Permanent – riparian areas (Waters of State): 0.57 acres (317 linear feet)

Temporary – streams (Waters of U.S.): 89 linear feet (0.46 acres)
Temporary – wetlands (Waters of U.S.): 0.26 acres
Temporary – riparian Areas (Waters of State): 0.80 acres (425 linear feet)

Dredge Volume : None

Fill Volume : Permanent - 972 cubic yards
Temporary – 2,790 cubic yards

Mitigation proposed: On-site: Restoration of 89 linear feet of jurisdictional waters and 0.26 acres of jurisdictional wetlands

Off-site: 1.7 acres of riparian habitat restoration and purchase of 0.5 acres of wetland mitigation bank credit

Latitude/Longitude: 38.40348 / -122.81616

Accordingly, based on its independent review of the record, the Regional Water Board certifies that the Caltrans – Highway 12 Laguna de Santa Rosa Bridge Replacement Project (WDID No. 1B12122WNSO), as described in the application will comply with sections 301,

302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Caltrans complies with the following terms and conditions:

All conditions of this certification apply to Caltrans (and all its employees) and all contractors (and their employees), sub-contractors (and their employees), and any other entity or agency that performs activities or work on the project (including the off-site mitigation lands) as related to this Water Quality Certification.

1. This certification action is subject to modification or revocation upon administrative or judicial review; including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.
 2. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to title 23, California Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
 3. The validity this certification is conditioned upon total payment of any fee required under title 23, California Code of Regulations, section 3833, and owed by the applicant.
 4. All conditions required by this certification shall be included in the Plans and Specifications prepared by Caltrans for the Contractor. In addition, Caltrans shall require compliance with all conditions included in this certification in the bid contract for this project.
 5. Caltrans shall provide a copy of this certification and State Water Resources Control Board (SWRCB) Order No. 2003-0017-DWQ (web link referenced below) to the contractor and all subcontractors conducting the work, and require that copies remain in their possession at the work site. Caltrans shall be responsible for work conducted by its contractor or subcontractors.
 6. For both the utility relocation and bridge replacement contracts, the Regional Water Board shall be notified in writing each year at least five working days (working days are Monday – Friday) prior to the commencement of ground disturbing activities, water diversion activities or construction activities with details regarding the construction schedule. The notification will allow Regional Water Board staff to be present on-site during installation and removal activities, and to answer any public inquiries that may arise regarding the project. Caltrans shall provide Regional Water Board staff access to the project site to document compliance with this certification.
 7. The Resident Engineer (or appropriately authorized agent) shall hold on-site water quality permit compliance meetings (similar to tailgate safety meetings) to discuss permit compliance, including instructions on violation avoidance and violation reporting procedures. The meetings shall be held at least every other week, before forecasted storm events, and when a new contractor or subcontractor arrives to begin work at the site. The contractors, subcontractors and their employees, as well as any inspectors or monitors assigned to the project, shall be present at the meetings. Caltrans shall maintain dated sign-in sheets for attendees at these meetings, and shall make them available to the Regional Water Board on request.
-

8. All activities and best management practices (BMPs) shall be implemented according to the submitted application materials (dated May 2012 and October 2012) and the findings and conditions of this certification. BMPs for erosion, sediment, turbidity and pollutant control shall be implemented and in place at commencement of, during, and after any ground clearing activities, construction activities, or any other project activities that could result in erosion, sediment, or other pollutant discharges to waters of the State. The BMPs shall be implemented in accordance with the Caltrans Construction Site Best Management Practice Manual (CCSBMPM) and all contractors and subcontractors shall comply with the CCSBMPM. In addition, BMPs for erosion and sediment control shall be utilized year round, regardless of season or time of year. Caltrans shall stage erosion and sediment control materials at the work site. All BMPs shall be installed properly and in accordance with the manufacturer's specifications. If the project Resident Engineer elects to install alternative BMPs for use on the project, Caltrans shall submit a proposal to Regional Water Board staff for review and concurrence.
 9. Caltrans shall prioritize the use of wildlife-friendly biodegradable (not photo-degradable) erosion control products wherever feasible. Caltrans shall not use or allow the use of erosion control products that contain synthetic netting for permanent erosion control (i.e. erosion control materials to be left in place for two years or after the completion date of the project). If Caltrans finds that erosion control netting or products have entrapped or harmed wildlife, personnel shall remove the netting or product and replace it with wildlife-friendly biodegradable products. Caltrans shall not use or allow the use of erosion control products that contain synthetic materials within waters of the United States or waters of the State at any time. Caltrans shall request approval from the Regional Water Board if an exception from this requirement is needed for a specific location.
 10. Herbicides and pesticides shall not be used within the project. If Caltrans has a compelling case as to why herbicides and pesticides should be used, they may submit a request along with a BMP plan to the Executive Officer of the Regional Water Board for review, consideration, and concurrence.
 11. Work in flowing or standing surface waters, unless otherwise proposed in the project description and approved by the Regional Water Board, is prohibited. If construction dewatering of groundwater is found to be necessary, Caltrans shall use a method of water disposal other than disposal to surface waters (such as land disposal) or Caltrans shall apply for coverage under the Low Threat Discharge Permit or an individual National Pollutant Discharge Elimination System (NPDES) Permit and receive notification of coverage to discharge to surface waters, prior to the discharge.
 12. Caltrans is prohibited from discharging waste to waters of the State, unless explicitly authorized by this certification. For example, no debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or concrete washings, welding slag, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this certification, shall not be allowed to enter into waters of the State. Except for temporary stockpiling of waste generated during demolition operations ("temporary" in this instance means generated and removed during the same working day), waste materials shall not be placed within 150 linear feet of waters of the State or where the materials may be
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washed by rainfall into waters of the State. Exceptions to the 150-foot limit may be granted on a case-by-case basis provided Caltrans first submits a proposal in writing that is found acceptable by Regional Water Board staff or the Regional Water Board liaison to Caltrans.

13. Caltrans shall implement a demolition debris containment plan to prevent demolition waste from entering State waters. The strategy may be detailed either in the SWPPP submitted with the Notice of Intent for the bridge construction contract or submitted separately to the Water Board. Demolition shall not commence until the demolition plan has been found acceptable to Water Board staff or the Caltrans liaison to the Regional Water Board.
14. Caltrans shall submit, subject to review and concurrence by the Regional Water Board staff or Caltrans liaison to the Regional Water Board, a dewatering and/or diversion plan that appropriately describe the dewatered or diverted areas and how those areas will be handled during construction. The diversion/dewatering plans shall be submitted no later than 30 days prior to conducting the proposed activity. Information submitted shall include the area or work to be diverted or dewatered and method of the proposed activity. All diversion or dewatering activities shall be designed to minimize the impact to waters of the State and maintain natural flows upstream and downstream. All dewatering or diversion structures shall be installed in a manner that does not cause sedimentation, siltation or erosion upstream or downstream. All dewatering or diversion structures shall be removed immediately upon completion of project activities.
15. In-channel work, including removal of stream diversion structures, shall only be conducted between June 15 and October 15; extensions shall not be granted. This certification does not authorize Caltrans to draft surface waters.
16. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be prohibited within waters of the State. Fueling of individual equipment types within waters of the State may be authorized if Caltrans first prepares a fueling plan that:
 - 11) Identifies the specific piece of machinery that may require fueling within waters of the State;
 - 12) Provides justification for the need to refuel within State waters. The justification shall describe why fueling outside of jurisdictional waters is infeasible; and
 - 13) Includes a narrative of specific BMPs that shall be employed to prevent and capture fuel releases.

Fueling of equipment within waters of the State shall be prohibited until the above mentioned plan has been approved by Regional Water Board staff or the Regional Water Board liaison for Caltrans. The fueling plan may be submitted individually, included in the project Storm Water Pollution Prevention Plan (SWPPP), or submitted as a SWPPP amendment.

17. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall not result in a discharge or a threatened discharge to any waters of the State or the U.S. At no time shall Caltrans use any vehicle or equipment which leaks any substance that may impact water quality.
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18. Caltrans shall implement appropriate BMPs to prevent the discharge of equipment fluids to the stream channel. The minimum requirements shall include: storing hazardous materials at least 150 linear feet outside of the stream banks; checking equipment for leaks and preventing the use of equipment with leaks; and pressure washing or steam cleaning equipment to remove fluid residue on any of its surfaces prior to its entering any stream channel in a manner that does not result in a discharge to waters of the State.
 19. If, at any time, an unauthorized discharge to surface water (including wetlands, rivers or streams) occurs, or any other water quality problem arises, the associated project activities shall cease immediately until adequate BMPs are implemented. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.
 20. Caltrans and their contractor are not authorized to discharge wastewater (e.g., water that has contacted uncured concrete or cement, or asphalt) to surface waters, ground waters, or land. Wastewater may only be disposed of to a sanitary waste water collection system/facility (with authorization from the facility's owner or operator) or a properly-licensed disposal or reuse facility. If Caltrans or their contractor proposes an alternate disposal method, Caltrans or their contractor shall request authorization from the Regional Water Board. Plans to reuse or recycle wastewater require written approval from Regional Water Board staff.
 21. Concrete shall be excluded from surface water for a period of 30-days after it is poured/sprayed. During that time the concrete shall be kept moist and runoff from the concrete shall not be allowed to enter any water body. Commercial sealants may be applied to the concrete surface where difficulty in excluding flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is cured. If groundwater comes into contact with fresh concrete, it shall be prevented from flowing towards surface water.
 22. Caltrans shall provide analysis and verification that placing non-hazardous waste or inert materials (which may include discarded product or recycled materials) will not result in degradation of water quality, human health, or the environment. All project-generated waste shall be handled, transported, and disposed in strict compliance with all applicable State and Federal laws and regulations. When operations are complete, any excess material or debris shall be removed from the work area and disposed of properly and in accordance with the Special Provisions for the project and/or Standard Specification 7-1.13, Disposal of Material Outside the Highway Right of Way. Within 30 days of disposing of materials off-site Caltrans shall submit to the Regional Water Board the satisfactory evidence provided to the Caltrans Engineer by the Contractor referenced in Standard Specification 7-1.13. In accordance with State and Federal laws and regulations, Caltrans is liable and responsible for the proper disposal of waste generated by their project.
 23. All imported fill material shall be clean and free of pollutants. All fill material shall be imported from a source that has the appropriate environmental clearances and permits. The reuse of low-level contaminated solids as fill on-site shall be performed in accordance with all State and Federal policies and established guidelines and must be submitted to the Regional Water Board for review and concurrence.
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24. Gravel bags used within the Laguna de Santa Rosa shall meet the gravel specifications described below in condition number 25. Gravel bag fabric shall be nonwoven polypropylene geotextile (or comparable polymer) and shall conform to the following requirements:
 - 11) Mass per unit area, grams per square meter, min ASTM Designation: D 5261 – 270
 - 12) Grab tensile strength (25-mm grip), kilonewtons, min. ASTM Designation: D4632* 0.89
 - 13) Ultraviolet stability, percent tensile strength retained after 500 hours, ASTM Designation: D4355, xenon arc lamp method 70 or appropriate test method for specific polymer
 - 14) Gravel bags shall be between 600 mm and 800 mm in length, and between 400 mm and 500 mm in width.
 - 15) Yarn used in construction of the gravel bags shall be as recommended by the manufacturer or bag supplier and shall be of a contrasting color. The opening of gravel-filled bags shall be secured to prevent gravel from escaping. Gravel-filled bags shall be between 13 kg and 22 kg in mass.
 - 16) Caltrans shall request approval from the Regional Water Board if an exception from this requirement is needed for a specific location.
 25. Gravel used in the construction of the temporary Laguna de Santa Rosa access pad shall:
 - 11) Consist of mechanically-rounded and washed, and/or river run gravel obtained from a river or creek bed;
 - 12) Be clean, hard, sound, durable, uniform in quality, and free of disintegrated material, organic matter, or other deleterious substances;
 - 13) Be composed entirely of particles that have no more than one fractured face;
 - 14) Have a cleanliness value of at least 85, using the Cleanliness Value Test Method for California Test No. 227; and
 - 15) Have a diameter no less than 0.75 inches in diameter, and no greater than four inches in diameter.
 26. The Laguna de Santa Rosa temporary access pad shall be completely removed on or before October 15. Extensions shall not be granted. Installation or removal of the temporary access pad shall not impact the form or substrate of the Laguna de Santa Rosa. Caltrans shall conduct pre- and post-surveys of the Laguna to ensure that installation or removal of the temporary access pad did not impact the Laguna's form or substrate. If Caltrans finds there was an impact, then the Laguna de Santa Rosa shall be restored to its previous conditions and documentation shall be provided to the Regional Water Board no later than 30 days from completion of the post-construction survey.
 27. In order to demonstrate compliance with receiving water limitations and water quality objectives surface water monitoring shall be conducted. When conducting surface water monitoring Caltrans shall establish discharge, upstream (background) and downstream monitoring locations to demonstrate compliance with applicable water quality objectives. The downstream location shall be no more than 100 feet from the discharge location.
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- 11) Surface water monitoring shall be conducted whenever a project activity is conducted within waters of the State (e.g. including but not limited to the installation, use or removal of stream diversions, pile installations, and cofferdams). Measurements and observations shall be collected from each sampling location four times daily.
- 12) Surface water monitoring shall be conducted immediately when any project activity has mobilized sediment or other pollutants resulting in a discharge and/or has the potential to alter background conditions within waters of the State (including but not limited to storm water runoff, concrete discharges, leaks, and spills.). The continuing frequency is contingent upon results of field measurements and applicable water quality objectives.

Surface water monitoring field measurements shall be taken for pH and turbidity. In addition, visual observations of each location shall be documented daily for each established monitoring location and monitoring event and include the estimate of flow, appearance of the discharge including color, floating or suspended matter or debris, appearance of the receiving water at the point of discharge (occurrence of erosion and scouring, turbidity, solids deposition, unusual aquatic growth, etc.), and observations about the receiving water, such as the presence of aquatic life. If a project activity has reached a steady state and is stable, then Caltrans may request a temporary reprieve from this condition from the Regional Water Board until an activity or discharge triggers the monitoring again.

28. Whenever, as a result of project activities (in-stream work or a discharge to receiving waters), downstream measurements exceed any water quality objective 100 feet downstream of the source(s) all necessary steps shall be taken to install, repair, and/or modify BMPs to control the source(s). The frequency of surface water monitoring shall increase to hourly and shall continue until measurements demonstrate compliance with water quality objectives for each parameter listed below and measured levels are no longer increasing as a result of project activities. In addition, the overall distance from the source(s) to the downstream extent of the exceedence of water quality objectives shall be measured.

Monitoring results shall be reported to appropriate Regional Water Board staff person by telephone within 24 hours of taking any measurements that exceed the limits detailed below (only report turbidity if it is higher than 20 NTU).

pH	<6.5 or >8.5 (any changes >0.5 units)
turbidity	20% above natural background

Monitoring results and upstream and downstream pictures within the working and/or disturbed area and discharge location shall be taken and submitted to the appropriate Regional Water Board staff within 24 hours of the incident. All other monitoring data documenting compliance with water quality objectives shall be reported on a monthly basis and is due to the Regional Water Board by the 15th of the following month.

29. Post Storm Event Reports:
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- 11) Once the project has begun ground-disturbing activities, and subsequent to a qualifying rain event that exceeds 0.5-inches of precipitation, Caltrans shall inspect the project within 24 hours and take photos of all discharge locations, and disturbed areas, including all excess materials disposal areas, in order to demonstrate that erosion control and revegetation measures are present and have been installed appropriately and are functioning effectively. A brief report containing these photos, corrective actions (if necessary), and any surface water monitoring results collected pursuant to this Order or the Construction General Permit (SWRCB Order 2009-009 DWQ) shall be submitted to the Regional Water Board within 10 days after the end of the qualifying rain event. Inspections are required daily during extended rain events. Once the project site is stable, in a steady state (channel- ground- or vegetation-disturbing activities have ceased), and has demonstrated sufficient and effective erosion and sediment control, Caltrans may request a reprieve from this condition from the Regional Water Board. At least one post-construction inspection is required to demonstrate sufficient and effective erosion and sediment control and compliance with the Basin Plan.
 - 12) Rain events are periods of precipitation that that are separated by more than 48-hours of dry weather. Rainfall amounts may be taken from on-site rain gauges, from the nearest California Data Exchange Center station (<http://cdec.water.ca.gov>), or by a custom method or station approved by Regional Water Board staff.
30. Grubbing of vegetation shall not occur in areas of temporary impact, as identified in the application materials. Vegetation within these areas shall be cleared to no less than one inch from the soil surface.
 31. To avoid and minimize impacts, temporary access roads shall employ reinforcing fabric and temporary soil confinement systems when placed over jurisdictional wetlands and waters. Applicable road locations and crossing designs shall be consistent with the Water Pollution Control Details included in Attachment A of this certification.
 32. Caltrans shall submit a mitigation and monitoring plan (MMP) to address on-site and off-site mitigation measures for temporary and permanent project impacts to jurisdictional wetlands, waters, and riparian vegetation. Bridge replacement construction shall be prohibited until a MMP has been found acceptable to the Executive Officer. The MMP shall include:
 - 11) A proposal to revegetate and monitor all temporarily impacted jurisdictional waters and riparian areas. The proposal shall include:
 - a. A planting palette, planting plans, and proposed seed mixes;
 - b. Success criteria, including vigor, percent cover, percent invasive cover, and 75% survival of trees at the end of ten years. Final success criteria for wetland restoration may be considered at five years;
 - c. Corrective actions to be taken if mitigation measures do not meet the proposed success criteria;
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- d. A plan to re-vegetate all temporarily impacted areas in the first full planting season (November to April) subsequent to the year construction is complete and erosion control is established in the impacted area. Caltrans shall include a plan to stabilize areas above the Laguna de Santa Rosa Ordinary High Water Mark using appropriate native soil-stabilizing species;
 - e. An invasive plant control plan;
 - f. A monitoring period of no less than ten years;
 - g. Photo-documentation; and
 - h. Annual reporting at the end of years 0 (as-built), 1, 3, 5, 7, 9, and 10. Caltrans shall propose report delivery deadlines;
- ii) A proposal to restore no less than 1.7 acres of riparian habitat in the Laguna de Santa Rosa watershed. Caltrans may partner with the Laguna de Santa Rosa Foundation to restore riparian habitat adjacent the north bank of Gravenstein Creek at "The Brown Farm," or, at an alternative site found acceptable to the California Department of Fish and Wildlife and the Regional Water Board. The proposal shall include:
- a. Mitigation goals;
 - b. A planting palette, planting plans, and proposed seed mixes;
 - c. A plan to implement the mitigation no later than Fall 2014;
 - d. Success criteria;
 - e. An invasive plant control plan;
 - f. Photo-documentation;
 - g. Corrective actions to be taken if mitigation measures do not meet the proposed success criteria;
 - h. A monitoring period of no less than ten years, and
 - i. Annual reporting at the end of years 0 (as-built), 1, 3, 5, 7, 9 and 10. Caltrans shall propose report delivery deadlines.

Project construction shall be prohibited until the MMP has been found acceptable to the Executive Officer. Utility relocation work may commence in advance of MMP acceptance provided specific activities and restoration measures related to the utility relocation activities are first submitted to and found acceptable by Regional Water Board staff or the Caltrans liaison to the Regional Water Board.

- 33. Prior to commencement of bridge construction, Caltrans shall submit confirmation of the purchase of credits equivalent to no less than 0.5 acres of seasonal wetland establishment from a United States Army Corps of Engineers-approved mitigation bank within the appropriate service area.
 - 34. Caltrans shall install a compost-amended vegetated filter strip to treat roadway stormwater runoff. The strip shall be no less than 9,821 square feet, have a slope not greater than 25 percent, and be situated adjacent westbound SR12, approximately between post-miles 9.74 and 9.81. The strip shall be entered into the District's permanent stormwater treatment BMP database and monitored and maintained to ensure BMP efficacy.
 - 35. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law.
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For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the Regional Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

36. The Regional Water Board may add to or modify the conditions of this Order, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
 37. This certification is not transferable. In the event of any change in control of ownership of land presently owned or controlled by the Applicant, the Applicant shall notify the successor-in-interest of the existence of this certification by letter and shall forward a copy of the letter to the Regional Water Board. The successor-in-interest must send to the Regional Water Board Executive Officer a written request for transfer of this certification to discharge dredged or fill material under this Order. The request must contain the following:
 - 11) requesting entity's full legal name;
 - 12) the state of incorporation, if a corporation;
 - 13) address and phone number of contact person; and
 - 14) a description of any changes to the project or confirmation that the successor-in-interest intends to implement the project as described in this Order.
 38. Except as may be modified by any preceding conditions, all certification actions are contingent on: a) the discharge being limited, and all proposed revegetation, avoidance, minimization, and mitigation measures being completed, in strict compliance with Caltrans' project description and CEQA documentation, as approved herein, b) Caltrans shall construct the project in accordance with the project described in the application and the findings above, and c) compliance with all applicable water quality requirements and water quality control plans including the requirements of the Water Quality Control Plan for the North Coast Region (Basin Plan), and amendments thereto. Any change in the design or implementation of the project that would have a significant or material effect on the findings, conclusions, or conditions of this Order must be submitted to the Executive Officer of the Regional Water Board for prior review, consideration, and written concurrence. If the Regional Water Board is not notified of a significant alteration to the project, it will be considered a violation of this Order, and Caltrans may be subject to Regional Water Board enforcement actions.
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Please contact our staff Environmental Specialist / Caltrans Liaison, Brendan Thompson at (707) 576-2699, or via e-mail, at Brendan.Thompson@waterboards.ca.gov, if you have any questions.

Original Signed By

Matthias St. John
Executive Officer

130207_CDOT_Hwy12_LagunaDeSantaRosa_401Cert

Enclosure: Attachment A – Temporary Construction Access Road Details

Web link: State Water Resources Control Board Order No. 2003-0017 -DWQ, General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification can be found at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf

Original to: Ms. Lilian Acorda, Caltrans, District 4, 111 Grand Ave., Oakland, CA 94612

Copies to: Mr. Cyrus Vafai, Caltrans, District 4, 111 Grand Ave., Oakland, CA 94612

Electronic Copies to: U.S. Army Corps of Engineers, Regulatory Functions - San Francisco District

California Department of Fish and Game, Bay Delta Region

EXHIBIT B-1

Water Quality Certification

(Certification No. 1B12122WNSO)

NCRWQCB Mitigation Plan Approval

From: Jannusch, Christopher@DOT
To: Atanasio, Robert@DOT;
Subject: FW: Laguna off-site CDFW mitigation
Date: Friday, January 10, 2014 8:14:22 AM

FYI – WB approved it as well.

From: Thompson, Brendan@Waterboards
Sent: Thursday, January 09, 2014 5:04 PM
To: Charles, Eltora@DOT
Cc: Vafai, Cyrus@DOT; Takhar, Hardeep@DOT; Acorda, Lilian A@DOT; Jannusch, Christopher@DOT; Bargsten, Stephen@Waterboards; Escaron, Melissa@Wildlife
Subject: RE: Laguna off-site CDFW mitigation

Hello Eltora,

We accept the attached off-site HMP for the SON 12 Laguna de Santa Rosa project.

Thanks. Please contact me if you have any questions.

Brendan Thompson, CPESC, QSD
Environmental Specialist
North Coast Regional Water Quality Control Board
5550 Skylane Blvd. Ste. A
Santa Rosa, CA 95403-1072
(707) 576-2699

From: Charles, Eltora@DOT
Sent: Tuesday, December 17, 2013 4:01 PM
To: Thompson, Brendan@Waterboards
Cc: Vafai, Cyrus@DOT; Takhar, Hardeep@DOT; Acorda, Lilian A@DOT; Jannusch, Christopher@DOT
Subject: FW: Laguna off-site CDFW mitigation

Greetings Brendan,

Condition 32 of the SON 12 Laguna de Santa Rosa 401 Certification (copy attached) requires Caltrans submit a mitigation and monitoring plan to address on-site and off-site mitigation measures for temporary and permanent impacts to jurisdictional wetlands, waters, and riparian vegetation. Condition 32 also

prohibits Bridge replacement construction until the submitted MMP is found acceptable by the Board.

Also attached is a copy of the summary for the Project's mitigation monitoring plan as submitted to the CDFW for review and acceptance. Your review comments and/or acceptance of the attached summary for the Project's proposed off-site planting strategy is appreciated.

Sincerely,

Eltora Charles, Civil T.E.
D4 WQ Permits
510-286-5456

From: Vafai, Cyrus@DOT
Sent: Tuesday, December 17, 2013 11:49 AM
To: Charles, Eltora@DOT; 'Holly.Barbare@CH2M.com'
Subject: FW: Laguna off-site CDFW mitigation

Fyi,

Cyrus Vafai, PE
Branch Chief, Water Quality Permits
Office of Water Quality, 14th floor, MS 8F
Caltrans District 4, Oakland
Phone: 510-286-5585
Fax: 510-286-5639

From: Jannusch, Christopher@DOT
Sent: Wednesday, December 11, 2013 10:40 AM
To: Acorda, Lilian A@DOT
Cc: Takhar, Hardeep@DOT; Vafai, Cyrus@DOT; Malamud-Roam, Frances@DOT; Shearer, Valerie@DOT; Atanasio, Robert@DOT; Montero, Carie@DOT; Nguyen, Bach-Yen@DOT; Paich, Allison@DOT; Stanton, Sunnie@DOT; Maroni, Frances@DOT; Haydu, Elaine@DOT
Subject: Laguna off-site CDFW mitigation

Hi Lilian,

The proposed off-site mitigation to satisfy the CDFW 1600 has been internally reviewed and I've sent it to Melissa at CDFW (see attached). Written approval from Melissa is one of the last pieces we need to move the co-op forward with the City of Santa Rosa.

Best,
Chris

Chris Jannusch
Caltrans Biologist - Associate Environmental Planner
510.286.5230



**Laguna de Santa Rosa Off-site Mitigation Project Proposal
Brown Farm, Hwy 12, Santa Rosa
Sonoma County, California
December 15, 2020**

Project Summary: Install 625 native riparian trees and shrubs along approximately 925 linear feet (2.1 acres) of Gravenstein Creek, tributary to the Laguna de Santa Rosa, with maintenance and monitoring for 10 years

Project Duration: May 2021 - December 2031

Project Cost: \$355,000

Contact Information: Kevin Cullinen
Sonoma Resource Conservation District
1221 Farmers Lane, Suite F

Santa Rosa, CA 95405
707.569.1448 ext. 103
kcullinen@sonomarc.org

Project Background/Objectives

The purpose of this project is to fulfill the permit requirements from CDFW and RWQCB to compensate for the environmental impacts associated with the Caltrans' Laguna de Santa Rosa Bridge Replacement Project over Highway 12 in Sebastopol. As part of the mitigation, CALTRANS is required to replace any riparian trees and shrubs removed from the project on a 3 to 1 area basis and ensure 75% survival of the plantings after ten years.

A nearby riparian site, located on the City of Santa Rosa's Brown Farm property, was identified by CALTRANS as a good candidate to implement the required riparian planting mitigation measures. The City of Santa Rosa has agreed for the site to be used for the mitigation work and a conceptual riparian planting plan has been designed (see attached design documents).

Sonoma Resource Conservation District (SRCD) was asked by CALTRANS to submit a proposal to implement the proposed riparian planting mitigation plan. A project description and budget follows.

Project Description

The purpose of this project is to fulfill the permit requirements from CDFW and RWQCB to compensate for the environmental impacts associated with Caltrans' Laguna de Santa Rosa Bridge Replacement Project. To comply with mitigation, 503 trees are required to be installed, however; 625 plants will be installed to help meet survival requirements over the monitoring period. The proposed riparian planting mitigation project would involve planting 625 trees and shrubs, which would be maintained and monitored for 9 years after the first year of installation (10 years total), with the requirement of having at least 377 of the plants alive at the end of the 10-year maintenance and monitoring period. These plants will be installed along approximately 930 linear feet (1.68 acre area) of a tributary of the Laguna de Santa Rosa referred to as Gravenstein Creek. SRCD will work in collaboration with the City of Santa Rosa and a subcontractor to install, water, and maintain the plantings in order to execute the scope of this proposal. This will include working with local nurseries to collect genetically local seeds for the plantings.

The objectives of the project are as follows: a) increase riparian corridor extent and quality to benefit local riparian species and aquatic organisms; b) increase the abundance of native riparian plants; c) enhance cover, complexity and buffering of the riparian corridor via revegetation with genetically appropriate native plant material; d) provide information on the project to the public through the SRCD's FARMS Youth Education Program and through the installation of a project sign that would be visible from the adjacent Joe Rodota trail.

Table 1. Native Plant Species for Stream Enhancement – Laguna de Santa Rosa Watershed

Common Name	Botanical Name
Valley Oak	<i>Quercus lobata</i>
Black Walnut	<i>Juglans hindsii</i>
Freemont Cottonwood	<i>Populus fremontia</i>
Box Elder	<i>Acer negundo</i>
Oregon Ash	<i>Fraxinus latifolia</i>
Buckeye	<i>Aesculus californica</i>
Red and Arroyo Willow	<i>Salix laevigata, Salix lasiolepis</i>
Coyote Brush	<i>Baccharis pilularis</i>
CA Blackberry	<i>Rubus ursinus</i>

Snowberry	<i>Symphoricarpos albus var. laevigatus</i>
Hawthorn	<i>Crataegus douglasii</i>
CA Wild Rose	<i>Rosa californica</i>
Blue Elderberry	<i>Sambucus mexicana</i>

Proposed Tasks:

1. Project Coordination, CEQA, Layout, Installation, and Signage

The SRCD will coordinate with the landowner and selected subcontractors to complete CEQA documentation and related biological surveys, facilitate property access, complete design layout, and planting and irrigation installation. Planting and irrigation installation will be accomplished by qualified contractors (Laguna de Santa Rosa Foundation and PBCS – STRAW Project), volunteers, and students from the SRCD FARMS program under the supervision of the SRCD Project Manager. Genetically appropriate plants to the Laguna de Santa Rosa Watershed will be installed with the appropriate browsing hardware. Prior to installation, minor weed clearing may need to be completed within the planting area. Any hazardous materials found on site will also be removed and properly disposed. An appropriate irrigation system will be installed with collaboration from the landowner. Planting is expected to occur over winter 2019/20. A project and watershed information sign will be established along the Joe Rodota Trail in proximity to the restoration work highlighting watershed issues, restoration opportunities, and how Sonoma RCD, Caltrans, Laguna Foundation, PBCS STRAW, and other Watershed Partners are working to improve the watersheds of Sonoma County.

2. Maintenance and Monitoring

Maintenance will be performed by a qualified contractor (likely Laguna de Santa Rosa Foundation) during the ten year contract period. Landowner agreements will be developed to ensure that the maintenance takes place and the project investment is protected. Maintenance activity will include weeding around the installed plants, replacing plants that die, ensuring the browse protection is suitable and doing regular irrigation checks and repairs. During the ten-year plant establishment period, the installation contractor will replace some of the dead or dying plants during routine maintenance activities to ensure the survival rate goal.

There shall be at least 75% survival of the originally planned 503 plants installed based on mitigation requirements by the end of the ten-year plant monitoring period (a minimum of 377 plants). At the end of Year 10, if survival is less than 75%, all failed riparian trees and upland oak plantings on the mitigation sites will be replanted with live plantings and monitored an additional three years to achieve at least 75% survival and the establishment of at least 377 plants.

Ten Years of Monitoring and Reporting

SRCD and its partners will monitor the project during the ten year contract period. Monitoring reports will be submitted beginning the year after the completion of the plantings to CALTRANS (and to CDFW and NCRWQCB if required) by December 31 of each year during the ten year monitoring period. Photo points will be established to document re-vegetation efforts. The photo-documentation will be conducted yearly for ten years and submitted to the agencies with the annual monitoring report. Each report shall include:

- A summary of each year's results;
- Recommendations of any remedial actions;
- A summary of any maintenance activities performed;
- Photographs from the project site photo points, and

- Monitoring data sheets

3. Contract Administration

The SRCD will submit invoices, pay subcontractors conduct budget tracking and contract management per CALTRANS guidelines and requirements.

Table 2. Proposed Budget – Laguna Offsite Mitigation Project

The following is the estimated budget for the 10-year term of this Agreement. Final costs incurred under the budget categories listed may be either higher or lower than the estimated costs as costs, including personnel rates and IRS mileage rates, will change over the term of this Agreement.

Task Description	Rate	Unit	Amount	Total Budget
Task 1. Planting Plan, CEQA, Site Flagging, Coordination, Signage, and Plant Installation.				
RCD Staff				
Executive Director	\$ 61.40	hrs	8	\$491.20
Program Manager	\$ 44.17	hrs	20	\$883.40
Project Manager	\$ 39.28	hrs	164	\$6,441.92
Program Assistant	\$ 25.67	hrs	30	\$770.10
Education and Communications Mngr	\$ 37.41	hrs	50	\$1,870.50
<i>Task 1 Personnel Subtotal</i>				\$10,457.12
Task 2. Maintenance Coordination and Monitoring Visits (10 yrs)				
RCD Staff				
Project Manager	\$ 39.28	hrs	110	\$4,320.80
Program Assistant	\$ 25.67	hrs	50	\$1,283.50
<i>Task 2 Personnel Subtotal</i>				\$5,604.30
Task 3. Contract Administration and Reporting				
RCD Staff				
Executive Director	\$ 61.40	hrs	65	\$3,991.00
Program Manager	\$ 44.17	hrs	50	\$2,208.50
Project Manager	\$ 39.28	hrs	140	\$5,499.20
Staff Accountant	\$ 34.88	hrs	60	\$2,092.80
<i>Task 3 Personnel Subtotal</i>				\$13,791.50
Fringe Benefits				
Executive Director	37.70%	Fringe %	\$4,482.20	\$1,689.79

Program Manager	39.67%	Fringe %	\$3,091.90	\$1,226.56
Project Manager	41.26%	Fringe %	\$16,261.92	\$6,709.67
Program Assistant	39.05%	Fringe %	\$2,053.60	\$801.93
Education and Communications Mngr	32.96%	Fringe %	\$1,870.50	\$616.52
Staff Accountant	39.60%	Fringe %	\$2,092.80	\$828.75
<i>Fringe Subtotal</i>				\$11,873.21
Personnel Subtotal				\$41,726.13
SUBCONTRACTOR (Laguna Foundation & Point Blue CS - STRAW)				
Subcontractor - Native seed collection and propagation, Planting and Irrigation Installation, Watering, Maintenance for 10 years (LF)				\$216,552.50
Subcontractor - Education and Plant Installation (STRAW)				\$11,149.00
Hazardous Materials Clean Up (TBD)				\$5,000.00
Subcontractor - CTS Biological Survey and Report (TBD)				\$5,000.00
Subcontractor Subtotal				\$237,701.50
MATERIALS	Rate	Unit	Amount	Total Budget
Plant Costs				
Average plant cost rate (D40 container)	\$10.00	per plant	575	\$5,750.00
Willows	\$6.00	per stake	50	\$300.00
Replacement plant costs	\$10.00	per plant	100	\$1,000.00
Protective Hardware/Fencing & Irrigation				
Plant hardware: weed mat, staples, Tubex tube, wood stakes, and flags (no protection for willows)	\$16.00	per plant	575	\$9,200.00
Irrigation materials (tubing, emitters, couplers, etc.)				\$4,200.00
RCD Mileage	\$0.580	per mile	450	\$261.00
CEQA Notice of Exemption Filing Fee				\$53.00
Paper and Postage				\$72.03
Project Signage (Materials, Design & Installation)				\$2,500.00
FARMS Youth Education Program Materials				\$75.00

Materials Subtotal				\$23,411.03
Other: 5% Contingency				\$13,960.96
TOTAL DIRECT COSTS				\$316,799.62
TOTAL INDIRECT COSTS, in accordance with SRCD Federal NICRA	30.50%	MTDC Base	\$ 125,247.12	\$38,200.37
TOTAL BUDGET				\$355,000.00

Attachments:

- Laguna off site mitigation concept Design
- SRCD Planting Plan and Recommendations
- Project Map



CONCEPTUAL MITIGATION
PROPOSED LOCATION

LAGUNA DE SANTA ROSA OFF-SITE MITIGATION
FOR DESIGN STUDY ONLY

Brown Farm existing mitigation sample



PHOTO 1: SAMPLE OF EXISTING MITIGATION PROJECT ADJACENT TO PROPOSED LAGUNA DE SANTA ROSA OFF-SITE MITIGATION.

PHOTO 2: SECTION OF PROPOSED LAGUNA DE SANTA ROSA OFF-SITE MITIGATION.



CONCEPTUAL MITIGATION
SITE PHOTOS

LAGUNA DE SANTA ROSA OFF-SITE MITIGATION
FOR DESIGN STUDY ONLY



ABOVE: PROPOSED OFF-SITE MITIGATION FOOT PRINT.

BELOW: CONCEPTUAL PLANTING STRATEGY. ON-SITE ANALYSIS WOULD DETERMINE ACTUAL LAYOUT OF PLANTS.

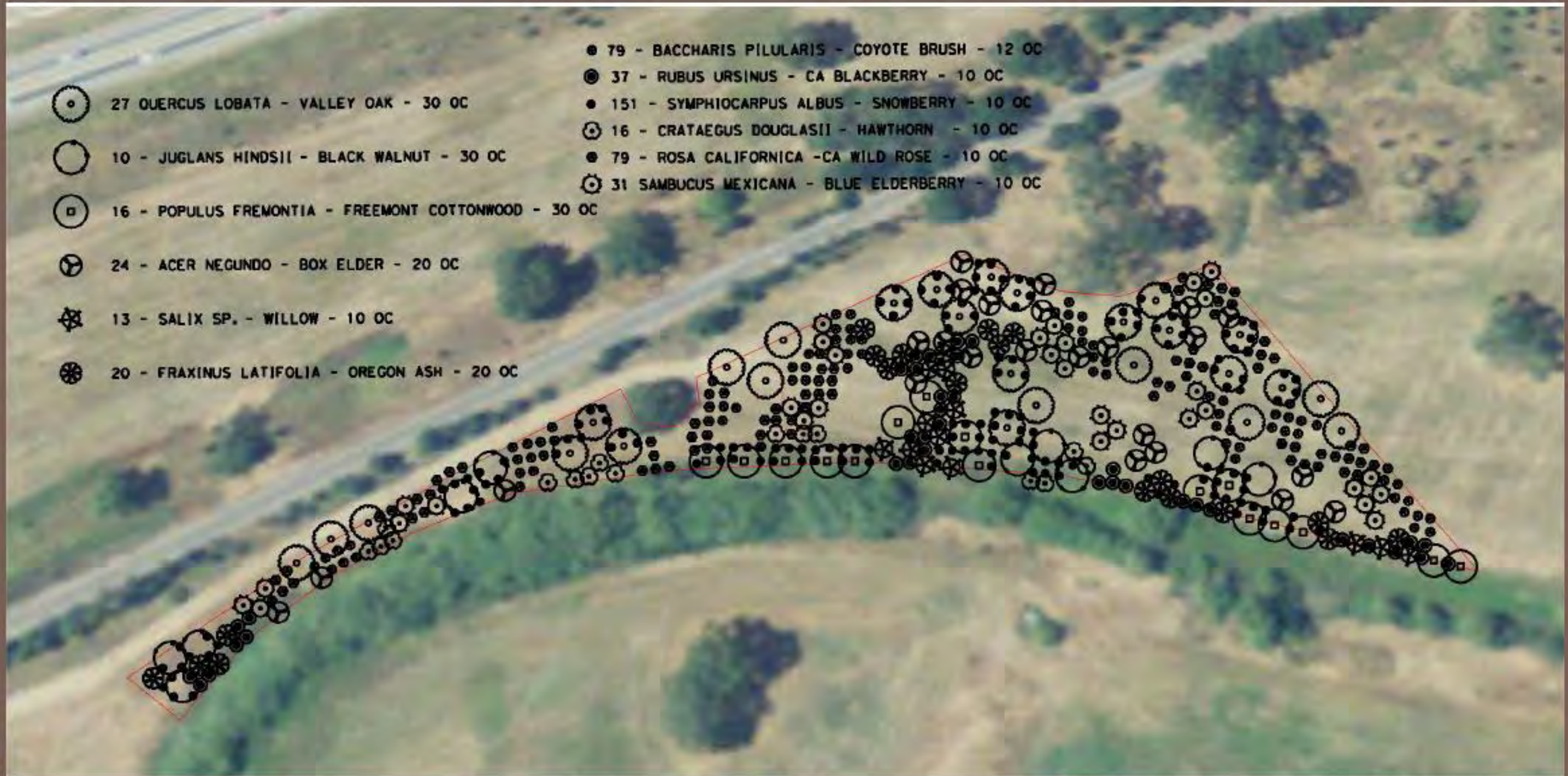


CONCEPTUAL MITIGATION SITE ANALYSIS

LAGUNA DE SANTA ROSA OFF-SITE MITIGATION

FOR DESIGN STUDY ONLY

BELOW: CONCEPTUAL PLANTING LAYOUT AND PLANT LIST.



CONCEPTUAL MITIGATION
SAMPLE PLANTING PLAN

LAGUNA DE SANTA ROSA OFF-SITE MITIGATION

FOR DESIGN STUDY ONLY

Laguna de Santa Rosa Off-Site Mitigation Project
Brown Farm, Santa Rosa, Laguna de Santa Rosa Watershed
Sonoma County
Prepared by Sonoma RCD, August 2015

Common Name	Scientific Name	Flag Color	Zones		Total by species	Approx. Spacing	Container Size
			Zone 1	Zone 2	Both Zones		
Trees							
Valley Oak	<i>Quercus lobata</i>	dark green	10	18	28	10'-12'	DP 40 or seed
Coast Live Oak	<i>Quercus agrifolia</i>	White and Black	5	15	20	10'-12'	DP 40 or seed
Black Walnut	<i>Juglans hindsii</i>	light blue	5	9	14	10'-12'	DP 40 or seed
Freemont Cottonwood	<i>Populus fremontia</i>	dark blue	2	16	18	10'-12'	DP 40
Box Elder	<i>Acer negundo</i>	pink	10	24	34	10'-12'	DP 16
Oregon Ash	<i>Fraxinus latifolia</i>	orange	5	15	20	10'-12'	DP 40
Buckeye	<i>Aesculus californica</i>	red	12	18	30	10'-12'	TP or seed
Red and Arroyo Willow	<i>Salix laevigata, Salix lasiolepis</i>	no flag	0	50	50	5'-8'	Stakes
Shrubs							
Coyote Brush	<i>Baccharis pilularis</i>	grey	18	60	78	5'-8'	Supercell or DP16
CA Blackberry	<i>Rubus ursinus</i>	Yellow and black	9	30	39	5'-8'	DP 16
Snowberry	<i>Symphoricarpos albus var. laevigatus</i>	neon green	32	119	151	5'-8'	DP 16
Hawthorn	<i>Crataegus douglasii</i>	White	9	12	21	5'-8'	DP 16
CA Wild Rose	<i>Rosa californica</i>	yellow	30	61	91	5'-8'	DP 16
Blue Elderberry	<i>Sambucus mexicana</i>	purple	6	25	31	5'-8'	DP 16
TOTAL BY ZONE			153	472	625		

*Depending on plant availability, available water and landowner preference, plants may be substituted or reduced. This planting project will be submitted to Caltrans to secure implementation funding for a minimum of 503 riparian plants along the unnamed tributary of Laguna de Santa Rosa.

Planting Plan Recommendations:

1. This planting plan will be installed in the months during late fall and early winter once rainfall has moistened the soil to a depth of approximately 10 inches or more (ideally between late November through January).
2. Individual plant locations will be marked in the field by color-coded pin flags. Should replanting become necessary, it is advised that these flags remain in place after the plant installation has been completed. All spacing requirements are outlined in the above table and will be reflected in the pin flag layout. Some plants may be substituted based on landowner preference and availability, water resources and specific conditions on site when planting occurs. Also, as mentioned above, specific plant locations may be modified based on when this plan is implemented and integration with enhancement actions associated with the adjacent floodplain.
3. Willow sprig installation shall occur after the willows have entered their winter dormancy generally during Dec-Jan and as much as possible should be collected from on site sources or nearby and within the watershed. Willow sprigs should be installed at least 2' deep, with sprigs that are at least 4' tall and 1" in diameter. Willows will need irrigation, but do not need protective hardware.
4. To the extent possible, all plantings shall be derived from locally available genotypes. This may involve collecting seed from existing on-site trees and shrubs, and working with local nurseries to ensure plants are propagated from species within the Laguna de Santa Rosa watershed. Container sizes for this planting plan will favor smaller sizes specified in the above table whenever possible, but plant availability may require larger sizes be used and may depend on landowner preference. Planting seeds directly will also be an acceptable method. Each plant will be enclosed in protective hardware, i.e. Tubex tree shelters or screen and collars, as needed and appropriate for the plant.

5. Plants will require irrigation for the first 3 dry seasons after installation, typically during the period outlined above. Irrigation should occur every 7 to 10 days during the dry season; each plant should receive approximately 1-2 gallons of water per week. All watering recommendations are dependent on local weather and specific soil conditions on site and will need to be adjusted accordingly. The RCD will coordinate with the landowner and any subcontractors as needed to develop a suitable irrigation plan for the project. There is a recycled water line that is located adjacent to the project site. It is expected that the subcontractor will fill up a water tank and hand water plants at least once per week. Irrigation lines may also be connected to the water tank if it is found to be a more efficient system of irrigation.

6. Restoration plants will require hand weeding and hardware adjustment for the 9 years following installation. Hand weeding should take place in the late winter, early spring, and late spring. The permits for this project prohibit the use of herbicides and pesticides for controlling weeds and pests. After the third year, most plants will have outgrown their protective hardware and the hardware will have to be removed for disposal. It is expected that 625 plants will be installed with mitigation funding from Caltrans and specific monitoring will be carried to ensure survivorship of at least 377 plants (75% of the original 503 plants called for this project): *"The Permittee shall monitor the survival and vigor of offsite plantings for a period of 10 years to ensure attainment of 75% survivorship.* See attached project proposal submitted to Caltrans.

7. The permits have already be aquired for the proposed planting plan. Should the scope of this project change in the future such as including vegetation removal, bank layback or any instream work than the appropriate permits will need to be secured and the appropriate jurisdictional agencies will be consulted. The permits for this project prohibit the use of herbicides and pesticides for controlling weeds and pests.

8. Budget: Refer to the attached project proposal submitted to Caltrans to install and monitor 625 plants which includes a budget.

Laguna de Santa Rosa Off-Site Mitigation Project Proposed Riparian Planting Zones

Potential Project
Sign Location



JOE RODOTA

Approximate
City Water Line

Zone 2

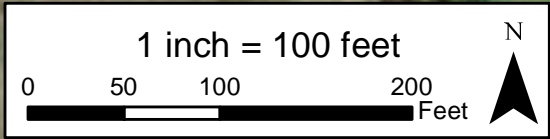
Zone 1

Gravenstein Creek

472 plants

153 plants

Existing Riparian
Enhancement Projects



- Joe Rodota Trail
- Gravenstein Creek
- ▭ Proposed Project Boundary

Map Created August 11, 2019 by SRCD

Greater Laguna de Santa Rosa Watershed

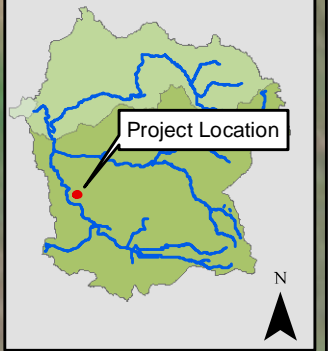


EXHIBIT D

Mitigation Property Location Maps



CONCEPTUAL MITIGATION
PROPOSED LOCATION

LAGUNA DE SANTA ROSA OFF-SITE MITIGATION
FOR DESIGN STUDY ONLY

Brown Farm existing mitigation sample



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PHOTO 2: SECTION OF PROPOSED LAGUNA DE SANTA ROSA OFF-SITE MITIGATION.



CONCEPTUAL MITIGATION
SITE PHOTOS

LAGUNA DE SANTA ROSA OFF-SITE MITIGATION

FOR DESIGN STUDY ONLY



PHOTO 3: SECTION OF PROPOSED LAGUNA DE SANTA ROSA OFF-SITE MITIGATION.

PHOTO 4: SECTION OF PROPOSED LAGUNA DE SANTA ROSA OFF-SITE MITIGATION.



CONCEPTUAL MITIGATION
SITE PHOTOS

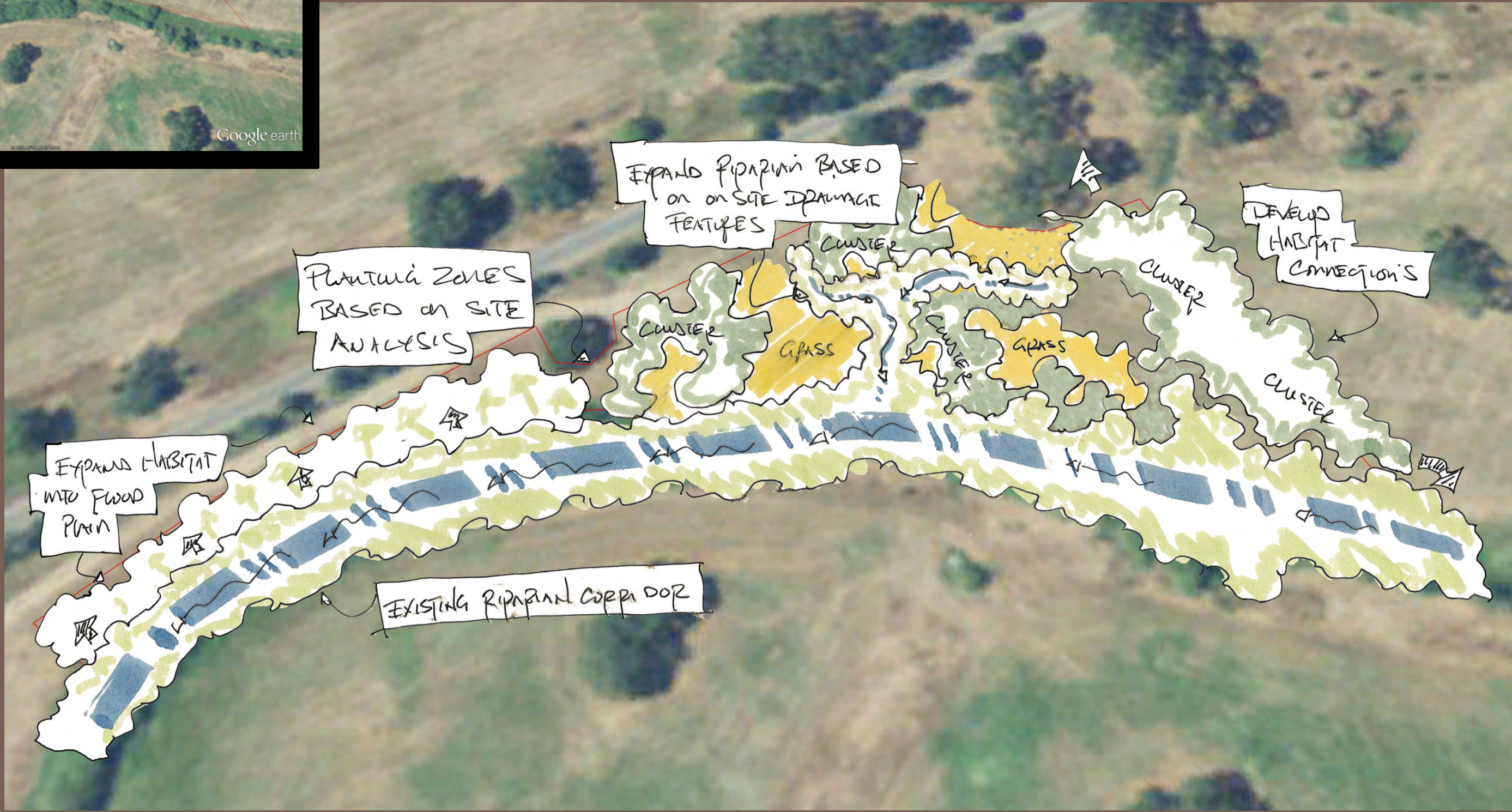
LAGUNA DE SANTA ROSA OFF-SITE MITIGATION

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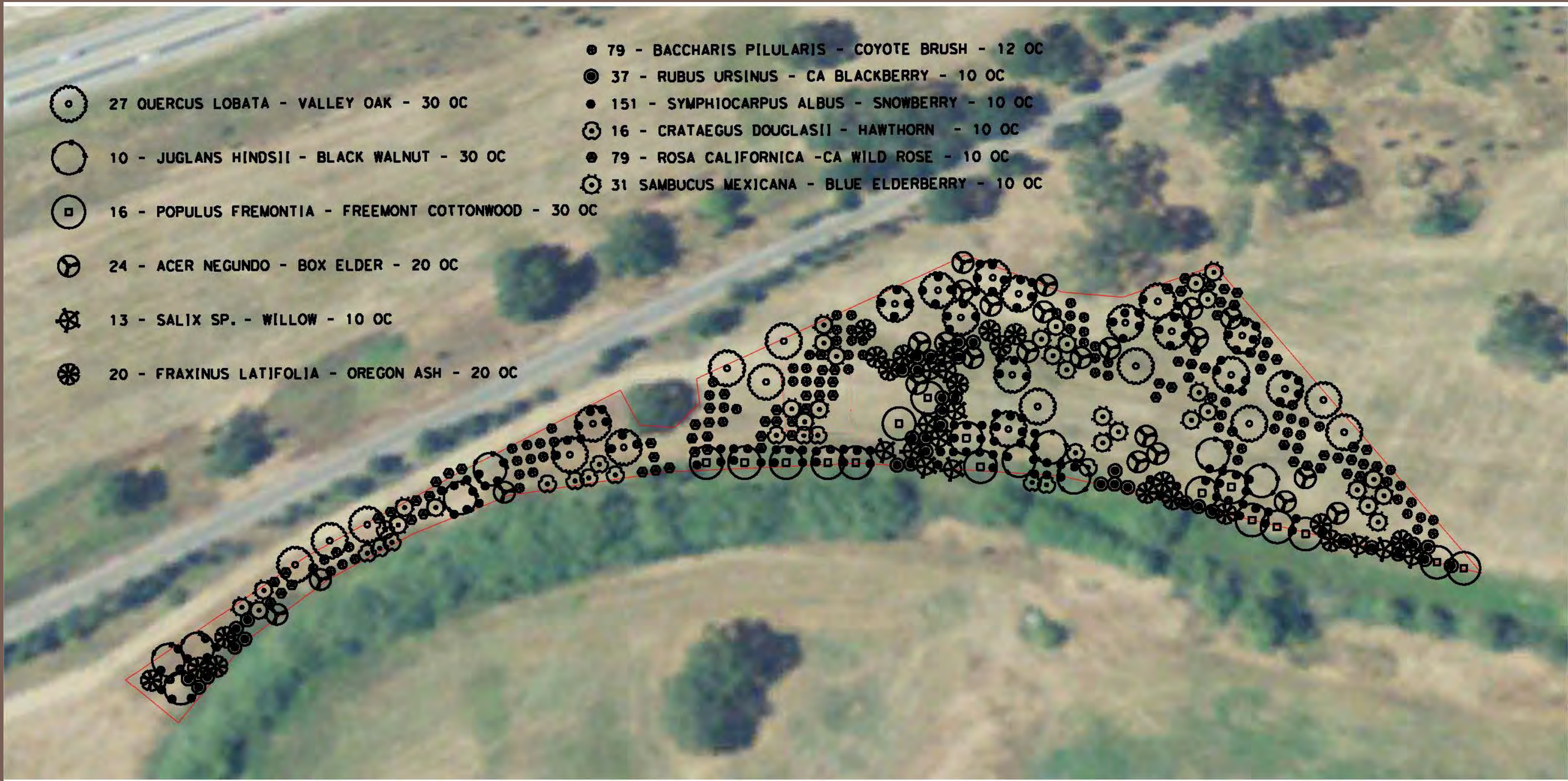


BELOW: CONCEPTUAL PLANTING STRATEGY. ON-SITE ANALYSIS WOULD DETERMINE ACTUAL LAYOUT OF PLANTS.

ABOVE: PROPOSED OFF-SITE MITIGATION FOOT PRINT.



BELOW: CONCEPTUAL PLANTING LAYOUT AND PLANT LIST.



CONCEPTUAL MITIGATION
SAMPLE PLANTING PLAN

LAGUNA DE SANTA ROSA OFF-SITE MITIGATION
FOR DESIGN STUDY ONLY