Appendix A

Notice of Preparation and Responses

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PUBLIC WORKS
Wade Horton, Director
County Government Center, Room 206 • San Luis Obispo CA 93408 • (805) 781-5252
Fax (805) 781-1229 email address: pwd@co.slo.ca.us

February 17, 2016

State Clearinghouse
PO Box 3044
Sacramento, CA 95812-3044

Subject: Notice of Preparation of a Supplemental Environmental Impact Report for the Mid-Higuera Bypass Project

Dear State Clearinghouse:

Enclosed are fifteen copies of the Notice of Preparation for the above-referenced project. The document is being submitted to the State Clearinghouse for distribution in accordance with Section 15082 of the State CEQA Guidelines. Recommendations for distribution of the Notice of Preparation are included on the second page of the submittal form. If you have any questions, or need more information from us, please contact me at (805) 781-5714.

Sincerely,

KEITH MILLER
Environmental Resource Specialist

Enclosures: Notice of Completion and Environmental Transmittal Form
Project Description
Preliminary Plans
Initial Study

File: CF 340.161.01

L:\AdminServ\2016\February\NOP SCH Cover letter.docx.KM.jm

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: Mid-Higuera Bypass Project

Lead Agency: San Luis Obispo Flood Control and Water Conservation Dist | Contact Person: Keith Miller

Mailing Address: County Government Center, Room 206 | Phone: (805) 781-5714

City: San Luis Obispo | Zip: 93408 | County: San Luis Obispo

Project Location: County: South Higuera Street | City/Nearest Community: San Luis Obispo

Cross Streets: Marsh Street and Madonna Road | Zip Code: 93401

Longitude/Latitude (degrees, minutes and seconds): 34 ° 16 ' 15.49" N / 120 ° 40 ' 18.69" W | Total Acres: 13

Assessor's Parcel No.: multiple 004-511-018, 003-711-025 | Section: 34 | Twp.: 30S | Range: 12E | Base:

Within 2 Miles: State Hwy #: 101 | Waterways: San Luis Obispo Creek

Airports: San Luis Obispo | Railways: UPRR | Schools: Mission Prep; Hawthorne

Document Type:

CEQA: ☒ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: Dist. authorizatn

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type
☒ Other: Flood control and riparian enhancement

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☐ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☐ Geologic/Seismic
☐ Minerals
☒ Noise
☐ Population/Housing Balance
☐ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☐ Solid Waste
☒ Toxic/Hazardous
☐ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☐ Water Supply/Groundwater
☒ Wetland/Riparian
☐ Growth Inducement
☐ Land Use
☐ Cumulative Effects
☐ Other:

Present Land Use/Zoning/General Plan Designation:

Open Space; Commercial Retail

Project Description: *(please use a separate page if necessary)*

The Mid-Higuera Bypass Project (project) would include flood control and habitat restoration activities along an approximately 0.56 mile long stretch of San Luis Obispo Creek. The project includes the construction of two bypass channels, channel terraces/benches, the replacement of the Bianchi Lane Bridge, and riparian habitat enhancement. Please refer to the attachments for more information.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

____	Air Resources Board	____	Office of Historic Preservation
____	Boating & Waterways, Department of	____	Office of Public School Construction
X	California Emergency Management Agency	____	Parks & Recreation, Department of
____	California Highway Patrol	____	Pesticide Regulation, Department of
S	Caltrans District #5	____	Public Utilities Commission
____	Caltrans Division of Aeronautics	S	Regional WQCB #Cent[illegible]
____	Caltrans Planning	____	Resources Agency
____	Central Valley Flood Protection Board	____	Resources Recycling and Recovery, Department of
____	Coachella Valley Mtns. Conservancy	____	S.F. Bay Conservation & Development Comm.
____	Coastal Commission	____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
____	Colorado River Board	____	San Joaquin River Conservancy
____	Conservation, Department of	____	Santa Monica Mtns. Conservancy
____	Corrections, Department of	____	State Lands Commission
____	Delta Protection Commission	____	SWRCB: Clean Water Grants
____	Education, Department of	X	SWRCB: Water Quality
____	Energy Commission	____	SWRCB: Water Rights
S	Fish & Game Region #4	____	Tahoe Regional Planning Agency
____	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
____	Forestry and Fire Protection, Department of	X	Water Resources, Department of
____	General Services, Department of		
____	Health Services, Department of	____	Other:
____	Housing & Community Development	____	Other:
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date February 22, 2016 Ending Date March 25, 2016

Lead Agency (Complete if applicable):

Consulting Firm: _____ Applicant: _____
Address: _____ Address: _____
City/State/Zip: _____ City/State/Zip: _____
Contact: _____ Phone: _____
Phone: _____

Signature of Lead Agency Representative: _____ **Date:** 2/16/16

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PUBLIC WORKS
Wade Horton, Director
County Government Center, Room 206 • San Luis Obispo CA 93408 • (805) 781-5252
Fax (805) 781-1229 email address: pwd@co.slo.ca.us

DATE: February 17, 2016

SUBJECT: Notice of Preparation - Supplemental Environmental Impact Report

TO: Responsible Agencies, Trustee Agencies, and Interested Parties

PROJECT TITLE: Mid-Higuera Bypass Project (455R277627; ED 15-151)

PROJECT APPLICANT: San Luis Obispo Flood Control and Water Conservation District

The San Luis Obispo Flood Control and Water Conservation District (District) will be the Lead Agency and will prepare a Supplemental Environmental Impact Report (SEIR) for the above-referenced project. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the SEIR prepared by our agency when considering your permit or other approval for the project.

Please provide us the following information at your earliest convenience, but not later than the 30-day comment period, which began with your agency's receipt of the Notice of Preparation (NOP).

1. NAME OF CONTACT PERSON. Please include address, e-mail and telephone number.
2. PERMIT(S) or APPROVAL(S) AUTHORITY. Please provide a summary description of these and send a copy of the relevant sections of legislation, regulatory guidance, etc.
3. ENVIRONMENTAL INFORMATION. What environmental information must be addressed in the Environmental Impact Report to enable your agency to use this documentation as a basis for your permit issuance or approval?
4. PERMIT STIPULATIONS/CONDITIONS. Please provide a list and description of standard stipulations (conditions) that your agency will apply to features of this project. Are there other conditions that have a high likelihood of application to a permit or approval for this project? If so, please list and describe.
5. REASONABLY FORESEEABLE PROJECTS, PROGRAMS or PLANS. Please name any future project, programs or plans that you think may have an overlapping influence with the project as proposed.
6. RELEVANT INFORMATION. Please provide references for any available, appropriate documentation you believe may be useful to the county in preparing the SEIR. Reference to and/or inclusion of such documents in an electronic format would be appreciated.

7. FURTHER COMMENTS. Please provide any further comments or information that will help the county to scope the document and determine the appropriate level of environmental assessment.

The project description, location, and the probable environmental effects are contained in the attached materials.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date, **but not later than March 25, 2016**.

Please send your response to Keith Miller at the address shown above. As requested above, we will need the name for a contact person in your agency.

Signature_____

KEITH MILLER
Project Manager
Telephone: (805) 781-5714
E-mail: klmiller@co.slo.ca.us

Reference: California Administrative Code, Title 14, Section 15082

Attachments:
Initial Study
Project Description
Preliminary Plans

File: CF 340.161.01

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Initial Study Summary – Environmental Checklist

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

(ver 5.8)Using Form

Project Title & No. County Public Works - **Mid-Higuera Bypass Project 455R277627 ED15-151**

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

☒ Aesthetics	☐ Geology and Soils	☐ Recreation
☐ Agricultural Resources	☒ Hazards/Hazardous Materials	☐ Transportation/Circulation
☒ Air Quality	☒ Noise	☐ Wastewater
☒ Biological Resources	☐ Population/Housing	☒ Water /Hydrology
☒ Cultural Resources	☐ Public Services/Utilities	☐ Land Use

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

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

Keith Miller — Signature — 2/9/16
Prepared by (Print) — Date

Steve McMasters — Signature — 2/10/16 — Environmental Coordinator (for)
Reviewed by (Print) — Date

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The County Planning Department uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Planning Department, 976 Osos Street, Rm. 200, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. PROJECT

DESCRIPTION: A proposal by the San Luis Obispo County Flood Control and Water Conservation District (District) for the Mid-Higuera Bypass Project (project) to implement flood control and habitat restoration activities along an approximately 0.56 mile long stretch of San Luis Obispo Creek. The project includes the construction of two bypass channels, channel terraces/benches, the replacement of the Bianchi Lane Bridge, and riparian habitat enhancement. The project is located between Highway 101, South Higuera Street, Marsh Street, and Madonna Road, within the City of San Luis Obispo. The project is a capital improvement project identified originally in the City's Waterway Management Plan (WMP) and evaluated in the WMP Environmental Impact Report/Statement (EIR/EIS). The project is proposed by and would be implemented by the San Luis Obispo County Flood Control and Water Conservation District (District).

ASSESSOR PARCEL NUMBER(S): multiple, including 004-511-018, 003-711-025, 002-482-017

Latitude: 34 degrees 16' 15.4914" N Longitude: 120degrees 40' 18.6918" W

SUPERVISORIAL DISTRICT # 3

B. EXISTING SETTING

PLAN AREA: N/A **SUB**: N/A **COMM: City of** San Luis Obispo

LAND USE CATEGORY: Conservation/Open Space (City)

COMB. DESIGNATION: Flood Hazard

PARCEL SIZE: Multiple/App. 12.8 acres total

TOPOGRAPHY: Nearly level , prominent swale/creek coursing through property

VEGETATION: Riparian, Grasses, Ruderal

EXISTING USES: Blue line creek undeveloped

SURROUNDING LAND USE CATEGORIES AND USES:

North: Commercial Retail (retail)	*East:* Commercial Retail (retail)
South: Public Facilities (Caltrans facility)	*West:* Conservation-Open Space (undeveloped)

C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, at least one issue was identified as having a potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.

COUNTY OF SAN LUIS OBISPO
INITIAL STUDY CHECKLIST

1. AESTHETICS *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Create an aesthetically incompatible site open to public view?	☒	☐	☐	☐
b) Introduce a use within a scenic view open to public view?	☒	☐	☐	☐
c) Change the visual character of an area?	☒	☐	☐	☐
d) Create glare or night lighting, which may affect surrounding areas?	☒	☐	☐	☐
e) Impact unique geological or physical features?	☐	☐	☐	☒
f) Other: _____	☐	☐	☐	☐

Mitigation/Action. The project corridor is located adjacent to and includes San Luis Obispo Creek. Riparian vegetation is visible from Highway 101 and South Higuera Street, which border the west and east sides of the project, respectively. Most elements of the project are in, or related to the San Luis Obispo Creek channel.

The project would remove a portion of the riparian vegetation in order to construct the bypass channels and install the new Bianchi Lane Bridge. It is unclear if the vegetation removal would increase the visibility of the urban development along South Higuera Street to motorists travelling on Highway 101. It is also unknown whether or not the grading required for the bypass channels would be visible from Highway 101 or not. The project does propose to replant native vegetation in order to maintain a consistent and diverse riparian canopy, but it may take multiple years before the new vegetation is established.

Due to the potentially significant impacts to public views, a viewshed analysis from public highways will be prepared by qualified persons and will include, but not be limited to, the following: details on the existing visual setting of the area; the short and long-term visibility of the project from public vantages; and recommend feasible mitigation measures, if necessary, to ensure that visual resources impacts are less than significant. If any additional vegetation screening is recommended, the species should be consistent with the City's WMP to the maximum extent feasible. The results of the visual resources assessment will be summarized in the EIR.

2. AGRICULTURAL RESOURCES

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Convert prime agricultural land, per NRCS soil classification, to non-agricultural use?	☐	☐	☐	☒
b) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?	☐	☐	☐	☒
c) Impair agricultural use of other property or result in conversion to other uses?	☐	☐	☐	☒
d) Conflict with existing zoning for agricultural use, or Williamson Act program?	☐	☐	☐	☒
e) Other: _____	☐	☐	☐	☐

Setting/Impact. The project is located in a non-agricultural area with no agricultural activities occurring on the property or immediate vicinity. The project corridor would not be conducive to future agricultural activities due to its size, location, and surrounding land uses. No significant impacts to agricultural resources are anticipated.

Mitigation/Conclusion. No mitigation measures are necessary.

3. AIR QUALITY

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?	☒	☐	☐	☐
b) Expose any sensitive receptor to substantial air pollutant concentrations?	☒	☐	☐	☐
c) Create or subject individuals to objectionable odors?	☐	☐	☒	☐
d) Be inconsistent with the District's Clean Air Plan?	☒	☐	☐	☐
e) Result in a cumulatively considerable net increase of any criteria pollutant either considered in non-attainment under applicable state or federal ambient air quality standards that are due to increased energy use or traffic generation, or intensified land use change?	☒	☐	☐	☐

3. AIR QUALITY

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
GREENHOUSE GASES				
f) ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***	☒	☐	☐	☐
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐
h) Other: _____	☐	☐	☐	☐

Setting/Impact. The Air Pollution Control District (APCD) has developed and updated their CEQA Air Quality Handbook (2012) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality levels, a Clean Air Plan has been adopted (prepared by APCD).

Greenhouse Gas (GHG) Emissions are said to result in an increase in the earth's average surface temperature. This is commonly referred to as global warming. The rise in global temperature is associated with long-term changes in precipitation, temperature, wind patterns, and other elements of the earth's climate system. This is also known as climate change. These changes are now thought to be broadly attributed to GHG emissions, particularly those emissions that result from the human production and use of fossil fuels.

Under CEQA, an individual project's GHG emissions will generally not result in direct significant impacts. This is because the climate change issue is global in nature. However, an individual project could be found to contribute to a potentially significant cumulative impact.

Asbestos/Naturally Occurring Asbestos. Naturally occurring asbestos (NOA) has been identified by the state Air Resources Board as a toxic air contaminant. Serpentine and ultramafic rocks are very common throughout California and may contain naturally occurring asbestos. Serpentine soils are known to exist in the project vicinity. During the hazardous materials assessment conducted in 2010 for the project, a soil sample from the South Street Bypass and one from the Bianchi Bypass area were analyzed for the presence of NOA. None was detected in either sample (Padre 2010). During field surveys conducted for the Habitat Assessment (County of SLO, 2010) no serpentine outcrops were observed within the project area.

The project will result in short-term construction-related air emissions, but due to the nature of the project, it will not generate "operational" emissions.

Mitigation/Action Required. Due to the project's potential direct, short-term impacts to air quality, additional analysis of air quality impacts will be accomplished by a qualified air quality specialist and in consultation with the APCD. The analysis shall be summarized in the EIR and will include a: discussion of the existing setting as well as federal and/or state nonattainment ambient air quality standard area for any criteria air pollutant; a summary of the thresholds and air quality constraints for the proposed development; analysis of the proposed project impacts; a discussion of adequate and feasible mitigation measures, as applicable, to address significant air quality impacts; summary of the approved state and federal legislation and regulations relating to GHG; and a GHG emission analysis conducted per the APCD CEQA handbook methodologies and input received from the APCD on the Notice of Preparation.

4. BIOLOGICAL RESOURCES

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Result in a loss of unique or special status species* or their habitats?	☐	☒	☐	☐
b) Reduce the extent, diversity or quality of native or other important vegetation?	☐	☒	☐	☐
c) Impact wetland or riparian habitat?	☐	☒	☐	☐
d) Interfere with the movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?	☐	☒	☐	☐
e) Conflict with any regional plans or policies to protect sensitive species, or regulations of the California Department of Fish & Wildlife or U.S. Fish & Wildlife Service?	☐	☒	☐	☐
f) Other: _____	☐	☐	☐	☐

* **Species – as defined in Section15380 of the CEQA Guidelines, which includes all plant and wildlife species that fall under the category of rare, threatened or endangered, as described in this section.**

Mitigation/Action Required. A Habitat Assessment was completed for the project corridor in 2010. The setting of the project corridor primarily consists of the riparian corridor of San Luis Obispo Creek, but also an adjacent terrace consisting primarily of ruderal and nonnative grassland habitat. Urban development exists at the top of the creek bank throughout the eastern edge of the corridor. Based on historic accounts and existing conditions, special status wildlife species including South-central California coast steelhead (*Oncorhynchus mykiss irideus*), California red-legged frog (*Rana draytonii*), as well as a number of special-status bat and avian species may be present within the corridor. Due to the predominance of nonnative species, historical development and disturbance along this section of the creek corridor, and the lack of serpentine-derived soils, no special-status botanical species were observed during the surveys, and none are expected to occur.

Construction of the project includes substantial earthwork as well as dewatering of the creek in a number of locations. These activities, in addition to the temporary loss of riparian vegetation during construction, have the potential to directly impact special-status species.

Based on the Habitat Assessment and the data available from previous projects within San Luis Obispo Creek, it is likely that standard avoidance and minimization measures could be implemented to avoid significant impacts to special-status wildlife species. These measures would include pre-construction nesting bird surveys, biological monitoring during construction activities, preparation of a dewatering plan that addresses the handling and relocation of steelhead if necessary, and implementation of a substantial revegetation plan, for example. The project would include the removal of nonnative vegetation and replacement with native vegetation in multiple locations. Due to the age of the existing Habitat Assessment, updated biological resources information will be obtained in spring 2016.

The Biological Resources section of the EIR will include updated biological resources information, as well as the data from the original assessment and other technical documents that have been prepared for the project. Specifically, the section will include: a description of the existing biological resources

setting; identification of other sensitive, unique or important plant and wildlife species and communities of the project area; identification of potential short-term and long-term impacts on rare, threatened, and/or endangered species and species habitat; identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential adverse biological resource impacts to less than significant levels.

5. CULTURAL RESOURCES *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Disturb archaeological resources?	☐	☒	☐	☐
b) Disturb historical resources?	☐	☒	☐	☐
c) Disturb paleontological resources?	☐	☐	☒	☐
d) Cause a substantial adverse change to a Tribal Cultural Resource?	☐	☒	☐	☐
e) Other: _____	☐	☐	☐	☐

Mitigation/Action Required. An archaeological survey report (ASR) was prepared for the project in 2010. The ASR included a records search and a pedestrian survey. The records search was conducted for all known archaeological sites, historic resources, and surveys within the project corridor (referred to as the Area of Potential Effect [APE] in the ASR). A search of the inventories for the State Historic Property Data Files, National Register of Historical Landmarks, California Points of Historic Interest, California OHP Archaeological Determinations of Eligibility, and the Caltrans State and Local Bridge Surveys yielded six property evaluations within the search radius. The records search revealed that much of the corridor has been previously been subject to various cultural resources surveys between 1978 and 2008. Several surveys have been conducted along South Higuera Street, and one focused on Highway 101's right of way through the length of the project area. The creek banks themselves have also been surveyed, twice. In all, 25 surveys have been conducted and five historic properties have been recorded within the search area. No prehistoric sites have been recorded in the project corridor.

No prehistoric archaeological sites were discovered in the project's APE. Furthermore, the project excavation areas are located within the creek banks that would have been active floodplain and therefore, unattractive for human settlement, until channelization by urban development. The potential for prehistoric buried resources is very low in this area. Due to the long history of commercial use in the area (including a narrow gauge railroad station) and historic residential uses, the potential for encountering buried historical deposits is high throughout the project area. Evaluation of other projects in the vicinity have yielded buried historical trash dumps along the creek. Geologic maps show that the predominant geologic formation within the project area is recently deposited alluvium (Quaternary Alluvium), which are generally less than 10,000 years old and therefore have a low sensitivity for paleontological resources.

Recommendations to avoid or reduce impacts to subsurface historical resources in the report include cultural resources monitoring during project construction. The ASR includes specific areas where monitoring should be the most intensive. This information will be reviewed in conjunction with any input received during the EIR noticing process and the results of AB 52 communications to be performed for the project. A formal Cultural Resources section will then be developed for the EIR.

6. GEOLOGY AND SOILS *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?	☐	☐	☒	☐
b) Be within a California Geological Survey "Alquist-Priolo" Earthquake Fault Zone", or other known fault zones*?	☐	☐	☐	☒
c) Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?	☐	☐	☒	☐
d) Include structures located on expansive soils?	☐	☐	☒	☐
e) Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?	☐	☐	☒	☐
f) Preclude the future extraction of valuable mineral resources?	☐	☐	☐	☒
g) Other: _____	☐	☐	☐	☐

* **Per Division of Mines and Geology Special Publication #42**

Setting. The following relates to the project's geologic aspects or conditions:

Topography: Nearly level with the San Luis Obispo Creek corridor running through the site.

Within County's Geologic Study Area?: No

Landslide Risk Potential: Low

Liquefaction Potential: Moderate

Nearby potentially active faults?: No Distance? Not applicable

Area known to contain serpentine or ultramafic rock or soils?: No

Shrink/Swell potential of soil: Moderate to high

Other notable geologic features? None

The project site is nearly level with the exception of the creek banks, which are steeply sloped in some places. The project area is highly constrained and in an urban area. There is no evidence in the City's General Plan of the project area containing valuable mineral resources.

Impact. The project is being designed to increase storm water capacity and would as a result potentially reduce the bank erosion potential in this stretch of the creek. As proposed, the project will result in the disturbance of approximately 8.4 acres of soils within and adjacent to San Luis Obispo Creek. In addition

to the grading of the bypass channels and terraces, the Bianchi Lane Bridge will be replaced. In some locations, the slopes of the existing steeply sloped creek banks would be reduced to 2.5:1 or flatter. Bypass channels would be sloped at approximately 2.5:1. Generally speaking, the flatter slopes will be more stable than more steeply sloped banks.

Mitigation/Conclusion. All project engineering designs and grading would need to comply with current engineering standards and the California Building Code. A geotechnical engineer will be responsible for the final design of the bypass channels and ensuring that they meet the appropriate standards. Prior to construction of the project, the District will be required to obtain a grading permit from the City's Community Development Department. The grading permit process will confirm that the proposed project is consistent with current design standards and is consistent with any recommendations in the project technical reports. In addition, the project is consistent with the WMP Drainage and Design Manual, as well as the Stream Maintenance and Management Program. There is no evidence that measures above what will already be required by ordinance, codes, or the WMP documents are needed.

Potential impacts related to erosion and sedimentation are discussed below and will be covered in the Hydrology and Water Quality section of the EIR.

7. HAZARDS & HAZARDOUS MATERIALS - ***Will the project:***	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on, or adjacent to, a site which is included on a list of hazardous material/waste sites compiled pursuant to Gov't Code 65962.5 ("Cortese List"), and result in an adverse public health condition?	☐	☐	☐	☒
e) Impair implementation or physically interfere with an adopted emergency response or evacuation plan?	☐	☐	☐	☒

7. HAZARDS & HAZARDOUS MATERIALS - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
f) If within the Airport Review designation, or near a private airstrip, result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Increase fire hazard risk or expose people or structures to high wildland fire hazard conditions?	☐	☐	☐	☒
h) Be within a 'very high' fire hazard severity zone?	☐	☐	☐	☒
i) Be within an area classified as a 'state responsibility' area as defined by CalFire?	☐	☐	☐	☒
j) Other: _____	☐	☐	☐	☐

Mitigation/Action. The project is not within a 'high' or 'very high' severity risk area for fire. The project is not within the Airport Review area. The subject project is within the 100-year floodplain. The project is located in an area of known hazardous material contamination. The project is a flood control project in an urban area and therefore would not subject people or structures to high wildland fire conditions.

Due to the historic and present commercial uses within the project area (including former and existing service stations) a Phase I and Preliminary Phase II Environmental Site Assessment (ESA) was prepared in 2010. The Phase I assessment identified a number of businesses/land uses that may have used hazardous materials that were located in and adjacent to the project area, including service stations, auto repair facilities, a stone-cutting business, a construction yard, an electrical substation, and an "oil shack". The Phase I assessment recommended specific subsurface (Phase II) testing that could be performed to evaluate soil conditions where the suspected uses occurred.

The Phase II ESA included field surveys and laboratory analysis of approximately 20 soil samples. The laboratory analysis concluded that in some locations concentrations of hydrocarbons exceed regulatory limits. The Phase II ESA included recommendations for additional soil assessment activities at the Flow Return area, the Madonna Bench area, and the Bianchi Lane Bypass area. In addition it was recommended that a preliminary groundwater assessment be performed if dewatering activities are expected to be required during the construction of the Flow Return area.

Based on the information in the Phase I and Preliminary Phase II ESA, there is a potential for construction activities to disturb and expose contaminated soils. In order to better characterize the potential impacts that would result from the project and to develop appropriate mitigation measures, a follow-up Phase II ESA will be prepared. The results of the follow-up assessment as well as other hazardous materials considerations will be summarized in the Hazards and Hazardous Materials section of the EIR.

8. NOISE

Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Expose people to noise levels that exceed the County Noise Element thresholds?	☒	☐	☐	☐
b) Generate permanent increases in the ambient noise levels in the project vicinity?	☐	☐	☐	☒
c) Cause a temporary or periodic increase in ambient noise in the project vicinity?	☒	☐	☐	☐
d) Expose people to severe noise or vibration?	☒	☐	☐	☐
e) If located within the Airport Review designation or adjacent to a private airstrip, expose people residing or working in the project area to severe noise levels?	☐	☐	☐	☒
f) Other: _____	☐	☐	☐	☐

Mitigation/Action. The project corridor is located between substantial transportation noise sources including Highway 101, South Higuera Street, and Madonna Road. The land uses adjacent to the corridor are primarily commercial or open space, although scattered residences do exist along the South Higuera Street corridor, particularly south of South Street. A topographic high point between Highway 101 and Bianchi Lane may act as a sound barrier for a small portion of the project corridor north and south of Bianchi Lane.

The project would include earthwork, including the removal of as much as 43,000 cubic yards of sand and gravel in order to construct the terraces and the bypass channels. The use of heavy machinery to construct the project would expose sensitive receptors (residences) to short-term construction-related noise. The changes in topography resulting from the proposed grading could affect local noise levels as well by removing natural topographic sound barriers.

Due to these potential impacts, a noise assessment (assessment) will be prepared for the project by a qualified acoustical consultant. The assessment will describe the existing setting, regulatory setting, potential construction and long-term noise impacts, and will recommend mitigation measures to reduce impacts to a less than significant level, if necessary. The assessment will be summarized in the Noise section of the EIR.

9. POPULATION/HOUSING

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Induce substantial growth in an area either directly (e.g., construct new homes or businesses) or indirectly (e.g., extension of major infrastructure)?	☐	☐	☒	☐
b) Displace existing housing or people, requiring construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Create the need for substantial new housing in the area?	☐	☐	☒	☐
d) Other: _____	☐	☐	☐	☐

Setting/Impact. The project would reduce flooding potential within the Mid-Higuera corridor, although the area will still be within the 100-year floodplain. There are scattered residences adjacent to the project corridor. The project will not displace any of the residences or people during or after construction. The project will not result in the need for new housing, and will not displace existing housing.

Mitigation/Conclusion. No significant population and housing impacts were identified. No mitigation measures are necessary.

10. PUBLIC SERVICES/UTILITIES

Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Fire protection?	☐	☐	☒	☐
b) Police protection (e.g., Sheriff, CHP)?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Roads?	☐	☐	☒	☐
e) Solid Wastes?	☐	☐	☒	☐
f) Other public facilities?	☐	☐	☒	☐
g) Other: _____	☐	☐	☐	☐

Setting. The project area is served by the following public services/facilities:

Police: City of San Luis Obispo Location: City of San Luis Obispo

Fire: City of San Luis Obispo Hazard Severity: Moderate Response Time: 5-10 minutes
Location: (Approximately 2.09 miles to the north)

School District: San Luis Coastal Unified School District.

Setting/Impact. The project is located within the urbanized portion of the City of San Luis Obispo. Because the project is a flood-control facility located primarily within open space parcels, it would not affect public services or utilities. No significant project-specific impacts to utilities or public services were identified.

Mitigation/Conclusion. No significant impacts were identified and no mitigation measures are required.

11. RECREATION *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase the use or demand for parks or other recreation opportunities?	☐	☐	☒	☐
b) Affect the access to trails, parks or other recreation opportunities?	☐	☐	☒	☐
c) Other _____	☐	☐	☐	☐

Setting. The project corridor is located between South Higuera Street and Highway 101. The City of San Luis Obispo's 2013 Bicycle Transportation Plan shows a portion of the Bob Jones Trail between Marsh Street and Madonna Road located within the same project corridor. The project plans show a "future bike lane" alignment throughout the project corridor. At the Bianchi Bypass Channel, where the topography is particularly constraining, the project grading plans specifically include an approximately 14-foot wide bench that could accommodate an 800-foot-long section of the trail in the future.

Impact. Although the project would be located in the same narrow corridor as a future segment of the Bob Jones Trail, it would not compromise the ability of the City to build the trail in the future. On the contrary, the project may result in a potentially beneficial impact because it includes a "pre-graded" alignment for the trail within an area already proposed to be disturbed by construction of the project.

Mitigation/Conclusion. No significant recreation impacts are anticipated, and no mitigation measures are necessary. Subsequent environmental review will likely be required for the trail once the design is completed and funding sources identified.

12. TRANSPORTATION/CIRCULATION *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase vehicle trips to local or areawide circulation system?	☐	☐	☒	☐
b) Reduce existing "Level of Service" on public roadway(s)?	☐	☐	☒	☐
c) Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?	☐	☐	☒	☐
d) Provide for adequate emergency access?	☐	☐	☒	☐

12. TRANSPORTATION/CIRCULATION *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
e) Conflict with an established measure of effectiveness for the performance of the circulation system considering all modes of transportation (e.g. LOS, mass transit, etc.)?	☐	☐	☒	☐
f) Conflict with an applicable congestion management program?	☐	☐	☒	☐
g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐
h) Result in a change in air traffic patterns that may result in substantial safety risks?	☐	☐	☐	☒
i) Other: _____	☐	☐	☐	☐

Setting. During construction the project site will be accessed from Bianchi Lane and South Street via South Higuera Street. There are existing traffic signals at both intersections. From South Higuera Street there is access to Highway 101 from both Marsh Street to the north and Madonna Road to the south. According to the City of San Luis Obispo Land Use and Circulation Element LOS Graphics, these two intersections are operating at Level of Service C and B, respectively, under the City's thresholds of significance. South Higuera Street, Marsh Street, and Madonna Road are all designated arterial roadways.

Impact. It has been estimated that there will be up to 5,200 truck round trips, assuming all of the excavated material is exported offsite. If the majority of the truck trips occur during a 6-month "dry season," the project would result in up to approximately 45 truck round trips per day. These trips would be made over a single 6-month period.

Mitigation/Conclusion. In accordance with the City of San Luis Obispo policy on street closures and traffic diversion for arterial roadways, the construction contractor would potentially need to prepare a traffic control plan per the most current version of the Manual on Uniform Traffic Control Devices and the California Supplement, to be approved by the City prior to construction. No significant traffic impacts have been identified, and no mitigation measures above what are already required by the City are necessary.

13. WASTEWATER

Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?	☐	☐	☒	☒
b) Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?	☐	☐	☒	☐
c) Adversely affect community wastewater service provider?	☐	☐	☒	☒
d) Other: _____	☐	☐	☐	☐

Setting. The project would increase storm water capacity within the project area which would reduce flooding of the adjacent, highly urbanized landscape. The project would not discharge any wastewater, affect a community wastewater provider, or result in increased nitrogen levels/daylighting of groundwater.

Impacts/Mitigation. The project would likely have a beneficial impact on surface water due to the reduced flooding potential. No significant impacts have been identified, and no mitigation measures are necessary. Surface water impacts that may result from erosion and sedimentation during construction are considered in the Water / Hydrology Section.

14. WATER & HYDROLOGY

Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
QUALITY				
a) Violate any water quality standards?	☒	☐	☐	☐
b) Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, sediment, temperature, dissolved oxygen, etc.)?	☒	☐	☐	☐
c) Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?	☐	☐	☒	☐
d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff?	☐	☐	☒	☐
e) Change rates of soil absorption, or amount or direction of surface runoff?	☒	☐	☐	☐
f) Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?	☒	☐	☐	☐

14. WATER & HYDROLOGY

Will the project:	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
g) Involve activities within the 100-year flood zone?	☒	☐	☐	☐
QUANTITY				
h) Change the quantity or movement of available surface or ground water?	☒	☐	☒	☐
i) Adversely affect community water service provider?	☐	☐	☒	☐
j) Expose people to a risk of loss, injury or death involving flooding (e.g., dam failure, etc.), or inundation by seiche, tsunami or mudflow?	☐	☐	☒	☐
k) Other: _____	☐	☐	☐	☐

Mitigation/Action. The project will only require water for dust control and possibly soil compaction during construction; therefore, the discussion that follows is related to hydrology and flooding issues.

The hydrology of San Luis Obispo Creek has been extensively studied in recent decades, most significantly during preparation of the WMP and related documents. The Mid-Higuera reach ("Reach 10" in the WMP) has been the focus of a number of studies because it is known that the creek provides less than 10-year flood protection in this area. In other words, every year there is a 10% chance that the creek flow will exceed the banks of the creek. When it does flood, the creek floodwaters affect South Higuera Street. There are a number of reasons that flooding occurs so frequently in this area, including but not limited to: the limited clearance under the Bianchi Lane Bridge, the narrow width of the channel in this area, and perhaps most significantly the lack of capacity at and upstream of the Marsh Street Bridge. A complete characterization of the Reach 10 hydrologic, drainage, and erosion conditions is included in the WMP.

In order to refine the proposed project and evaluate how effective it may be, additional hydrologic modelling (HEC-RAS) was completed in October 2014 (Wallace 2014). The modelling indicates that water surface elevations in the creek will be lowered by 0.5 to 1 foot for the 25-year storm, which corresponds with up to a 66% increase of flow within the creek channels compared to existing conditions. The highest increase in capacity would occur at the Bianchi Bridge.

The modelling also indicates that the potential for erosion is greater due to the project. A number of erosion control measures are proposed, including hydroseeding disturbed slopes, and installing vegetated rock slope protection. There are additional measures included in the WMP Drainage Design Manual. In addition, projects involving more than one acre of disturbance, such as this one, are subject to the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which focuses on controlling storm water runoff. The Regional Water Quality Control Board is the local extension who monitors this program.

Based on the preliminary review of available project references, the project would have potentially beneficial impacts to local flooding issues. In addition, the WMP and related documents provide enough BMPs to reduce potential water and hydrology impacts to a less than significant level. Nevertheless, given the considerable volume of information available, the severity of the existing flooding issues, and the technical nature of the information, the EIR will include a formal Water and Hydrology section. This

section will describe the existing setting, regulatory setting, potential short and long-term impacts, and will recommend mitigation measures, if required beyond those described in the WMP.

15. LAND USE *Will the project:*	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
a) Be potentially inconsistent with land use, policy/regulation (e.g., general plan [County Land Use Element and Ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?	☐	☐	☒	☐
b) Be potentially inconsistent with any habitat or community conservation plan?	☐	☐	☒	☐
c) Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?	☐	☒	☐	☐
d) Be potentially incompatible with surrounding land uses?	☐	☐	☒	☐
e) Other: _____	☐	☐	☐	☐

Setting/Impact. Surrounding uses are identified on Page 2 of the Initial Study. The project was identified in the WMP as a critical Capital Improvement Program, is consistent with the Mid-Higuera Special Floodplain Zone (#1), and the Mid-Higuera Enhancement Plan.

The project is not within or adjacent to a Habitat Conservation Plan area. The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study. San Luis Obispo Creek is considered critical habitat for the California red-legged frog by the United States Fish and Wildlife Service, and the project will be consistent with the City Storm Water Management Program as well as the RWQCB plans and policies for storm water management.

Mitigation/Conclusion. Potential inconsistencies with the CRLF critical habitat designation will be considered in the Biological Resources section of the SEIR. Any potential inconsistencies with RWQCB storm water or basin plans will be described in the Water and Hydrology section of the SEIR. No other potential inconsistencies were identified, and therefore no additional measures were determined necessary.

16. MANDATORY FINDINGS OF SIGNIFICANCE *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or pre-history?	☒	☐	☐	☐

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) ☒ ☐ ☐ ☐

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ☒ ☐ ☐ ☐

Mitigation/Action. The SEIR will address issues related to biological resources, potential cumulative impacts, and substantial adverse effects.

For further information on CEQA or the County's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental Information", or the California Environmental Resources Evaluation System at: http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines for information about the California Environmental Quality Act.

Exhibit A - Initial Study References and Agency Contacts

Because it has been determined that an EIR will be prepared, agency contacts will be made through the Notice of Preparation process.

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

☒ Project File for the Subject Application

County documents

☐ Coastal Plan Policies
☐ Framework for Planning (Coastal/Inland)
☒ General Plan (Inland/Coastal), includes all maps/elements; more pertinent elements:
  - ☐ Agriculture Element
  - ☐ Conservation & Open Space Element
  - ☐ Economic Element
  - ☐ Housing Element
  - ☒ Noise Element
  - ☐ Parks & Recreation Element/Project List
  - ☐ Safety Element

☒ Land Use Ordinance (Inland/Coastal)
☐ Building and Construction Ordinance
☐ Public Facilities Fee Ordinance
☐ Real Property Division Ordinance
☐ Affordable Housing Fund
☐ Airport Land Use Plan
☐ Energy Wise Plan
☐ South County Area Plan/South County sub area and Update EIR
☐ Design Plan
☐ Specific Plan
☒ Annual Resource Summary Report
☐ Circulation Study

Other documents

☒ Clean Air Plan/APCD Handbook
☒ Regional Transportation Plan
☒ Uniform Fire Code
☐ Water Quality Control Plan (Central Coast Basin – Region 3)
☒ Archaeological Resources Map
☒ Area of Critical Concerns Map
☒ Special Biological Importance Map
☒ CA Natural Species Diversity Database
☒ Fire Hazard Severity Map
☒ Flood Hazard Maps
☒ Natural Resources Conservation Service Soil Survey for SLO County
☒ GIS mapping layers (e.g., habitat, streams, contours, etc.)
☐ Other

In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

City of San Luis Obispo, *General Plan Land Use and Circulation Element Update Program Environmental Impact Report*. September 2014.

City of San Luis Obispo, *Mid-Higuera Street Enhancement Plan*. March 2001.

City of San Luis Obispo, *San Luis Obispo Creek Waterway Management Plan Programmatic Environmental Impact Report / Environmental Impact Statement*. October 2003.

City of San Luis Obispo, *San Luis Obispo Creek Waterway Management Plan - Volumes I, II, and III*. March 2003.

County of San Luis Obispo, *Archaeological Survey Report Mid-Higuera Bypass Project Flood Control District Zone 9 San Luis Obispo, San Luis Obispo County*. January 2011.

County of San Luis Obispo, *Habitat Assessment for the Mid-Higuera Bypass Project; 455R277627*. October 2010.

Padre Associates, *Phase I Environmental Site Assessment and Preliminary Phase II Subsurface Assessment Activities for Properties Associated with Proposed Mid-Higuera Bypass Project*. September 2010.

Padre Associates, *Tree Survey and Identification of Ordinary High Water Mark within San Luis Obispo Creek.* February 2012.

Padre Associates, *Tree Survey and Identification of Ordinary High Water Mark within San Luis Obispo Creek.* November 2013.

Questa Engineering Corporation, *Mid-Higuera Flood Control Project Hydrology & Hydraulic Analysis.* July 2009.

Wallace Group, *Mid-Higuera Bypass Site Plan, Grading Plan, Vegetation Enhancement Plan.* November 2014.

Wallace Group, *Project Report Preliminary Design Draft for Review Mid-Higuera Bypass San Luis Obispo.* October 2014.

1 PROJECT DESCRIPTION

1.1 Project Summary

The Mid-Higuera Bypass Project (project) is proposed to increase the flood control capacity of San Luis Obispo Creek (creek) between Marsh Street and Madonna Road due to the following concerns:

- there is currently less than 25-year storm capacity in this stretch of the creek;
- significant bank erosion exists in some locations;
- there is localized sediment accumulation, particularly at the Marsh Street Bridge;
- a poor pool-to-riffle ratio exists;
- substantial invasive species and exotic plants are present; and
- there is a lack of continuity and/or diversity in native riparian vegetation

The proposed project includes five components developed to directly address these issues, including:

1. excavation of two new channels (South Street Bypass and the Bianchi Bypass) that bypass the existing creek channel and be active during large storm events;
2. construction of channel terraces/benches and a flow return located adjacent to but above the OHWM to increase capacity;
3. sediment removal at the Marsh Street Bridge;
4. replacement of the Bianchi Lane Bridge with a taller, wider bridge; and
5. riparian habitat enhancement, including the removal of invasive species, promotion of a canopy of native species and willows overhanging pools, as well as the installation of strategically located habitat features such as pool forming root wads, rock deflectors, and vegetated rock slope protection.

The project was identified in both the City of San Luis Obispo's (City) Waterway Management Plan (WMP) and the associated Environmental Impact Report/Environmental Impact Statement (EIR/EIS); however, at the time the EIR/EIS was prepared (2003) the project could not be evaluated in the detail required to satisfy the California Environmental Quality Act requirements (CEQA). A Supplemental EIR (SEIR) is being prepared to provide the information necessary to make the previous EIR adequate for the currently proposed project.

1.2 Project Location

The project is located within and adjacent to the creek between the Marsh Street Bridge (upstream) and Madonna Road Bridge (downstream). It is bordered on the west by Highway 101 and on the east by South Higuera Street. It is located completely within the City of San Luis Obispo (refer to the Preliminary Plans).

1.3 Project Background

The creek has flooded on multiple occasions in the last 40 years between Marsh Street and Madonna Road. The water level in the creek, immediately north of the Marsh Street Bridge, rises above the top of the creek bank during periods of heavy rain. The creek water subsequently flows into the adjacent City Streets, damaging public and private property.

The City, in conjunction with the County of San Luis Obispo's Zone 9 Flood Control and Water Conservation District (District), undertook and adopted the WMP after the 1995 flooding of

South Higuera and surrounding streets. Several flood control projects were incorporated in the WMP, including the original Mid-Higuera Bypass project.

In 2008, the Zone 9 Committee reduced the original project scope to include work that would only occur on City of San Luis Obispo property because of significant property acquisition costs. Questa Engineering subsequently confirmed that the reduced scope would still reduce local flooding. Following the release of the Questa Engineering study results, additional funding for preliminary environmental studies was approved by the San Luis Obispo County Board of Supervisors. The preliminary environmental studies showed no unusual site conditions that would be a barrier to project completion.

At the same time Zone 9 began pursuing a small property swap with a property owner adjacent to the City's property near the Bianchi Lane Bridge. The property swap is required in order to provide additional approach space for the project's first bypass element to be constructed. This element consists of the removal and re-installation of the Bianchi Lane Bridge. Additional studies were conducted between 2011 and the present, including preliminary design and an alternatives analysis. Following completion of the alternatives analysis, the Zone 9 Advisory Committee selected and identified the preferred project.

1.4 Project Objective

The primary objective of the project is to increase the flood-carrying capacity (up to a 25-year storm in some locations) of San Luis Obispo Creek from Marsh Street to Madonna Road, while enhancing and protecting water quality as well as special-status species habitat within the project area. Secondarily, the project will provide preliminary grading for a conceptual bike path alignment which could be constructed in the future along a portion of the project.

1.5 Project Components

Each of the five project components are described in more detail below.

1.5.1 Bypass Channels

The project would include the construction of two bypass channels, the Bianchi Bypass and the South Street Bypass. The bypass channels are proposed between the creek and Highway 101. They have been designed to be active during larger storm events (i.e. they are designed to be "above" the Ordinary High Water Mark [OHWM] of the creek), and to flow full during 25-year storm events. Vegetated rock slope protection as well as root wads/flow deflectors would be installed at both the upstream and downstream transition areas between the bypass channels and the creek.

The South Street Bypass would be approximately 600 feet long, and 10 to 12 feet deep. The channel bottom would be approximately 20 feet wide and the maximum channel slopes would be 2.5 horizontal to 1 vertical (2.5:1). The Bianchi Bypass is approximately 800 feet long and 6 to 8 feet deep. The channel bottom would be approximately 20 feet wide and the maximum channel slopes would be 2:1. In addition, an approximately 14 foot wide bench would be constructed at the western edge of the Bianchi Bypass to accommodate a future bike route. No other bicycle related improvements are proposed and the alignment is only conceptual at this time.

1.5.2 Benches and Related Grading

In addition to the bypass channels, the capacity and functionality of the creek channel would be expanded through the construction of four benches, by laying back slopes at the “pinch point”, and through construction of a “flow return”. Similar to the bypass channels, the four benches proposed would be excavated above the creek OHWM and would reach approximately 20-30 feet wide. The maximum slopes above the benches would be excavated no steeper than 2.5:1.

Pinch Point

The pinch point is a narrow approximately 120 foot long section of the channel at approximately 306 South Higuera Street, where the banks are nearly vertical and bordered on both sides by structures. The channel would be graded in this area so that the slopes were no steeper than 2.5:1 and then stabilized with willow cuttings, or potentially a structural retaining wall. Grading may require removal or modification of one or both structures at this location. Final design of this component is still under development and subject to the approval of the private landowners.

Flow Return

Historically, the creek has backed up on the upstream side of the Marsh Street Bridge causing flow to spill out of the creek and down South Higuera Street. Grading of a flow return at the Mathews Open Space parcel just downstream of the Marsh Street Bridge at 320 South Higuera Street, is proposed to allow escaped creek flows to be redirected from South Higuera Street back to the creek channel. The proposed grading will create two broad swales designed to convey flood flow across the property to the creek. The final design is recommended to include a sidewalk underdrain, shorter curb height, or a modified driveway design to capture flow from the gutter in Higuera Street.

1.5.3 Marsh Street Sediment Removal

Significant sediment has accumulated on the upstream side of the Marsh Street Bridge and within the three bridge barrels. Further, the upstream sediment has formed an island that is blocking the largest center barrel. To address this issue, sediment will be removed upstream of the bridge, within the bridge barrels, and downstream of the bridge. The sediment would be removed to 1-foot above the creek water surface elevation at time of construction. This strategy will preserve the existing low flow channel through the bridge. In addition, the western bank will be sloped back to a 2.5:1 slope.

1.5.4 Bianchi Lane Bridge Replacement

The existing Bianchi Lane Bridge is an old bridge that was relocated to its current position many years ago. It is relatively low and narrow, and as a result can only accommodate flows from a 6-year storm event. The proposed new bridge will be a two-span bridge with a higher deck elevation and will incorporate the start of the first bypass channel. The new bridge will provide capacity for an approximately 23-year storm event. The new bridge installation will include grading to accommodate the new road approaches.

1.5.5 Riparian Enhancement

Riparian enhancements have been incorporated for each of the components described above. Vegetated rock slope protection would be installed at the confluence of the creek channel and the bypass channels. At these locations, root wads would also be installed to provide pools and habitat complexity to the creek. At the Bianchi Bypass downstream transition area, rock flow deflectors will be installed to create pools and hydrologic complexity.

The project components have been designed to avoid and/or minimize impacts to the existing creek channel to the extent feasible. Nevertheless, the project does include substantial grading and tree removal. It is estimated that approximately 120 trees will be removed during construction. These include native and nonnative species. Native trees removed will be replaced with native species and planted in accordance with the City's Drainage Design Manual, which includes planting smaller crown trees (i.e. willow, buckeye, elderberry) closer to the channel and large crown trees (oak, cottonwood, bay) on the upper banks, which will provide a shaded, open channel while allowing for storm water capacity in the channel over the long-term. In addition, invasive species encountered during construction will be removed. These species include castor bean, cape ivy, giant reed (arundo), and Himalayan blackberry, for example. A Habitat Mitigation and Monitoring Plan (HMMP) will be prepared as part of the subsequent permitting process. The HMMP will include specific performance criteria and guide implementation of mitigation during and after project construction.

1.6 Areas of Disturbance

Preliminary estimates of the areas of disturbance (temporary and permanent impacts combined) associated with each project component are included in Table 1.

Table 1. Areas of Disturbance

Component		Disturbance (acres)	Cut/Fill (yds^3)
Bypass Channels	South Bypass	2.20	11,500 / 500
	Bianchi Bypass	2.67	17,000 / 500
Benches/Grading	4 Benches	1.74	3,900 / 150
	Pinch Point	0.44	2,300 / 1,200
	Flow Return	0.50	940 / 50
Marsh Street Sediment Removal		0.45	2,100 / 0
Bianchi Lane Bridge		0.37	3,700 / 0
Total		8.37	43,840

1.7 Construction Techniques

1.7.1 Access

Construction access will be from Bianchi Lane, 306 and 320 South Higuera Street, and South Street. In order to move equipment to the west side of the creek it may be necessary to construct one or more temporary crossing within the dewatered channel. Temporary crossings are anticipated to be at grade across the creek, with a gravel driving surface. A construction staging area would be located on the western side of the Bianchi Lane Bridge adjacent to the Madonna Construction site. Construction haul routes would include South Higuera Street, with trucks using either the Marsh Street or Madonna Road Highway 101 ramps. Construction traffic would temporarily impact South Higuera Street, Marsh Street, Bianchi Lane, South Street, and Brook Street during the heaviest construction periods.

1.7.2 Equipment

Heavy equipment including excavators, dozers, backhoes, dump trucks, and cranes would be required to construct the project. In addition various flatbed trucks, pick-up trucks, generators, pumps, and smaller scale equipment would be used during construction.

1.7.3 Soil Export

Approximately 41,500 cubic yards of material may need to be exported. It may be possible to re-use a portion of that material onsite in areas between the creek channel and the bypass channels to provide a vegetated or earthen screen between Highway 101 and development along South Higuera Street. If exporting soil is required, the soil will be hauled to a location that can legally accept the material.

1.7.4 Dewatering

San Luis Obispo Creek is a perennial creek and therefore it is anticipated that substantial dewatering will be necessary to construct each component. As shown in the Preliminary Plans, dewatering would be conducted in three areas. The final dewatering plan will be prepared subsequently during the permitting process.

1.8 Schedule and Permitting

As currently proposed, all components will be constructed as a single project in a 12 month period. Restoration monitoring would continue for approximately 3-5 years after construction, depending upon revegetation success and permit requirements. The project will require permits from, local, state and federal resource agencies. A list of permits that may be required is included in Table 2.

Table 2. Anticipated Permits

Agency	Permit Required
City of San Luis Obispo	Grading Permit
Central Coast Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification
	Waste Discharge Requirement (dewatering)
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement
California Department of Transportation (Caltrans)	Encroachment Permit
Air Pollution Control District	Authority to Construct
	NESHAP Permit
US Army Corps of Engineers (ACOE)	Section 404 Clean Water Act Permit

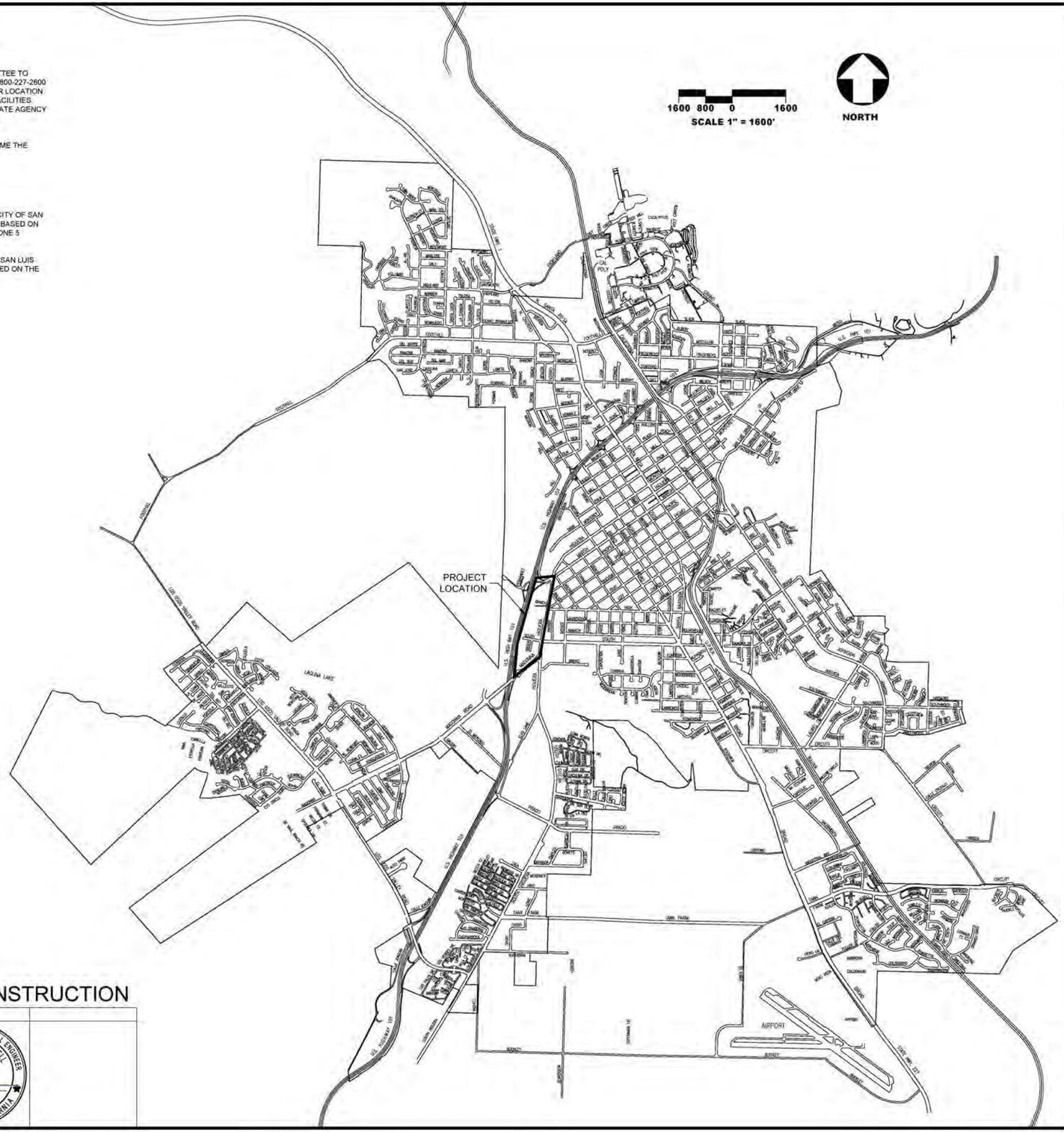
GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR PERMITTEE TO CONTACT "UNDERGROUND SERVICE ALERT U.S.A." TOLL FREE AT 1-800-227-2600 FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION, FOR LOCATION OF POWER, TELEPHONE, OIL AND NATURAL GAS UNDERGROUND FACILITIES. CONTRACTOR OR PERMITEE SHALL ALSO CONTACT THE APPROPRIATE AGENCY FOR THE LOCATION OF CABLE T.V., WATER, SEWER, DRAINAGE OR UNDERGROUND FACILITIES.
2. THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE AT THE TIME THE CONTRACT IS AWARDED.

DATUM

HORIZONTAL CONTROL FOR POINTS 8066 & 8207 AS PUBLISHED IN THE CITY OF SAN LUIS OBISPO 2007 HORIZONTAL CONTROL NETWORK. CITY NETWORK IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83) EPOCH DATE 1991.35, ZONE 5 CALIFORNIA.

VERTICAL CONTROL BENCHMARK NO. 15 AS PUBLISHED IN THE CITY OF SAN LUIS OBISPO 2007 BENCHMARK SYSTEM. CITY'S BENCHMARK SYSTEM IS BASED ON THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88).



SHEET INDEX

SHEET NUMBER	DESCRIPTION
G1	TITLE SHEET
G2	OVERALL SITE PLAN
C1	GRADING PLAN STA 10+00 TO 20+00
C2	GRADING PLAN STA 20+00 TO 30+00
C3	GRADING PLAN STA 30+00 TO 36+00
C4	GRADING PLAN STA 36+00 TO 42+00
C5	GRADING PLAN STA 42+00 TO 46+00
C6	PROPOSED BIANCHI BRIDGE
C7	BYPASS CHANNEL TRANSITION DETAILS
C8	CREEK DIVERSION DETAILS
V1	VEG ENHANCEMENT STA 10+00 TO 20+00
V2	VEG ENHANCEMENT STA 20+00 TO 30+00
V3	VEG ENHANCEMENT STA 30+00 TO 36+00
V4	VEG ENHANCEMENT STA 36+00 TO 42+00
V5	VEG ENHANCEMENT STA 42+00 TO 46+00

APPLICABLE CITY OF SAN LUIS OBISPO STANDARDS

REFERENCE DOCUMENTS
CITY STANDARD DRAWINGS - FEBRUARY 2014 EDITION
CITY STANDARD SPECIFICATIONS - FEBRUARY 2014 EDITION
CALTRANS STANDARD SPECIFICATIONS - 2010 EDITION
SLO CREEK WATERWAY MANAGEMENT PLAN VOLUME III DRAINAGE DESIGN MANUAL (DDM)

STD. NUMBER	STD. TITLE
DDM FIG 5-4	BYPASS SYSTEMS
DDM FIG 6-2	EROSION CONTROL BLANKET
DDM FIG 6-5	COIR LOGS
DDM FIG 6-8	PLANTED RIP RAP
DDM FIG 6-13	FLOW DEFLECTORS
DDM FIG 11-1	PLANT CLUSTERING
DDM FIG 11-2	VEGETATIVE MANAGEMENT

PRELIMINARY NOT FOR CONSTRUCTION

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ENGINEER OF RECORD
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

city of san luis obispo
san luis obispo county, california

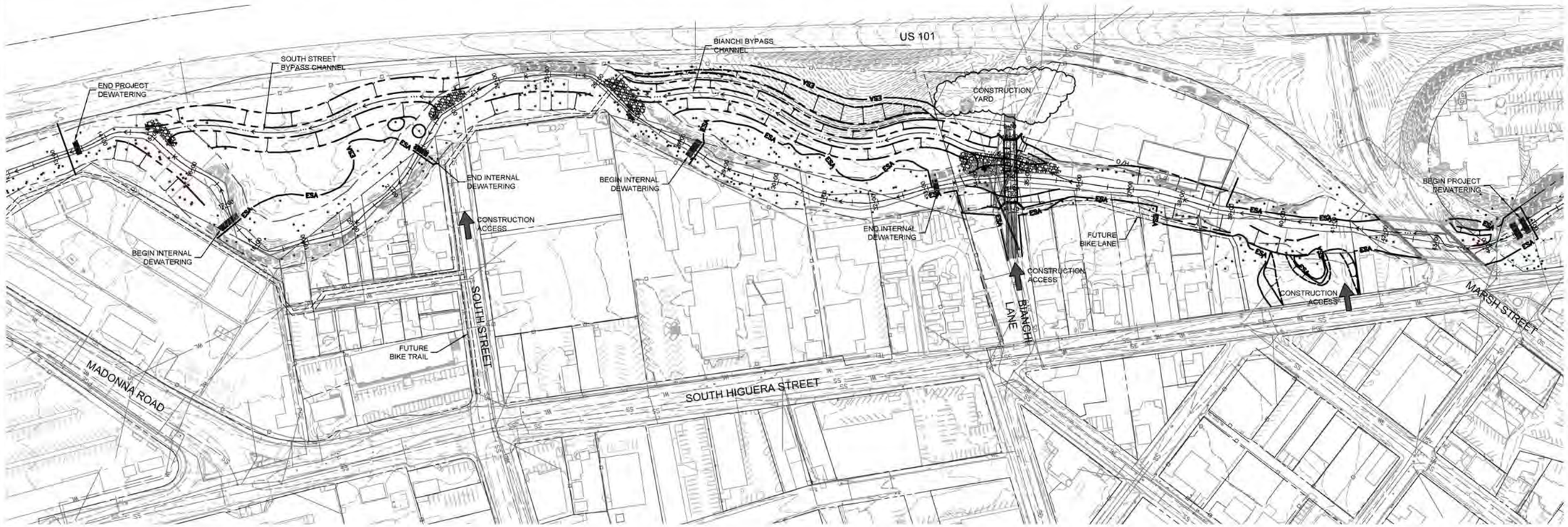
MID-HIGUERA BYPASS
San Luis Obispo Creek
Madonna Road
to
Marsh Street

CITY SPECIFICATION NO. 90649

APPROVED BY:

BARBARA LYNCH R.C.E. C053418
CITY ENGINEER

DATE: 11/21/2014
FILE NO. / LOCATION
SHEET NO. G1 OF 15



LEGEND

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- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE

GENERAL NOTES

1. ENVIRONMENTAL MONITORING WILL BE PERFORMED BY A MONITOR RETAINED BY THE CITY TO WORK IN CONJUNCTION WITH THE PROJECT.
2. DUST CONTROL SHALL BE IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS 14-9.03 "DUST CONTROL".
3. EROSION CONTROL SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS 21 "EROSION CONTROL".
4. THE CONTRACTOR WILL NOT BE ALLOWED TO USE WATER FROM THE CITY WATER MAINS. THE CITY HAS A NON-POTABLE WATER SUPPLY LOCATED AT 25 PRADO ROAD. THE AVAILABILITY OF THIS WATER IS NOT GUARANTEED. RECYCLED WATER IS AVAILABLE FOR USE AT THE RECYCLED WATER HYDRANTS LOCATED WITHIN THE CITY LIMITS AT VARIOUS LOCATIONS. USE OF THE RECYCLED WATER IS SUBJECT TO THE CONDITIONS OF THE RECYCLED-WATER PROGRAM AND COMPLETION OF REQUIRED TRAINING.

GRADING NOTES

1. THE FOLLOWING QUANTITIES ARE ESTIMATES ONLY AND ARE NOT ADJUSTED FOR REMOVAL OF VEGETATION OR FOR ROCK ENCOUNTERED DURING EXCAVATION. QUANTITY ESTIMATES SHOWN ON THESE PLANS ARE TO BE USED FOR BONDING AND PERMIT PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL QUANTITIES AND SHRINKAGE FOR THE PURPOSES OF CONSTRUCTION AND BIDDING.
   A. CUT = 35,000 CY
   B. FILL = 0 CY
   C. NET = 35,000 CY CUT
2. ALL PERMANENT CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 2.5 HORIZONTAL TO 1.0 VERTICAL UNLESS OTHERWISE NOTED.
3. ALL GRADING AND SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE GRADING ORDINANCE OF THE CITY OF SAN LUIS OBISPO, CITY STANDARD SPECIFICATIONS, AND THE SOILS REPORT. IN THE CASE OF CONFLICT BETWEEN THE PRECEDING REQUIREMENTS AND THESE PLANS, THE MORE STRINGENT SHALL GOVERN.

VEGETATION NOTES

1. PROTECT ALL TREES IN PLACE UNLESS NOTED ON PLANS FOR REMOVAL, IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS 77-1.03A(2) "TREE PROTECTION".
2. PRIOR TO REMOVING OR TRIMMING VEGETATION, IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE WITH THE CITY TO HAVE TREES MARKED FOR REMOVAL.
3. ALL DISTURBED AREAS SHALL HAVE EROSION CONTROL HYDROSEEDING, UNLESS OTHERWISE SPECIFIED ON THESE PLANS.
4. NEW VEGETATION SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS 20-7 "HIGHWAY PLANTING".
5. CONTRACTOR SHALL ESTABLISH AND CONTINUALLY MAINTAIN ALL NEWLY PLANTED AREAS IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS 20-9 "PLANT ESTABLISHMENT WORK".

NORTH

100' 50' 0 100'

SCALE 1" = 100'

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www.wallacegroup.us

ENGINEER OF RECORD: 90649
REGISTERED PROFESSIONAL ENGINEER CRAIG A. CAMPBELL No. 34405 CIVIL STATE OF CALIFORNIA

DATE	⚠	REVISIONS: DESCRIPTION	APPROVAL: DESIGN ENGINEER	CITY

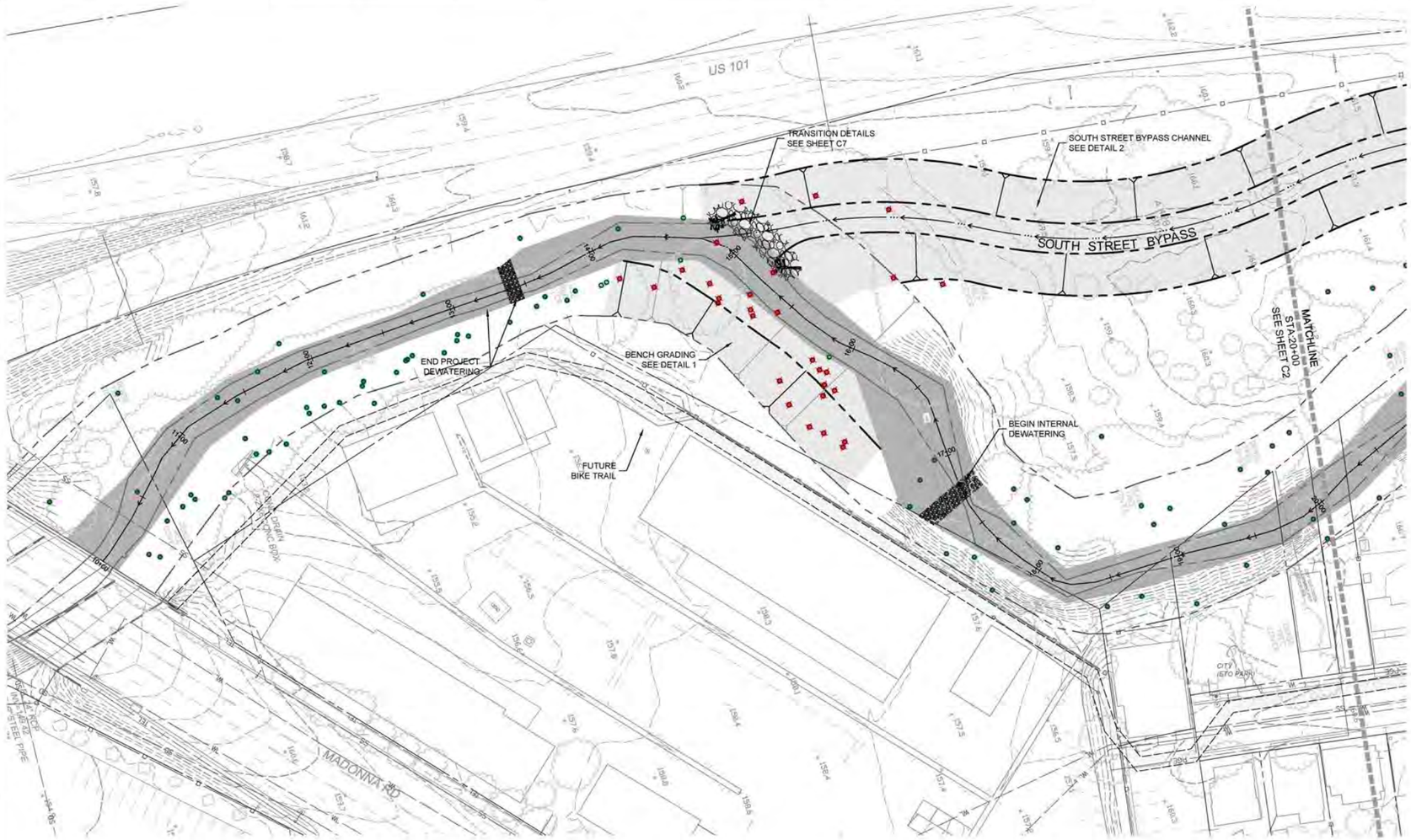
city of san luis obispo

REVISIONS
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: OVERALL SITE PLAN

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO.: 90649
SHEET NO.: G2 OF 15



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- EXISTING TOE/TOP OF SLOPE
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- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
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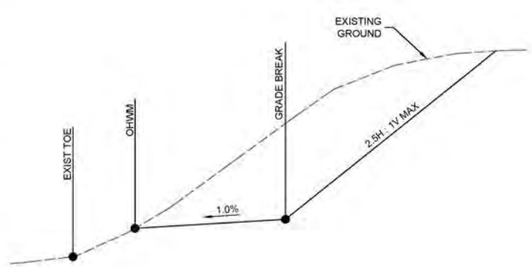
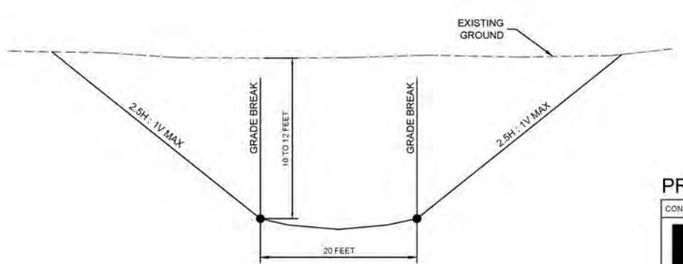


1 TYPICAL CHANNEL BENCH GRADING

NTS



2 TYPICAL SOUTH STREET BYPASS CHANNEL GRADING

NTS

NORTH

40 20 0 40

SCALE 1" = 40'

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ENGINEER OF RECORD: 90649
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

REVISIONS			APPROVAL	
DATE		DESCRIPTION	DESIGN ENGINEER	CITY

city of san luis obispo

REVISIONS
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA. 10+00 TO 20+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO: 90649
SHEET NO.: C1 OF 15

LEGEND

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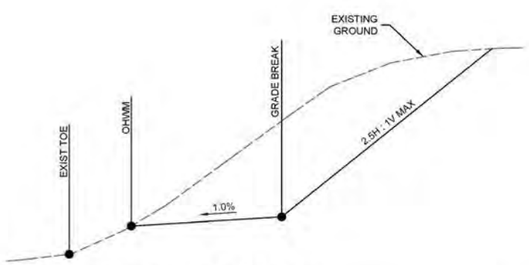
- FLOWLINE
- ORDINARY HIGH WATER MARK (OHWM)
- PARCEL LINE FROM CITY GIS
- WL — EXISTING WATER LINE
- SS — EXISTING GRAVITY SEWER LINE
- SD — EXISTING STORM DRAIN
- GAS — EXISTING UNDERGROUND GAS LINE
- O/H — EXISTING OVERHEAD UTILITY LINE LOCATION
- ELE — EXISTING UNDERGROUND ELECTRICAL LINE
- CTV — EXISTING UNDERGROUND CABLE TELEVISION LINE
- TEL — EXISTING UNDERGROUND TELEPHONE LINE



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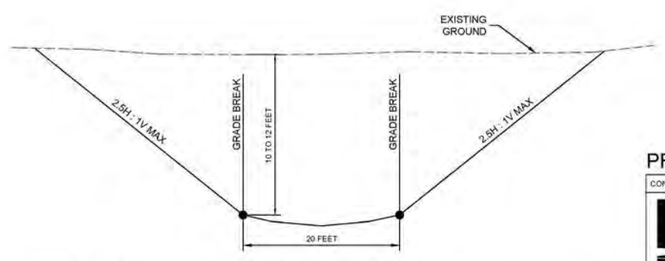

2 SOUTH STREET BYPASS CHANNEL GRADING — NTS

NORTH

40 20 0 40

SCALE 1" = 40'

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ENGINEER OF RECORD: 60649

REGISTERED PROFESSIONAL ENGINEER
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CIVIL
STATE OF CALIFORNIA

DATE	⚠	REVISIONS DESCRIPTION	APPROVAL DESIGN DIVISION	APPROVAL CITY

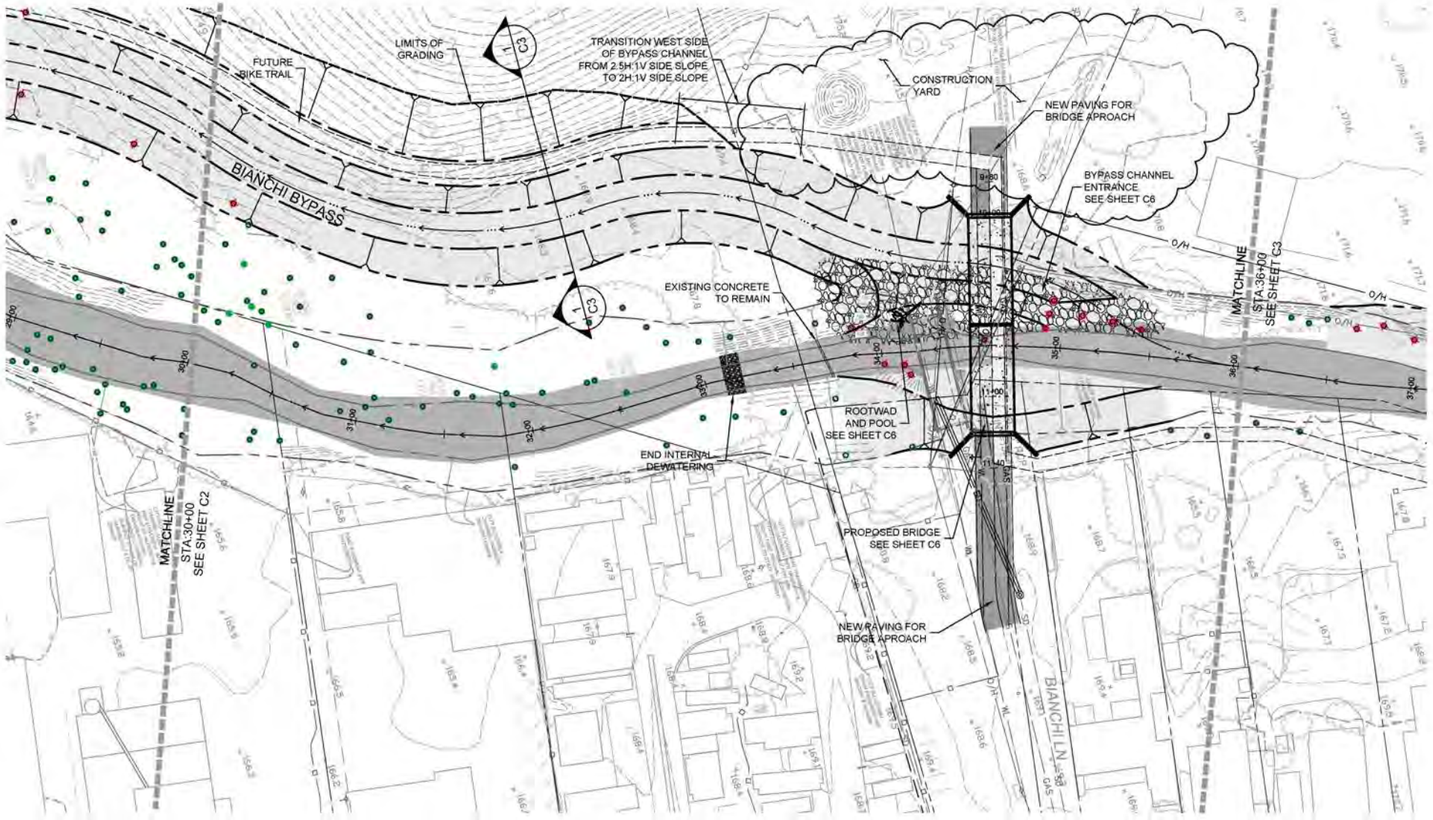
city of san luis obispo

REVISIONS:
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA.20+00 TO 30+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO.: 90649
SHEET NO.: C2 OF 15



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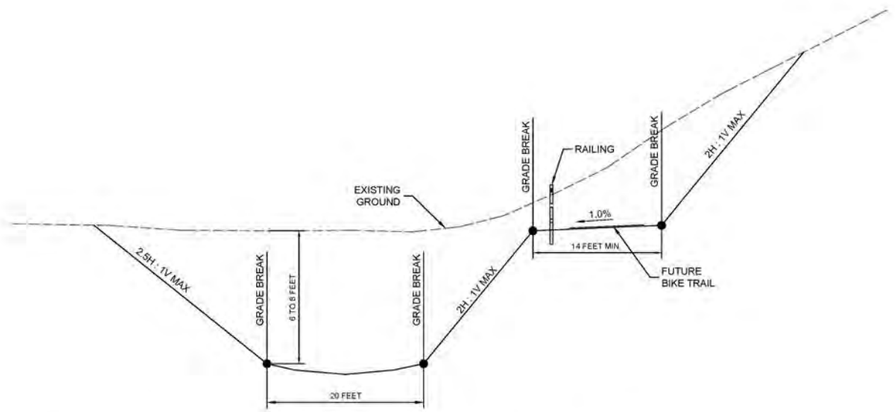

1 BIANCHI BYPASS CHANNEL AND FUTURE BIKE TRAIL GRADING

NTS

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

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No. 34405
CIVIL
STATE OF CALIFORNIA

DATE	⚠	REVISIONS DESCRIPTION	APPROVAL DESIGN ENGINEER	APPROVAL CITY

city of san luis obispo

REVISIONS:
RECORD DRAWING:

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA. 30+00 TO 36+00

DESIGNED BY: VGH
DRAWN BY: VGH
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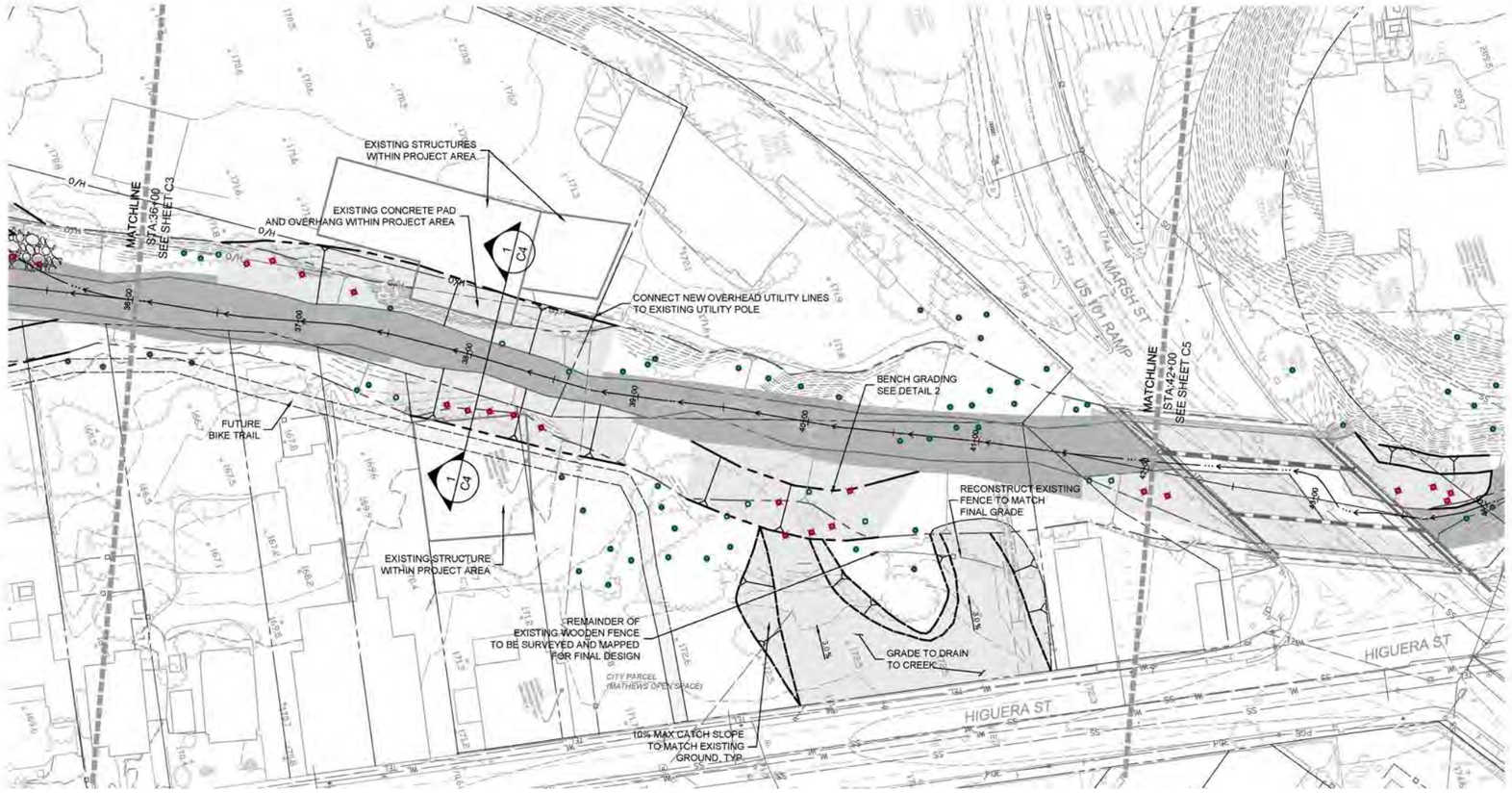
DATE: 11/21/2014
CITY SPECIFICATION NO.: 90649
SHEET NO.: C3 OF 15



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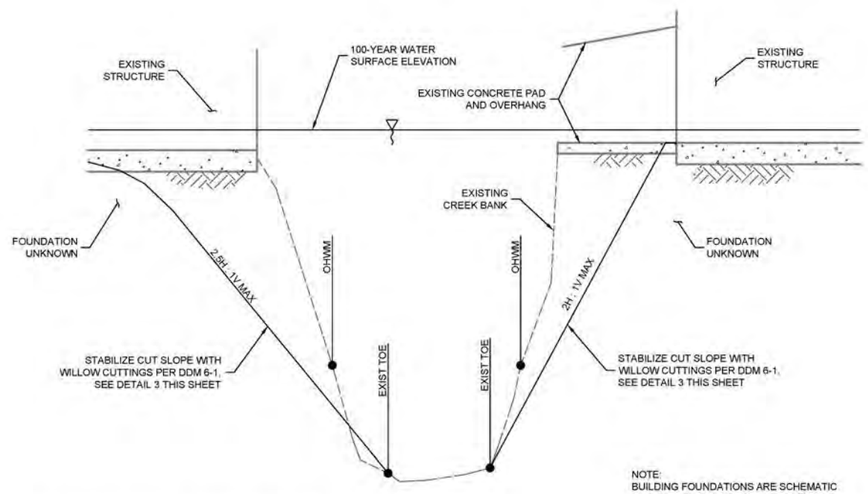
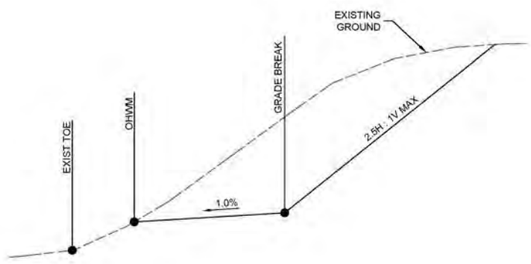


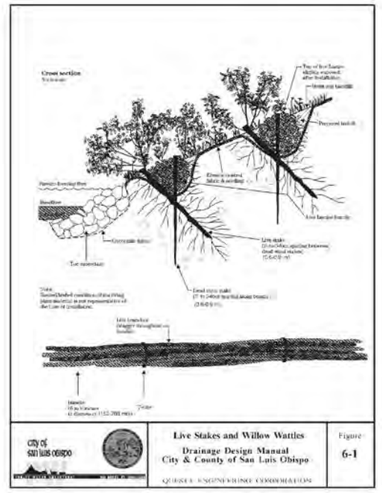
1 TYPICAL SECTION AT THE "PINCH POINT"

NTS



2 TYPICAL CHANNEL BENCH GRADING

NTS



3 WILLOW WALL DETAILS

NTS

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

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www.wallacegroup.us

ENGINEER OF RECORD: 90649

REGISTERED PROFESSIONAL ENGINEER CRAIG A. CAMPBELL No. 34405 CIVIL STATE OF CALIFORNIA

REVISIONS		APPROVAL	
DATE	DESCRIPTION	DESIGN ENGINEER	CITY

city of san luis obispo

REVISIONS

RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA. 36+00 TO 42+00

DESIGNED BY: VGH

DRAWN BY: VGH

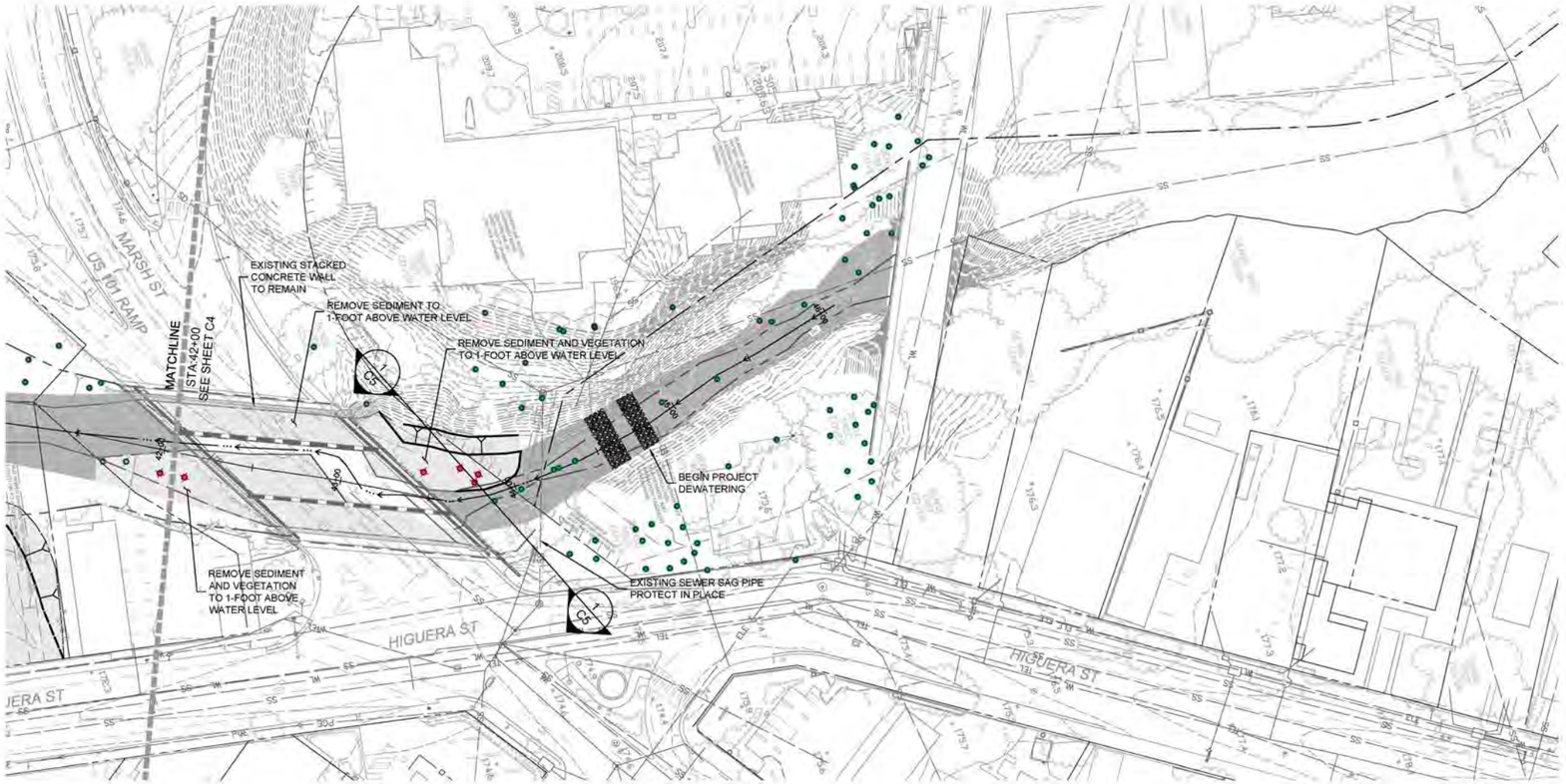
CHECKED BY: CAC

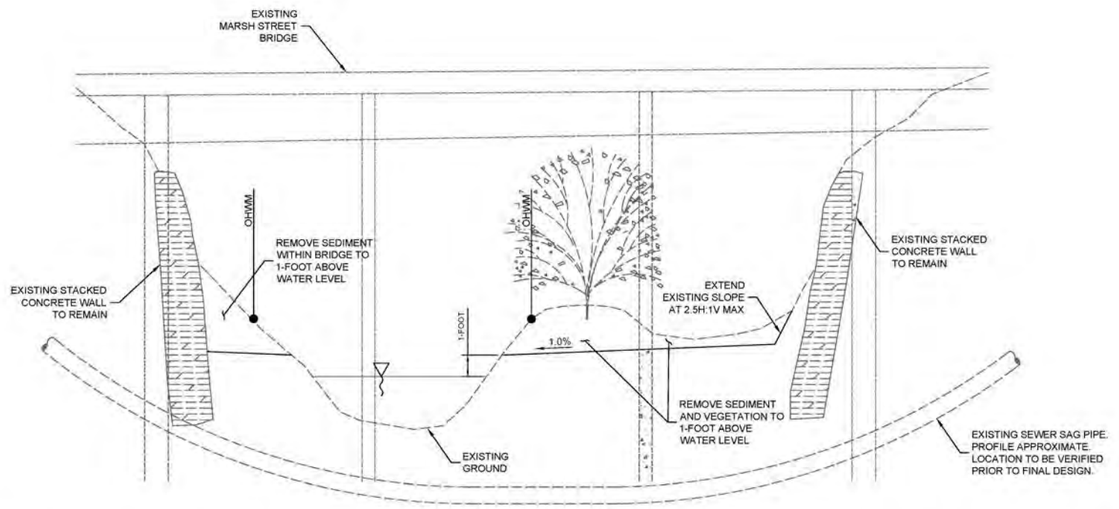
APPROVED BY: CAC

DATE: 11/21/2014

CITY SPECIFICATION NO. 90649

SHEET NO.: C4 OF 15





1 TYPICAL SECTION UPSTREAM OF MARSH STREET BRIDGE

NTS

LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN, PROTECT IN PLACE
- EXISTING TREE WITHIN GRADING AREA, REMOVAL MAY BE NECESSARY.
- EXISTING TREE TO BE REMOVED
- TEMPORARY FENCE (TYPE ESA)
- EXISTING TOE/TOP OF SLOPE
- PROPOSED TOE/TOP OF SLOPE
- FLOWLINE
- ORDINARY HIGH WATER MARK (OHWM)
- PARCEL LINE FROM CITY GIS
- EXISTING WATER LINE
- EXISTING GRAVITY SEWER LINE
- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
WALLACE GROUP
CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES
WALLACE SWANSON INTERNATIONAL
612 CLARION COURT
SAN LUIS OBISPO, CA 93401
T 805 544-4011 F 805 544-4294
www.wallacegroup.us

ENGINEER OF RECORD: 90649
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

DATE		REVISIONS DESCRIPTION	APPROVAL DESIGN ENGINEER	APPROVAL CITY

city of san luis obispo

REVISIONS
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA. 42+00 TO 46+00

DESIGNED BY: VGH

DRAWN BY: VGH

CHECKED BY: CAC

APPROVED BY: CAC

DATE: 11/21/2014

CITY SPECIFICATION NO: 90649

SHEET NO.: C5 OF 15

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

Notice of Preparation

February 19, 2016

To: Reviewing Agencies

Re: Mid-Higuera Bypass Project
SCH# 2016021077

Attached for your review and comment is the Notice of Preparation (NOP) for the Mid-Higuera Bypass Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Keith Miller
San Luis Obispo County
County Government Center, Room 206
San Luis Obispo, CA 93408

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Rep.
State Clearinghouse Data Base

SCH# 2016021077
Project Title Mid-Higuera Bypass Project
Lead Agency San Luis Obispo County

Type NOP Notice of Preparation

Description The Mid Higuera Bypass Project would include flood control and habitat restoration activities along an approx. 0.56 mile long stretch of San Luis Obispo Creek. The project includes the construction of two bypass channels, channel terraces/benches, the replacement of the Bianchi Lane Bridge, and riparian habitat enhancement.

Lead Agency Contact

Name Keith Miller
Agency San Luis Obispo County
Phone 805-781-5714 **Fax**
email
Address County Government Center, Room 206
City San Luis Obispo **State** CA **Zip** 93408

Project Location

County San Luis Obispo
City
Region
Cross Streets Marsh Street and Madonna Road
Lat / Long 34° 16' 15.4" N / 120° 40' 18.6" W
Parcel No. 004-511-018, 003-711-025
Township 30S **Range** 12E **Section** 34 **Base**

Proximity to:

Highways 101
Airports SLO
Railways UPRR
Waterways San Luis Obispo Creek
Schools Mission Prep; Hawthorne
Land Use Open Space; Commercial Retail

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Noise; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Vegetation; Water Quality; Wetland/Riparian

Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 4; California Highway Patrol; Public Utilities Commission; Native American Heritage Commission; Caltrans, District 5; State Lands Commission; Air Resources Board; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 3; Department of Fish and Wildlife, Marine Region

Date Received 02/19/2016 **Start of Review** 02/19/2016 **End of Review** 03/21/2016

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

KD

County: San Luis Obispo

SCH# 2016021077

Resources Agency

Resources Agency
Nadell Gayou

- ☐ Dept. of Boating & Waterways
  Denise Peterson
- ☐ California Coastal Commission
  Elizabeth A. Fuchs
- ☐ Colorado River Board
  Lisa Johansen
- ☐ Dept. of Conservation
  Elizabeth Carpenter
- ☐ California Energy Commission
  Eric Knight
- ☐ Cal Fire
  Dan Foster
- ☐ Central Valley Flood Protection Board
  James Herota
- ☐ Office of Historic Preservation
  Ron Parsons

Dept of Parks & Recreation
Environmental Stewardship Section

- ☐ California Department of Resources, Recycling & Recovery
  Sue O'Leary
- ☐ S.F. Bay Conservation & Dev't. Comm.
  Steve McAdam
- ■ Dept. of Water Resources
  Resources Agency
  Nadell Gayou

Fish and Game

- ☐ Depart. of Fish & Wildlife
  Scott Flint
  Environmental Services Division
- ☐ Fish & Wildlife Region 1
  Curt Babcock
- ☐ Fish & Wildlife Region 1E
  Laurie Harnsberger
- ☐ Fish & Wildlife Region 2
  Jeff Drongesen
- ☐ Fish & Wildlife Region 3
  Craig Weightman
- ■ Fish & Wildlife Region 4
  Julie Vance
- ☐ Fish & Wildlife Region 5
  Leslie Newton-Reed
  Habitat Conservation Program
- ☐ Fish & Wildlife Region 6
  Tiffany Ellis
  Habitat Conservation Program
- ☐ Fish & Wildlife Region 6 I/M
  Heidi Calvert
  Inyo/Mono, Habitat Conservation Program
- ☐ Dept. of Fish & Wildlife M
  Becky Ota
  Marine Region

Other Departments

- ☐ Food & Agriculture
  Sandra Schubert
  Dept. of Food and Agriculture
- ☐ Depart. of General Services
  Public School Construction
- ☐ Dept. of General Services
  Anna Garbeff
  Environmental Services Section
- ☐ Delta Stewardship Council
  Kevan Samsam
- ☐ Housing & Comm. Dev.
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- ☐ Delta Protection Commission
  Michael Machado
- ☐ OES (Office of Emergency Services)
  Marcia Scully
- ■ Native American Heritage Comm.
  Debbie Treadway
- ■ Public Utilities Commission
  Supervisor
- ☐ Santa Monica Bay Restoration
  Guangyu Wang
- ■ State Lands Commission
  Jennifer Deleong
- ☐ Tahoe Regional Planning Agency (TRPA)
  Cherry Jacques

Cal State Transportation Agency CalSTA

- ☐ Caltrans - Division of Aeronautics
  Philip Crimmins
- ☐ Caltrans – Planning
  HQ LD-IGR
  Terri Pencovic
- ■ California Highway Patrol
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- ☐ Caltrans, District 1
  Rex Jackman
- ☐ Caltrans, District 2
  Marcelino Gonzalez
- ☐ Caltrans, District 3
  Eric Federicks – South
  Susan Zanchi - North
- ☐ Caltrans, District 4
  Patricia Maurice
- ■ Caltrans, District 5
  Larry Newland
- ☐ Caltrans, District 6
  Michael Navarro
- ☐ Caltrans, District 7
  Dianna Watson
- ☐ Caltrans, District 8
  Mark Roberts
- ☐ Caltrans, District 9
  Gayle Rosander
- ☐ Caltrans, District 10
  Tom Dumas
- ☐ Caltrans, District 11
  Jacob Armstrong
- ☐ Caltrans, District 12
  Maureen El Harake

Cal EPA

Air Resources Board

- ■ All Other Projects
  Cathi Slaminski
  - ☐ Transportation Projects
    Nesamani Kalandiyur
  - ☐ Industrial/Energy Projects
    Mike Tollstrup
- ☐ State Water Resources Control Board
  Regional Programs Unit
  Division of Financial Assistance
- ☐ State Water Resources Control Board
  Karen Larsen – Asst Deputy
  Division of Drinking Water
- ☐ State Water Resources Control Board
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- ■ State Water Resouces Control Board
  Phil Crader
  Division of Water Rights
- ☐ Dept. of Toxic Substances Control
  CEQA Tracking Center
- ☐ Department of Pesticide Regulation
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- ☐ RWQCB 1
  Cathleen Hudson
  North Coast Region (1)
- ☐ RWQCB 2
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- ■ RWQCB 3
  Central Coast Region (3)
- ☐ RWQCB 4
  Teresa Rodgers
  Los Angeles Region (4)
- ☐ RWQCB 5S
  Central Valley Region (5)
  - ☐ RWQCB 5F
    Central Valley Region (5)
    Fresno Branch Office
  - ☐ RWQCB 5R
    Central Valley Region (5)
    Redding Branch Office
- ☐ RWQCB 6
  Lahontan Region (6)
  - ☐ RWQCB 6V
    Lahontan Region (6)
    Victorville Branch Office
- ☐ RWQCB 7
  Colorado River Basin Region (7)
- ☐ RWQCB 8
  Santa Ana Region (8)
- ☐ RWQCB 9
  San Diego Region (9)

- ■ Other DFG Marine Region
- ☐ _____ Conservancy

Last Updated 2/9/2016

SLO COUNTY apcd | Air Pollution Control District
San Luis Obispo County

February 24, 2016

Keith Miller
San Luis Obispo County
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408

SUBJECT: APCD Comments Regarding the Mid-Higuera Bypass Project NOP Program Level (ED 15-151)

Dear Mr. Miller,

Thank you for including the San Luis Obispo County Air Pollution Control District (APCD) in the environmental review process. We have completed our review of the above referenced project.

The project as proposed includes a proposal for a modification to the Mid-Higuera Bypass Project to implement flood control and habitat restoration activities along an approximately 0.56 mile long stretch of San Luis Obispo Creek. The project includes the construction of two bypass channels, channel terraces/benches, the replacement of the Bianchi Lane Bride and riparian habitat enhancement. The project is located between Highway 101 South Higuera Street, Marsh Street, and Madonna Road within the City of San Luis Obispo. The project is a capital improvement project identified originally it the City's Waterway Management Plan and evaluated in the Waterway Management Plan Environmental Impact Report/Statement. The project is proposed by and would be implemented by the San Luis Obispo County Flood Control and Water Conservation District.

The following are APCD comments that are pertinent to this project.

1. Contact Person:

Melissa Guise
Air Pollution Control District
3433 Roberto Court
San Luis Obispo, CA 93401
(805) 781-4667

2. Permit(s) or Approval(s) Authority:

Lead During Demolition

Demolition of structures coated with lead based paint is a concern for the APCD. Improper demolition can result in the release of lead containing particles from the site. Sandblasting or removal of paint by heating with a heat gun can result in significant emissions of lead. Therefore, proper abatement of lead before demolition of these structures must be performed in order to prevent the release of lead from the site. **Depending on removal method, an APCD permit may be required. Contact the APCD Engineering Division at (805) 781-5912 for more information. Approval of a lead work plan by the APCD is required and must be submitted ten days prior to the start of the demolition. For more information, contact the APCD Enforcement Division at (805) 781-5912 or for specific information regarding lead removal, please contact Cal-OSHA at (818) 901-5403. Additional information can also be found on line at http://www.epa.gov/lead.**

Naturally Occurring Asbestos

Naturally occurring asbestos (NOA) has been identified by the state Air Resources Board as a toxic air contaminant. Serpentine and ultramafic rocks are very common throughout California and may contain naturally occurring asbestos. The SLO County APCD has identified areas throughout the County where NOA may be present (see the APCD's 2012 CEQA Handbook, Technical Appendix 4.4). If the project site is located in a candidate area for Naturally Occurring Asbestos (NOA), the following requirements apply. Under the ARB Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105), **prior to any construction activities at the site, the project proponent shall ensure that a geologic evaluation is conducted to determine if the area disturbed is exempt from the regulation. An exemption request must be filed with the APCD.** If the site is not exempt from the requirements of the regulation, the applicant must comply with all requirements outlined in the Asbestos ATCM. This may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the APCD. More information on NOA can be found at slocleanair.org/business/asbestos.php.

Demolition/Asbestos

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, abatement, and disposal of asbestos containing material (ACM). Asbestos containing materials could be encountered during the demolition or remodeling of existing buildings or the disturbance, demolition, or relocation of above or below ground utility pipes/pipelines (e.g., transite pipes or insulation on pipes). **If this project will include any of these activities, then it may be subject to various regulatory jurisdictions, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP).** These requirements include, but are not limited to: 1) written notification, within at least 10 business days of activities commencing, to the APCD, 2) asbestos survey conducted by a Certified Asbestos Consultant, and, 3) applicable removal and disposal requirements of identified ACM. Please contact the APCD Enforcement Division at (805) 781-5912 and also go to slocleanair.org/business/asbestos.php for further information. To obtain a Notification of Demolition and Renovation form go to the "Other Forms" section of: slocleanair.org/business/onlineforms.php.

Developmental Burning
Effective February 25, 2000, **the APCD prohibited developmental burning of vegetative material within San Luis Obispo County.** If you have any questions regarding these requirements, contact the APCD Enforcement Division at 781-5912.

Construction Permit Requirements
Based on the information provided, we are unsure of the types of equipment that may be present during the project's construction phase. Portable equipment, 50 horsepower (hp) or greater, used during construction activities may require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit.

The following list is provided as a guide to equipment and operations that may have permitting requirements, but should not be viewed as exclusive. For a more detailed listing, refer to the Technical Appendices, page 4-4, in the APCD's 2012 CEQA Handbook.

- Power screens, conveyors, diesel engines, and/or crushers;
- Portable generators and equipment with engines that are 50 hp or greater;
- Electrical generation plants or the use of standby generator;
- Internal combustion engines;
- Rock and pavement crushing;
- Unconfined abrasive blasting operations;
- Tub grinders;
- Trommel screens; and,
- Portable plants (e.g. aggregate plant, asphalt batch plant, concrete batch plant, etc).

To minimize potential delays, prior to the start of the project, please contact the APCD Engineering Division at (805) 781-5912 for specific information regarding permitting requirements.

Construction Phase Idling Limitations
If this project is in close proximity to nearby sensitive receptors, and will have diesel powered construction activity in close proximity to any sensitive receptor the following mitigation measures shall be implemented to ensure that public health benefits are realized by reducing toxic risk from diesel emissions:

To help reduce sensitive receptor emissions impact of diesel vehicles and equipment used to construct the project, the applicant shall implement the following idling control techniques:

A. California Diesel Idling Regulations
   a. ***On-road diesel vehicles*** shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:
      1. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,
      2. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a

sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.

b. ***Off-road diesel equipment*** shall comply with the 5 minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use off-Road Diesel regulation.

c. Signs must be posted in the designated queuing areas and job sites to remind drivers and operators of the state's 5 minute idling limit.

d. The specific requirements and exceptions in the regulations can be reviewed at the following web sites: www.arb.ca.gov/msprog/truck-idling/2485.pdf and www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.

B. Diesel Idling Restrictions Near Sensitive Receptors (*List sensitive receptors here based on the following list: schools, residential dwellings, parks, day care centers, nursing homes, and hospitals – if none, then eliminate "b"*)
In addition to the State required diesel idling requirements, the project applicant shall comply with these more restrictive requirements to minimize impacts to nearby sensitive receptors:
a. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
b. Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;
c. Use of alternative fueled equipment is recommended; and
d. Signs that specify the no idling areas must be posted and enforced at the site.

Truck Routing
Proposed truck routes should be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals. If the project has significant truck trips where hauling/truck trips are routine activity and operate in close proximity to sensitive receptors, toxic risk needs to be evaluated.

3. Environmental Information:
The project under development has the potential for significant impacts to local air emissions, ambient air quality, sensitive receptors, and the implementation of the Clean Air Plan (CAP). A complete air quality analysis should be included in the DEIR to adequately evaluate the overall air quality impacts associated with implementation of the proposed project. This analysis should address both short-term (construction) and long-term (operational) emissions impacts (including traditional air pollutants, air toxics and greenhouse gas emissions). The following is an outline of items that should be included in the analysis:

The "2012 CEQA Air Quality Handbook" (the Handbook) can be used as guidance for assessing the air quality impacts for this project and defining mitigation measures. A copy can be accessed on the APCD web page at:

slocleanair.org/images/cms/upload/files/CEQA_Handbook_2012_v1.pdf

a) A description of existing air quality and emissions in the impact area, including the attainment status of the APCD relative to State and Federal air quality standards and any existing regulatory restrictions to development. The most recent Clean Air Plan (CA) should be consulted for applicable information and the APCD should be consulted to determine if there is more up to date information available.

b) A detailed description of all phases of the project should be included in the EIR. Based on the description, a detailed quantitative air emissions analysis at the project scale needs to be completed and all emissions from each phase of the project need to be quantified. A complete emission analysis should be performed on all relevant construction and operational phase emission sources using the latest approved version of CalEEMod (www.caleemod.com), EMFAC, OFF-ROAD, AP-42 "Compilation of Air pollutant Emission Factors" or other APCD approved emission calculator tools. This analysis should include both stationary and mobiles sources, regardless if APCD permits are needed for the equipment. All assumptions used in the air emissions calculations should be included in the DEIR. Modeling results should include detailed output reports that include data input parameters, assumptions, and default modification if applicable. The quantitative analysis needs to address criteria pollutants, greenhouse gases, air toxics, and diesel particulate matter and be compared to APCD's CEQA threshold.

c) As indicated above, greenhouse gases should be quantified as part of the project. The short term greenhouse gas impacts from the construction should be amortized over the life of the project and added to the operational phase impacts. Additionally, if the project will result in any loss and or conversion of vegetated land (i.e., cropland, forestland, grassland, wetlands, other) the GHG emissions associated with that loss or conversion should be quantified and mitigated as appropriate.

d) To aid in the air quality analysis, the traffic study should include the total daily traffic volumes projected. The traffic study results can be used in the quantitative and qualitative analyses by providing a tool for comparing trip generation between different alternatives and evaluating effectiveness of mitigation methods for reducing traffic impacts.

e) The EIR should include a range of feasible alternatives to the proposed project that could effectively minimize air quality impacts. A thorough emission analysis should be conducted for each of the propose alternative identified. All calculations and assumptions used should be fully documented in an appendix to the EIR.

f) A cumulative impact analysis should be performed to evaluate the combined air quality impacts of this project and impact from existing and propose future development in the area. This should encompass all planned construction activities within one mile of the project.

g) Construction activities in the Alluvial deposits could be a source of odors and an issue for local residences in the area. Potential for odors and mitigation should be addressed in the DEIR.

h) Mitigation measures to reduce or avoid significant air quality impacts should be recommended. The DEIR should address any proposed mitigation measures and describe feasible mitigation measure to reduce air quality impacts on-site for both construction and operational phase emissions. Off-site mitigation may be required in the event that emissions cannot be reduced on-site below APCD specified thresholds.

4. Permit Stipulation/Conditions:

   It is recommended reference material include the 2012 version of the "CEQA Air Quality Handbook" (the Handbook). It can be accessed on the APCD web at slocleanair.org/images/cms/upload/files/CEQA_Handbook_2012_v1.pdf

5. Alternatives:

   Any alternatives described in the DEIR should involve the same level of air quality analysis as described in section 3 listed above.

6. Reasonably Foreseeable Projects, Programs or Plans:

   None at this time.

7. Relevant Information:

   As mentioned earlier, the CEQA Air Quality Handbook should be referenced in the DEIR for determining the significance of impacts and level of mitigation recommended.

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, feel free to contact me at 781-4667.

Sincerely,

Melissa Guise
Air Quality Specialist

MAG/arr

H:\PLAN\CEQA\Project_Review\3000\3900\3947-1\3947-1.docx

{In Archive} Comments on the Mid-Higuera Bypass Project NOP
Fukushima, Adam J@DOT
to:
klmiller@co.slo.ca.us
03/24/2016 04:15 PM
Hide Details
From: "Fukushima, Adam J@DOT" <adam.fukushima@dot.ca.gov>
To: "klmiller@co.slo.ca.us" <klmiller@co.slo.ca.us>
History: This message has been replied to.
Archive: This message is being viewed in an archive.

Hello Keith,

Caltrans has reviewed the NOP for the Mid-Higuera Bypass Project and submits the following comments for your consideration.

The project proposes to construct two creek bypass sections that would bring the creek closer to Highway US 101 and also increase velocities during higher flows. Caltrans requests more details on how the project would potentially protect from erosion US 101, the Caltrans District Office (50 Higuera Street) and the Caltrans District Vehicle Maintenance Shop (66 Madonna Road). Specifically, we request an analysis that shows how the project would affect the floodplain elevations for these facilities. We're also interested in seeing how the project would affect the floodplain and creek characteristics downstream of the project. Please let me know if you have any questions or need more information.

Any work within the Caltrans right of way will require an encroachment permit. As part of the encroachment permit process, additional analyses or reports may be necessary as pertinent to the proposed improvement.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

Adam Fukushima, PTP
Caltrans - District 5
50 Higuera Street
San Luis Obispo CA
(805) 549-3131

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710
Fax (916) 373-5471
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

Edmund G. Brown Jr., Governor

February 29, 2016

Keith Miller
San Luis Obispo County
County Government Center, Room 206
San Luis Obispo, CA 93408

RE: SCH#2016021077, Mid-Higuera Bypass Project, San Luis Obispo County

Dear Mr. Miller:

The Native American Heritage Commission has received the Notice of Preparation (NOP) for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

a. A brief description of the project.
b. The lead agency contact information.
c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
   a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   a. Alternatives to the project.
   b. Recommended mitigation measures.
   c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.
   d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
   b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
   a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
   b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation

monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have been already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions, please contact me at my email address: sharaya.souza@nahc.ca.gov.

Sincerely,

Sharaya Souza
Staff Services Analyst
cc: State Clearinghouse

Caltrans Comments on the Mid-Higuera Bypass Project NOP short file

From: Streder, Melissa@DOT <melissa.streder@dot.ca.gov>
Sent: Tuesday, August 9, 2016 3:30 PM
To: Keith L. Miller
Subject: RE: Comments on the Mid-Higuera Bypass Project NOP

Hello Keith,

Our Caltrans hydrology staff did review the preliminary report and offers the following comment for your consideration:

The preliminary report proposes to protect new slopes along Hwy 101 with vegetation. A stronger revetment design may be necessary in areas that have the potential to negatively impact the highway. The new slopes created by the bypass channels will be vulnerable to erosion for an indeterminate amount of time once construction is complete. This may warrant stronger measures to ensure the highway is sufficiently protected during large storm events.

Thank you for the opportunity to comment on this project early in the review process. Please contact me if you have any additional questions.

Best Regards,

Melissa Streder
Associate Transportation Planner
California Department of Transportation
(805) 549-3800
(Mon-Thurs)

Appendix B

Preliminary Plans:

Site Plan

Grading Plan

Project Details

Vegetation Enhancement Plan

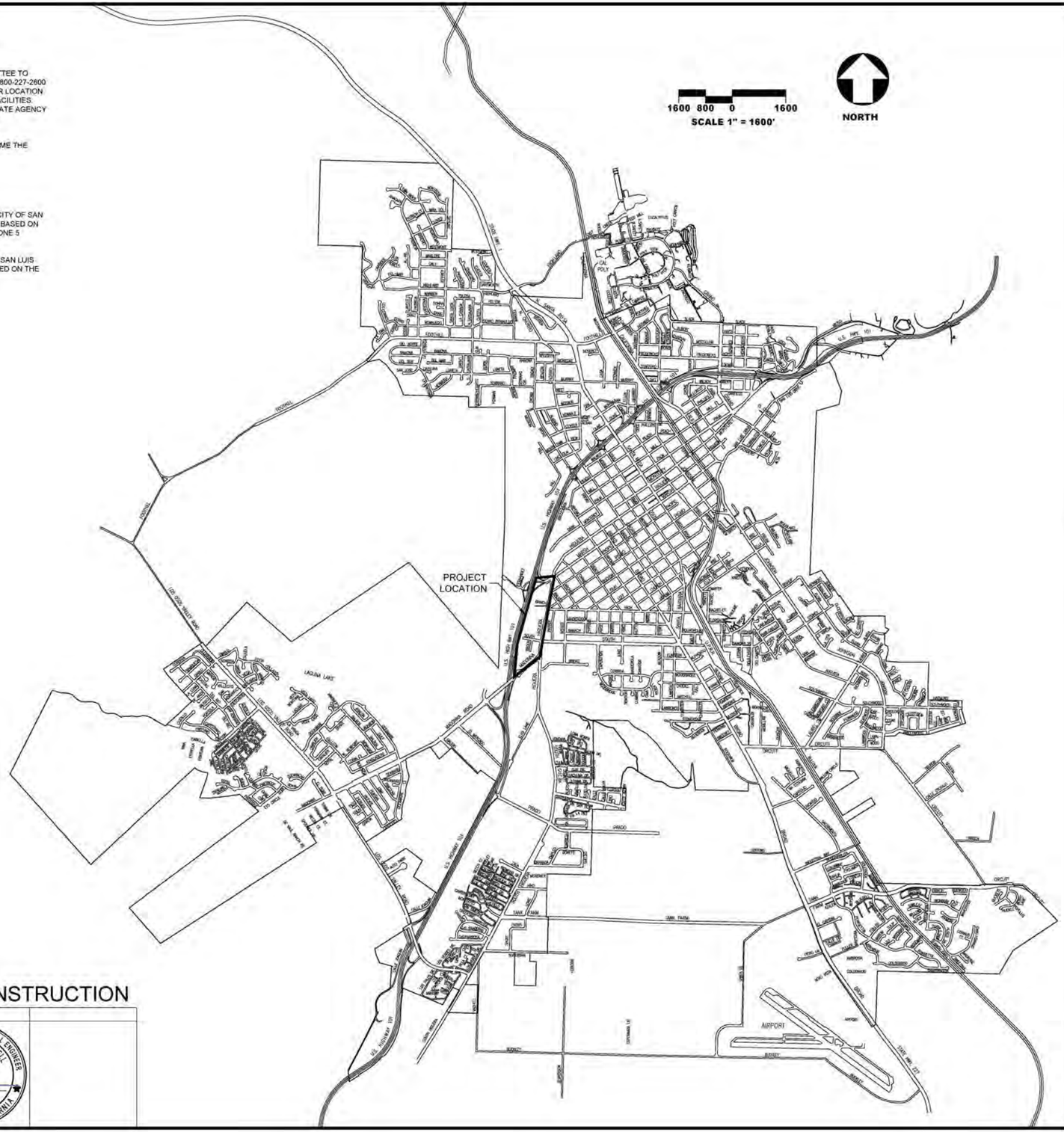
GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR PERMITTEE TO CONTACT "UNDERGROUND SERVICE ALERT U.S.A." TOLL FREE AT 1-800-227-2600 FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION, FOR LOCATION OF POWER, TELEPHONE, OIL AND NATURAL GAS UNDERGROUND FACILITIES. CONTRACTOR OR PERMITEE SHALL ALSO CONTACT THE APPROPRIATE AGENCY FOR THE LOCATION OF CABLE T.V., WATER, SEWER, DRAINAGE OR UNDERGROUND FACILITIES.
2. THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE AT THE TIME THE CONTRACT IS AWARDED.

DATUM

HORIZONTAL CONTROL FOR POINTS 8066 & 8207 AS PUBLISHED IN THE CITY OF SAN LUIS OBISPO 2007 HORIZONTAL CONTROL NETWORK. CITY NETWORK IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83) EPOCH DATE 1991.35, ZONE 5 CALIFORNIA.

VERTICAL CONTROL BENCHMARK NO. 15 AS PUBLISHED IN THE CITY OF SAN LUIS OBISPO 2007 BENCHMARK SYSTEM. CITY'S BENCHMARK SYSTEM IS BASED ON THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88).



SHEET INDEX

SHEET NUMBER	DESCRIPTION
G1	TITLE SHEET
G2	OVERALL SITE PLAN
C1	GRADING PLAN STA 10+00 TO 20+00
C2	GRADING PLAN STA 20+00 TO 30+00
C3	GRADING PLAN STA 30+00 TO 36+00
C4	GRADING PLAN STA 36+00 TO 42+00
C5	GRADING PLAN STA 42+00 TO 46+00
C6	PROPOSED BIANCHI BRIDGE
C7	BYPASS CHANNEL TRANSITION DETAILS
C8	CREEK DIVERSION DETAILS
V1	VEG ENHANCEMENT STA 10+00 TO 20+00
V2	VEG ENHANCEMENT STA 20+00 TO 30+00
V3	VEG ENHANCEMENT STA 30+00 TO 36+00
V4	VEG ENHANCEMENT STA 36+00 TO 42+00
V5	VEG ENHANCEMENT STA 42+00 TO 46+00

APPLICABLE CITY OF SAN LUIS OBISPO STANDARDS

REFERENCE DOCUMENTS
CITY STANDARD DRAWINGS - FEBRUARY 2014 EDITION
CITY STANDARD SPECIFICATIONS - FEBRUARY 2014 EDITION
CALTRANS STANDARD SPECIFICATIONS - 2010 EDITION
SLO CREEK WATERWAY MANAGEMENT PLAN VOLUME III DRAINAGE DESIGN MANUAL (DDM)

STD. NUMBER	STD. TITLE
DDM FIG 5-4	BYPASS SYSTEMS
DDM FIG 6-2	EROSION CONTROL BLANKET
DDM FIG 6-5	COIR LOGS
DDM FIG 6-8	PLANTED RIP RAP
DDM FIG 6-13	FLOW DEFLECTORS
DDM FIG 11-1	PLANT CLUSTERING
DDM FIG 11-2	VEGETATIVE MANAGEMENT

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
WALLACE GROUP
CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES
WALLACE SWANSON INTERNATIONAL
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ENGINEER OF RECORD
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

city of san luis obispo
san luis obispo county, california

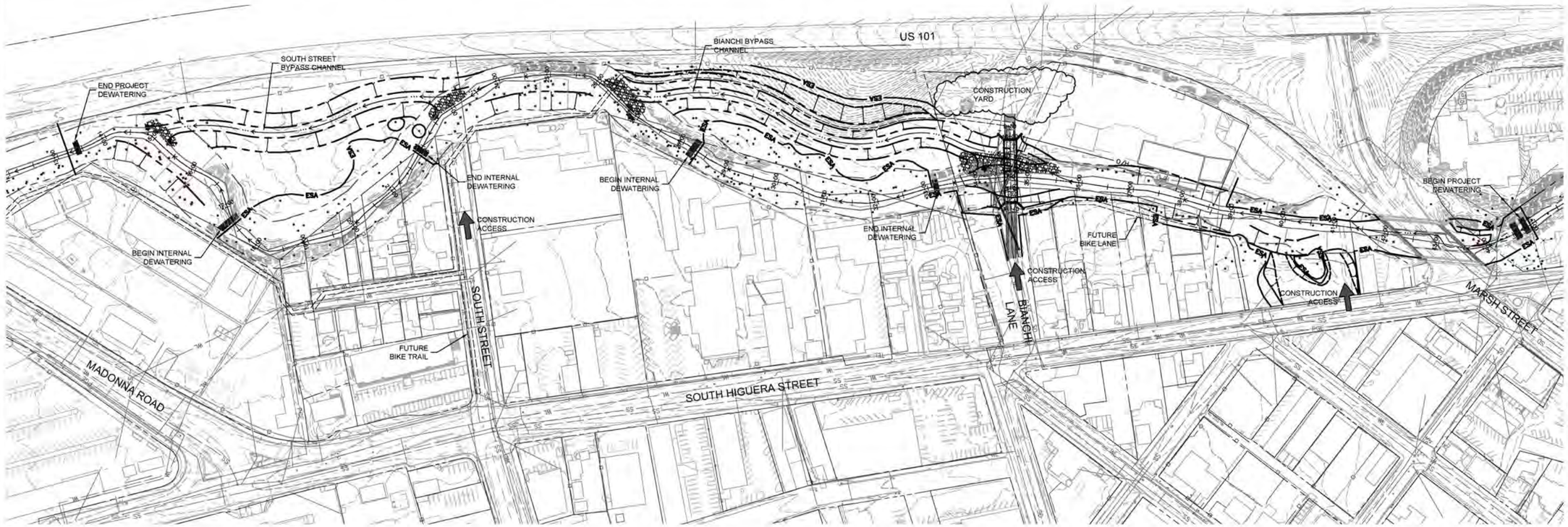
MID-HIGUERA BYPASS
San Luis Obispo Creek
Madonna Road
to
Marsh Street

CITY SPECIFICATION NO. 90649

APPROVED BY:

BARBARA LYNCH R.C.E. C053418
CITY ENGINEER

DATE: 11/21/2014
FILE NO. / LOCATION
SHEET NO. G1 OF 15



LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN, PROTECT IN PLACE
- EXISTING TREE WITHIN GRADING AREA. REMOVAL MAY BE NECESSARY.
- EXISTING TREE TO BE REMOVED
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- ORDINARY HIGH WATER MARK (OHWM)
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- EXISTING WATER LINE
- EXISTING GRAVITY SEWER LINE
- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE

GENERAL NOTES

1. ENVIRONMENTAL MONITORING WILL BE PERFORMED BY A MONITOR RETAINED BY THE CITY TO WORK IN CONJUNCTION WITH THE PROJECT.
2. DUST CONTROL SHALL BE IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS 14-9.03 "DUST CONTROL".
3. EROSION CONTROL SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS 21 "EROSION CONTROL".
4. THE CONTRACTOR WILL NOT BE ALLOWED TO USE WATER FROM THE CITY WATER MAINS. THE CITY HAS A NON-POTABLE WATER SUPPLY LOCATED AT 25 PRADO ROAD. THE AVAILABILITY OF THIS WATER IS NOT GUARANTEED. RECYCLED WATER IS AVAILABLE FOR USE AT THE RECYCLED WATER HYDRANTS LOCATED WITHIN THE CITY LIMITS AT VARIOUS LOCATIONS. USE OF THE RECYCLED WATER IS SUBJECT TO THE CONDITIONS OF THE RECYCLED-WATER PROGRAM AND COMPLETION OF REQUIRED TRAINING.

GRADING NOTES

1. THE FOLLOWING QUANTITIES ARE ESTIMATES ONLY AND ARE NOT ADJUSTED FOR REMOVAL OF VEGETATION OR FOR ROCK ENCOUNTERED DURING EXCAVATION. QUANTITY ESTIMATES SHOWN ON THESE PLANS ARE TO BE USED FOR BONDING AND PERMIT PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL QUANTITIES AND SHRINKAGE FOR THE PURPOSES OF CONSTRUCTION AND BIDDING.
   A. CUT = 35,000 CY
   B. FILL = 0 CY
   C. NET = 35,000 CY CUT
2. ALL PERMANENT CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 2.5 HORIZONTAL TO 1.0 VERTICAL UNLESS OTHERWISE NOTED.
3. ALL GRADING AND SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE GRADING ORDINANCE OF THE CITY OF SAN LUIS OBISPO, CITY STANDARD SPECIFICATIONS, AND THE SOILS REPORT. IN THE CASE OF CONFLICT BETWEEN THE PRECEDING REQUIREMENTS AND THESE PLANS, THE MORE STRINGENT SHALL GOVERN.

VEGETATION NOTES

1. PROTECT ALL TREES IN PLACE UNLESS NOTED ON PLANS FOR REMOVAL, IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS 77-1.03A(2) "TREE PROTECTION".
2. PRIOR TO REMOVING OR TRIMMING VEGETATION, IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE WITH THE CITY TO HAVE TREES MARKED FOR REMOVAL.
3. ALL DISTURBED AREAS SHALL HAVE EROSION CONTROL HYDROSEEDING, UNLESS OTHERWISE SPECIFIED ON THESE PLANS.
4. NEW VEGETATION SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS 20-7 "HIGHWAY PLANTING".
5. CONTRACTOR SHALL ESTABLISH AND CONTINUALLY MAINTAIN ALL NEWLY PLANTED AREAS IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS 20-9 "PLANT ESTABLISHMENT WORK".

NORTH

100' 50' 0 100'

SCALE 1" = 100'

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
WALLACE GROUP
CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
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www.wallacegroup.us

ENGINEER OF RECORD: 90649
REGISTERED PROFESSIONAL ENGINEER CRAIG A. CAMPBELL No. 34405 CIVIL STATE OF CALIFORNIA

DATE	⚠	REVISIONS: DESCRIPTION	APPROVAL: DESIGN ENGINEER	CITY

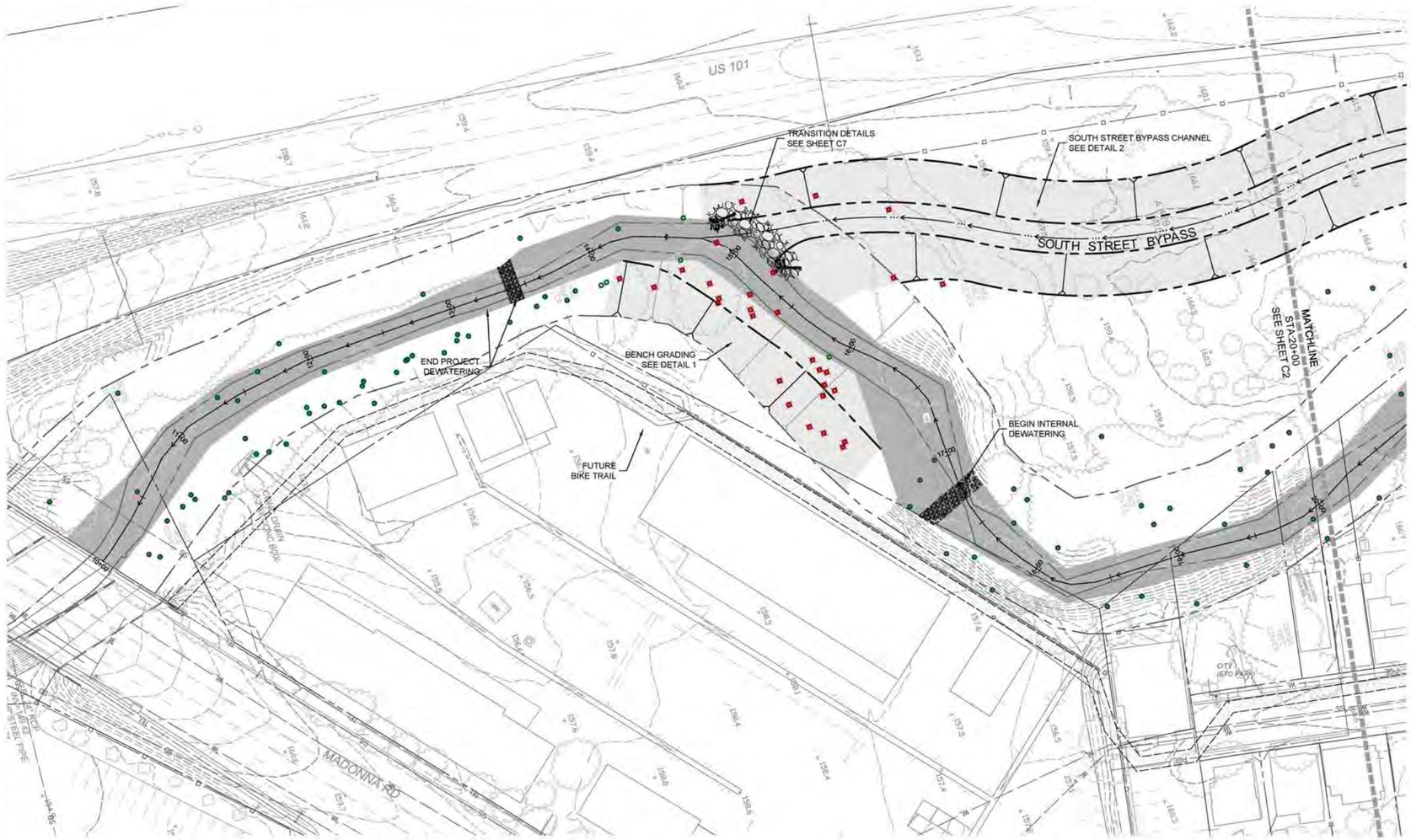
city of san luis obispo

REVISIONS
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: OVERALL SITE PLAN

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO.: 90649
SHEET NO.: G2 OF 15



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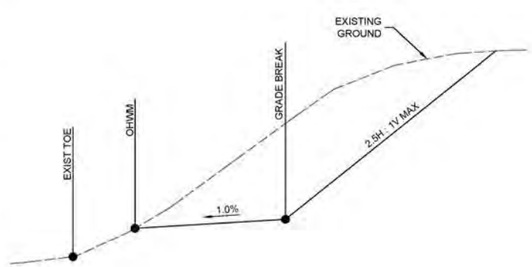
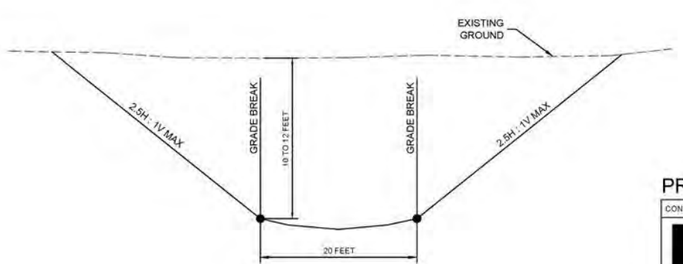


1 TYPICAL CHANNEL BENCH GRADING

NTS



2 TYPICAL SOUTH STREET BYPASS CHANNEL GRADING

NTS

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
WALLACE GROUP
CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
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REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

REVISIONS			APPROVAL	
DATE		DESCRIPTION	DESIGN ENGINEER	CITY

city of san luis obispo

REVISIONS
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA. 10+00 TO 20+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO: 90649
SHEET NO.: C1 OF 15

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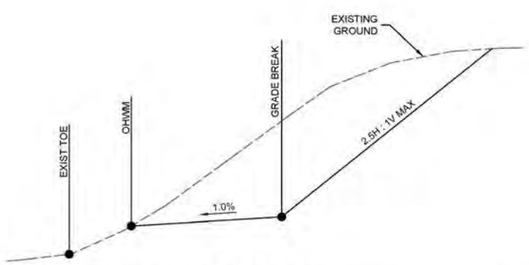
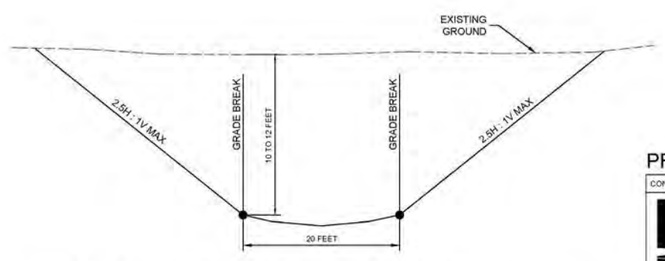
- EXISTING TREE WITHIN GRADING AREA, REMOVAL MAY BE NECESSARY.
- EXISTING TREE TO BE REMOVED
- ESA — TEMPORARY FENCE (TYPE ESA)
- EXISTING TOE/TOP OF SLOPE
- PROPOSED TOE/TOP OF SLOPE
- FLOWLINE
- ORDINARY HIGH WATER MARK (OHWM)
- PARCEL LINE FROM CITY GIS
- WL — EXISTING WATER LINE
- SS — EXISTING GRAVITY SEWER LINE
- SD — EXISTING STORM DRAIN
- GAS — EXISTING UNDERGROUND GAS LINE
- O/H — EXISTING OVERHEAD UTILITY LINE LOCATION
- ELE — EXISTING UNDERGROUND ELECTRICAL LINE
- CTV — EXISTING UNDERGROUND CABLE TELEVISION LINE
- TEL — EXISTING UNDERGROUND TELEPHONE LINE



1 TYPICAL CHANNEL BENCH GRADING — NTS



2 SOUTH STREET BYPASS CHANNEL GRADING — NTS

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

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ENGINEER OF RECORD: 60649

REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

DATE	⚠	REVISIONS DESCRIPTION	APPROVAL DESIGN DIVISION	APPROVAL CITY

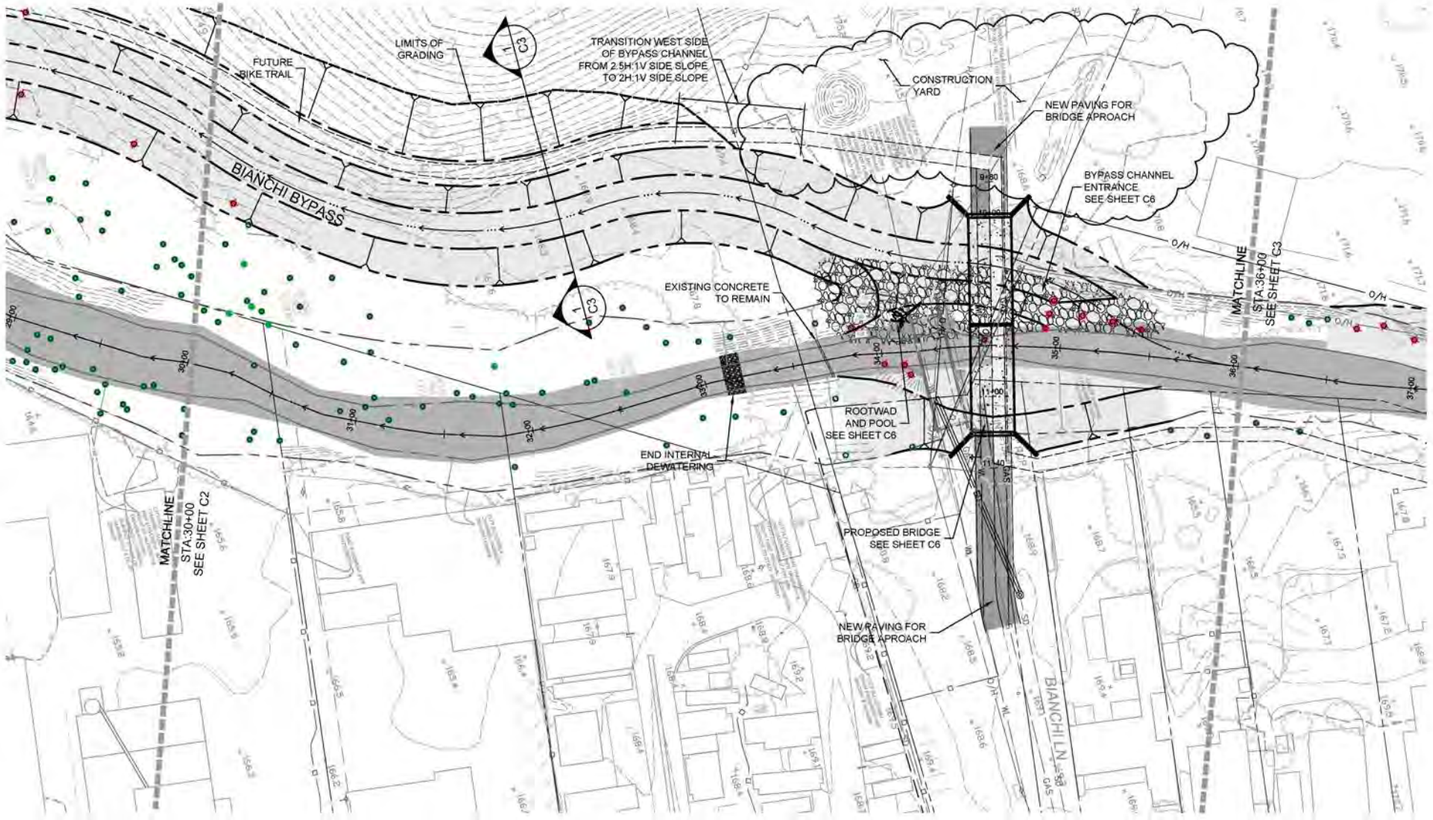
city of san luis obispo

REVISIONS:
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

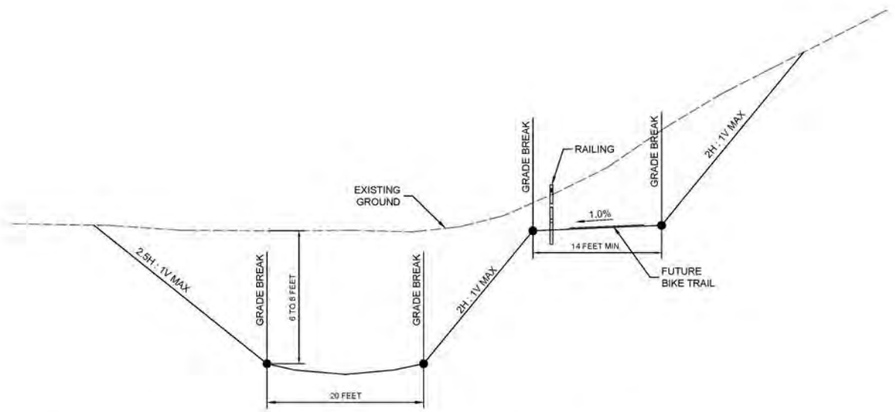
SHEET TITLE: GRADING PLAN STA.20+00 TO 30+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO.: 90649
SHEET NO.: C2 OF 15



LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN, PROTECT IN PLACE
- EXISTING TREE WITHIN GRADING AREA, REMOVAL MAY BE NECESSARY.
- EXISTING TREE TO BE REMOVED
- TEMPORARY FENCE (TYPE ESA)
- EXISTING TOE/TOP OF SLOPE
- PROPOSED TOE/TOP OF SLOPE
- FLOWLINE
- ORDINARY HIGH WATER MARK (OHWM)
- PARCEL LINE FROM CITY GIS
- EXISTING WATER LINE
- EXISTING GRAVITY SEWER LINE
- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE



1 BIANCHI BYPASS CHANNEL AND FUTURE BIKE TRAIL GRADING

NTS

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
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ENGINEER OF RECORD: 90649

REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

DATE	⚠	REVISIONS DESCRIPTION	APPROVAL DESIGN ENGINEER	APPROVAL CITY

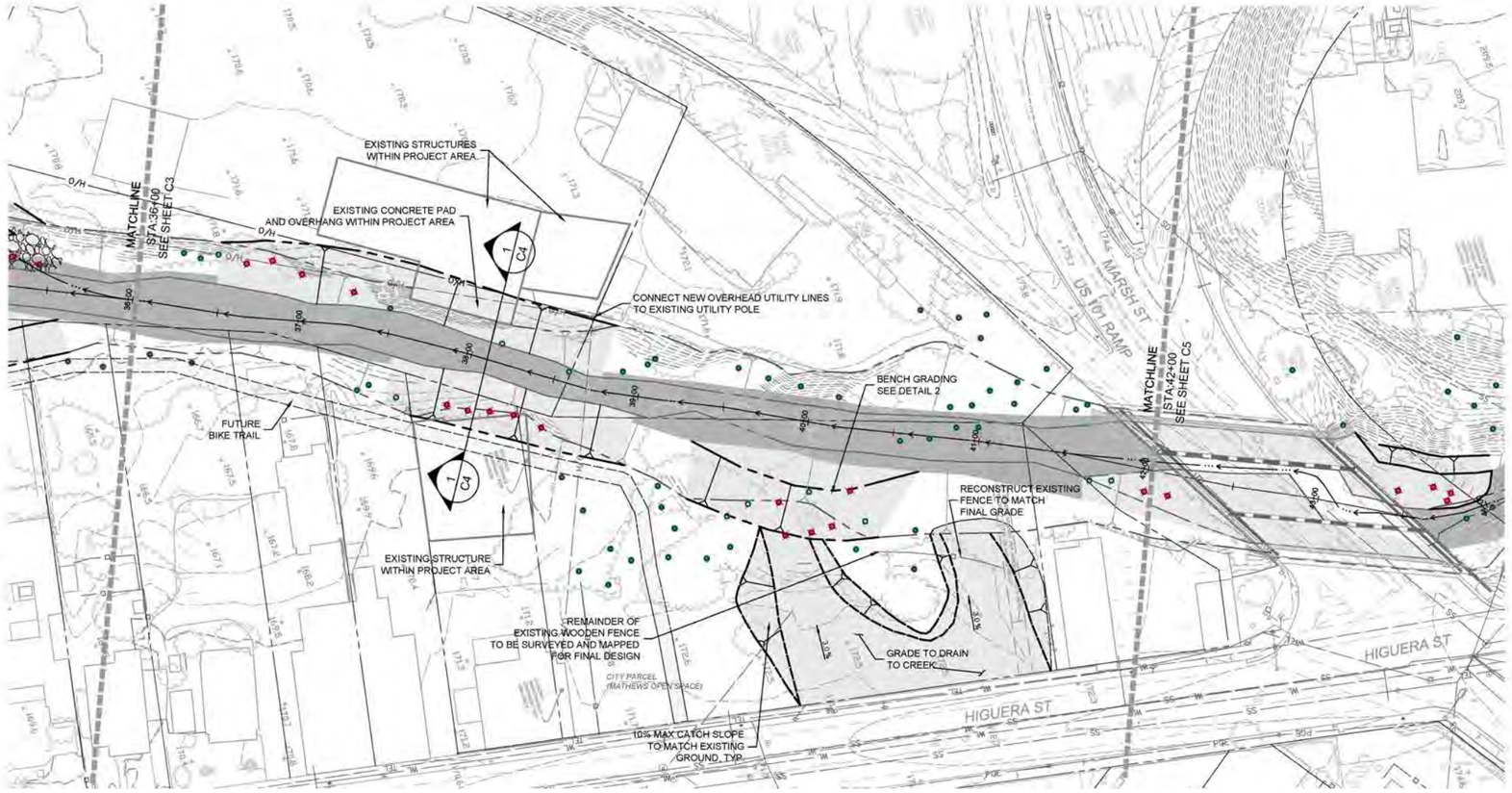
city of san luis obispo

REVISIONS:
RECORD DRAWING:

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA. 30+00 TO 36+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO.: 90649
SHEET NO.: C3 OF 15



LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN, PROTECT IN PLACE
- EXISTING TREE WITHIN GRADING AREA, REMOVAL MAY BE NECESSARY.
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- EXISTING WATER LINE
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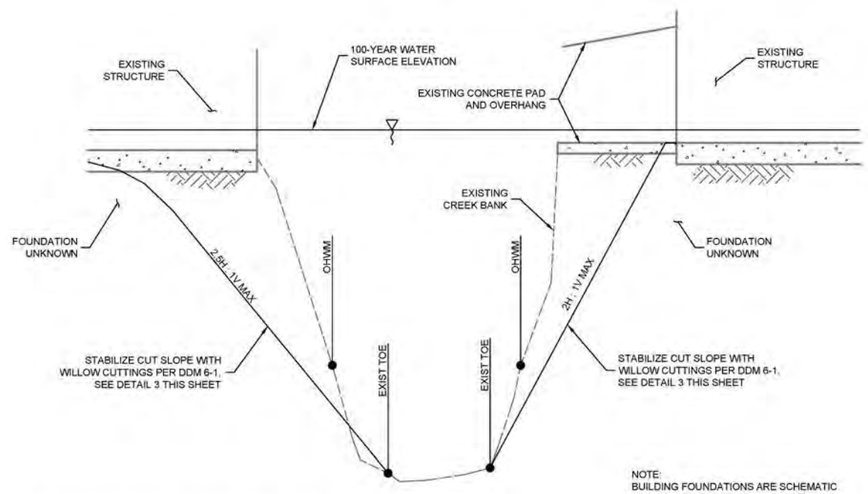
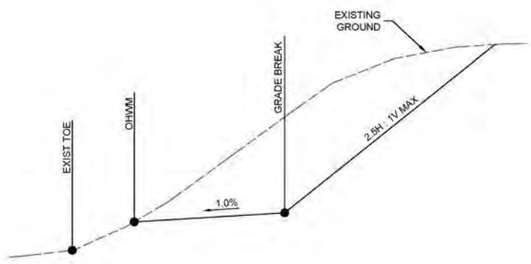
- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE



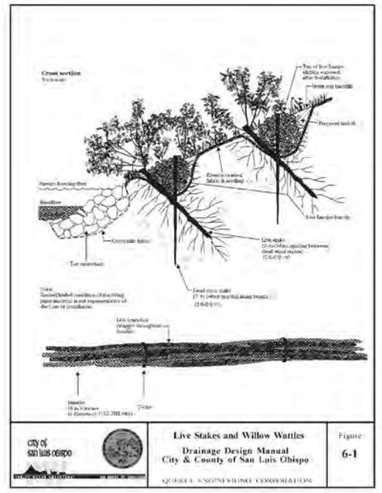
1 TYPICAL SECTION AT THE "PINCH POINT"

NTS



2 TYPICAL CHANNEL BENCH GRADING

NTS



3 WILLOW WALL DETAILS

NTS

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
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ENGINEER OF RECORD: 90649

REGISTERED PROFESSIONAL ENGINEER CRAIG A. CAMPBELL No. 34405 CIVIL STATE OF CALIFORNIA

REVISIONS		APPROVAL	
DATE	DESCRIPTION	DESIGN ENGINEER	CITY

city of san luis obispo

REVISIONS

RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA. 36+00 TO 42+00

DESIGNED BY: VGH

DRAWN BY: VGH

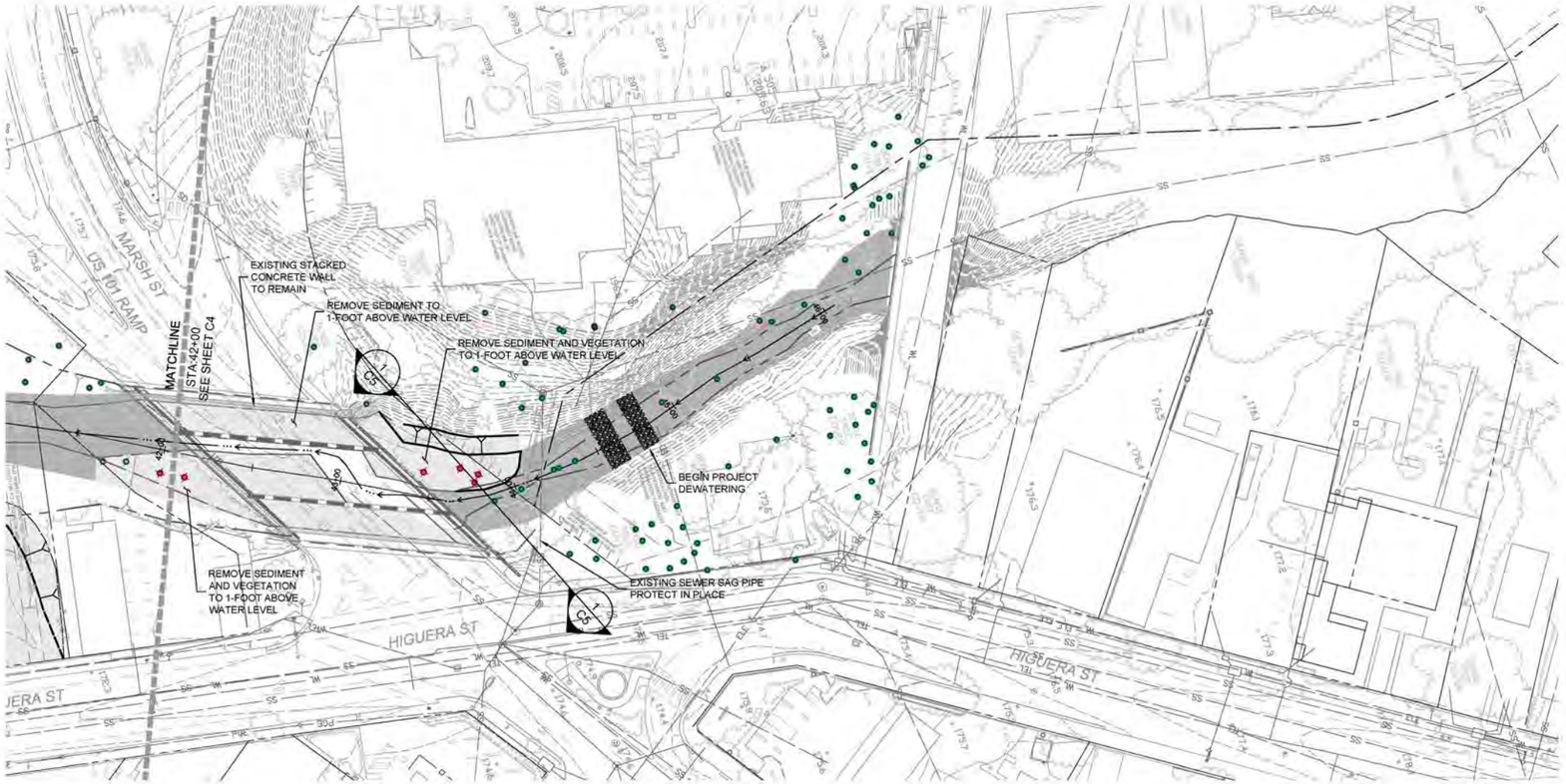
CHECKED BY: CAC

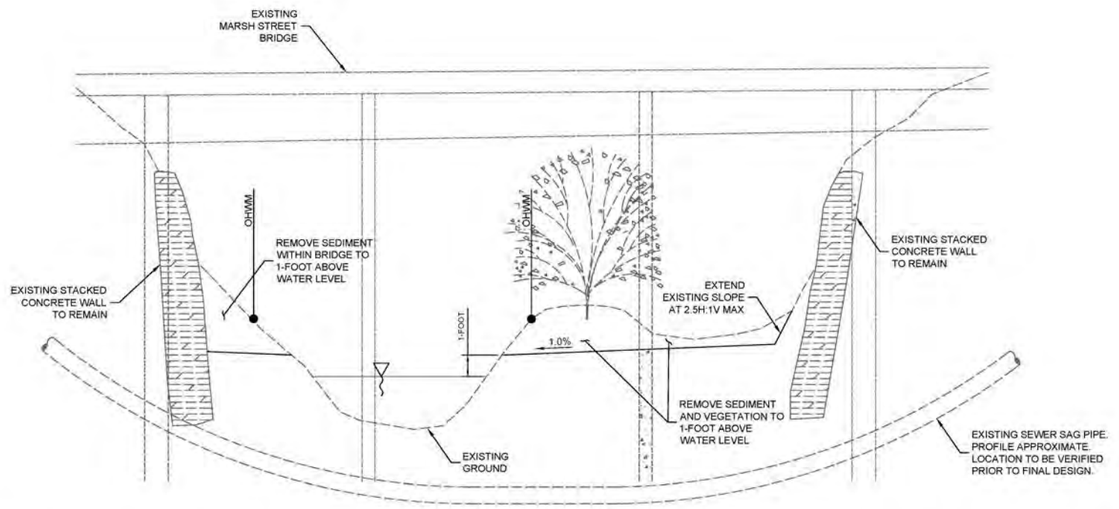
APPROVED BY: CAC

DATE: 11/21/2014

CITY SPECIFICATION NO. 90649

SHEET NO.: C4 OF 15





1 TYPICAL SECTION UPSTREAM OF MARSH STREET BRIDGE

NTS

LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN, PROTECT IN PLACE
- EXISTING TREE WITHIN GRADING AREA, REMOVAL MAY BE NECESSARY.
- EXISTING TREE TO BE REMOVED
- TEMPORARY FENCE (TYPE ESA)
- EXISTING TOE/TOP OF SLOPE
- PROPOSED TOE/TOP OF SLOPE
- FLOWLINE
- ORDINARY HIGH WATER MARK (OHWM)
- PARCEL LINE FROM CITY GIS
- EXISTING WATER LINE
- EXISTING GRAVITY SEWER LINE
- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

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ENGINEER OF RECORD: 90649
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

DATE		REVISIONS DESCRIPTION	APPROVAL DESIGN ENGINEER	APPROVAL CITY

city of san luis obispo

REVISIONS
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: GRADING PLAN STA. 42+00 TO 46+00

DESIGNED BY: VGH

DRAWN BY: VGH

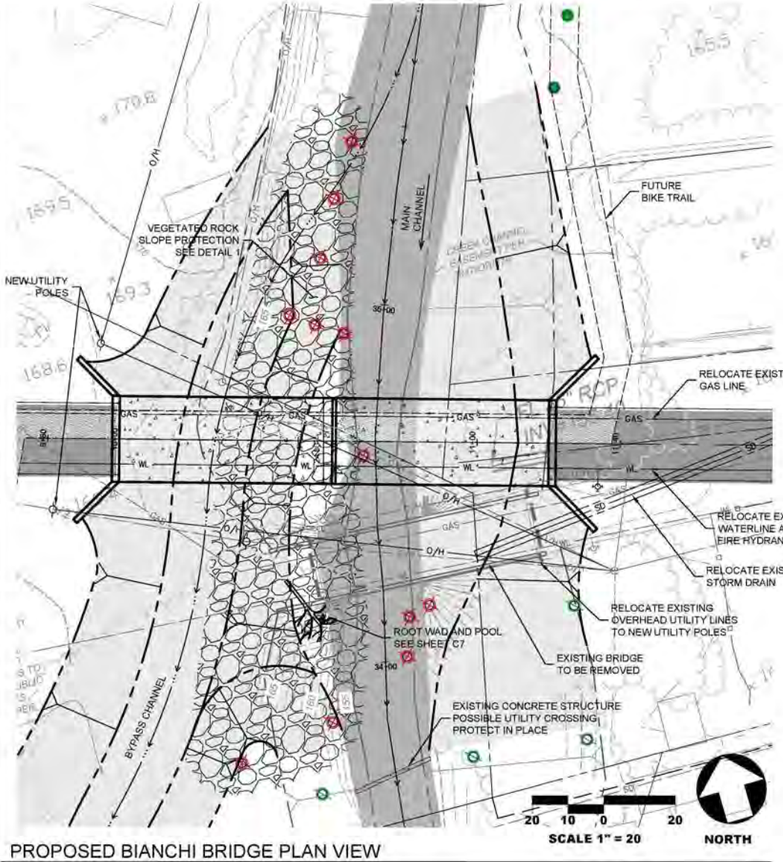
CHECKED BY: CAC

APPROVED BY: CAC

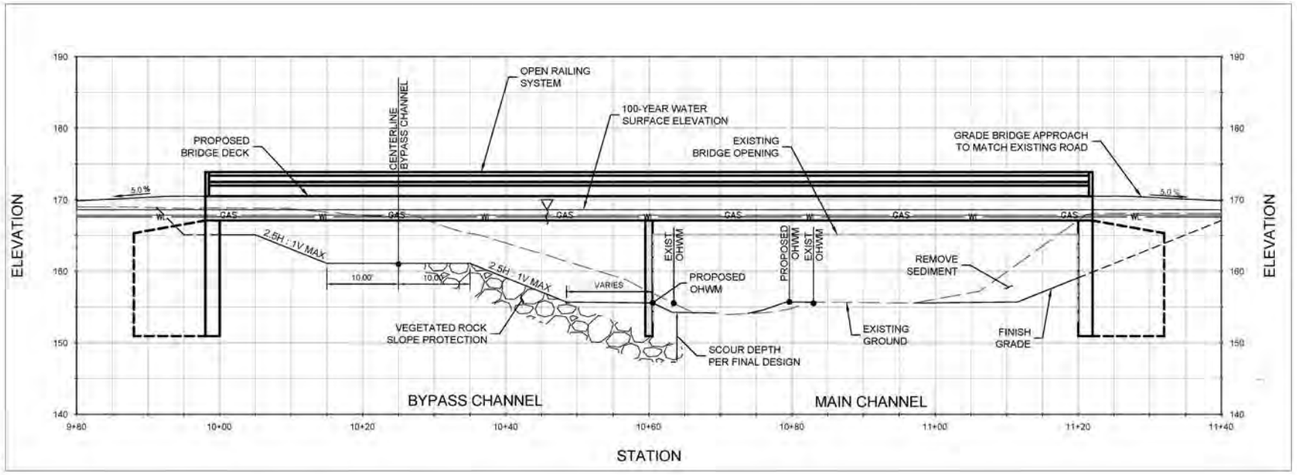
DATE: 11/21/2014

CITY SPECIFICATION NO: 90649

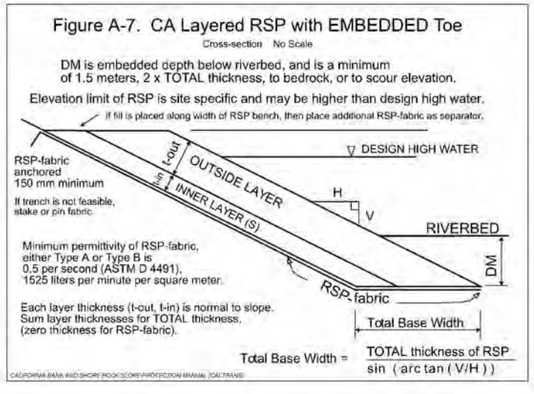
SHEET NO.: C5 OF 15



PROPOSED BIANCHI BRIDGE PLAN VIEW



PROPOSED BIANCHI BRIDGE PROFILE, LOOKING UPSTREAM



VEGETATED ROCK SLOPE PROTECTION NOTES

1. ROCK SLOPE PROTECTION SHALL BE PLACED AND CONSTRUCTED IN CONFORMANCE WITH THE PROVISIONS OF SECTION 72 "SLOPE PROTECTION" OF THE CALTRANS STANDARD SPECIFICATIONS.
2. VOIDS IN THE ROCK SLOPE PROTECTION ARE TO BE FILLED WITH NATIVE SOIL IN PREPARATION FOR PLANTING.
3. REFER TO VEGETATION ENHANCEMENT PLAN SHEETS FOR PLANT TYPES.
4. PLANTING SEQUENCING: PLACE ROCK, COVER WITH SOIL AND WATER-JET SOIL INTO VOIDS BETWEEN ROCKS. REPEAT UNTIL TOTAL RSP DEPTH IS REACHED. FORM PLANTING HOLE, PLACE VEGETATION, AND WATER THOROUGHLY.

1 VEGETATED ROCK SLOPE PROTECTION DETAILS

NTS

LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN, PROTECT IN PLACE
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- EXISTING TREE TO BE REMOVED
- TEMPORARY FENCE (TYPE ESA)
- EXISTING TOE/TOP OF SLOPE
- PROPOSED TOE/TOP OF SLOPE
- FLOWLINE
- ORDINARY HIGH WATER MARK (OHWM)
- PARCEL LINE FROM CITY GIS
- EXISTING WATER LINE
- EXISTING GRAVITY SEWER LINE
- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE

PRELIMINARY NOT FOR CONSTRUCTION

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ENGINEER OF RECORD
REGISTERED PROFESSIONAL ENGINEER CRAIG A. CAMPBELL No. 34405 CIVIL STATE OF CALIFORNIA
90649

DATE	△	REVISIONS: DESCRIPTION	APPROVAL: DESIGN PROFESSIONAL	CITY

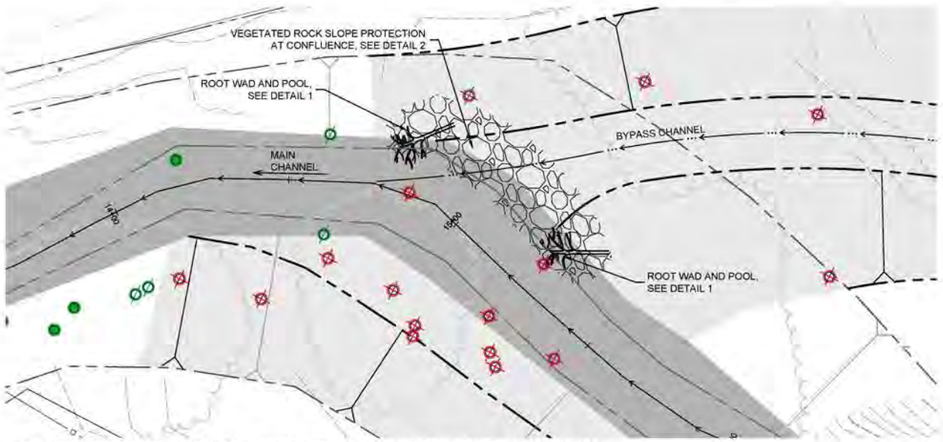
city of san luis obispo

REVISIONS
RECORD DRAWING

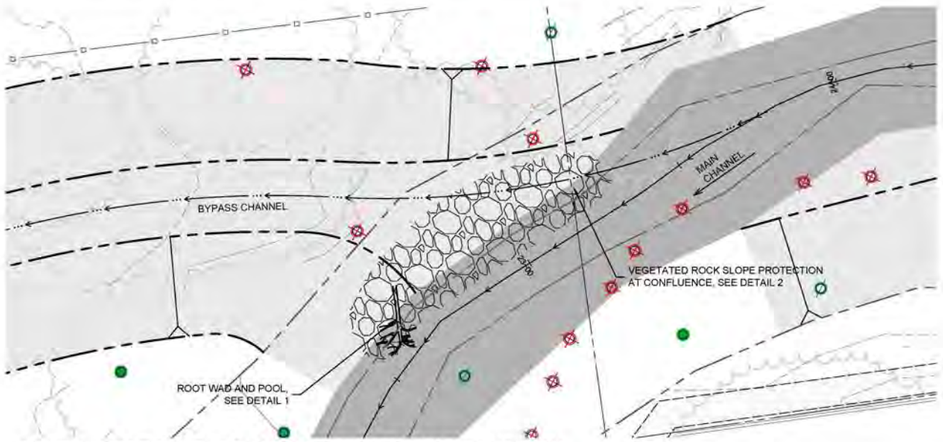
PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: PROPOSED BIANCHI BRIDGE

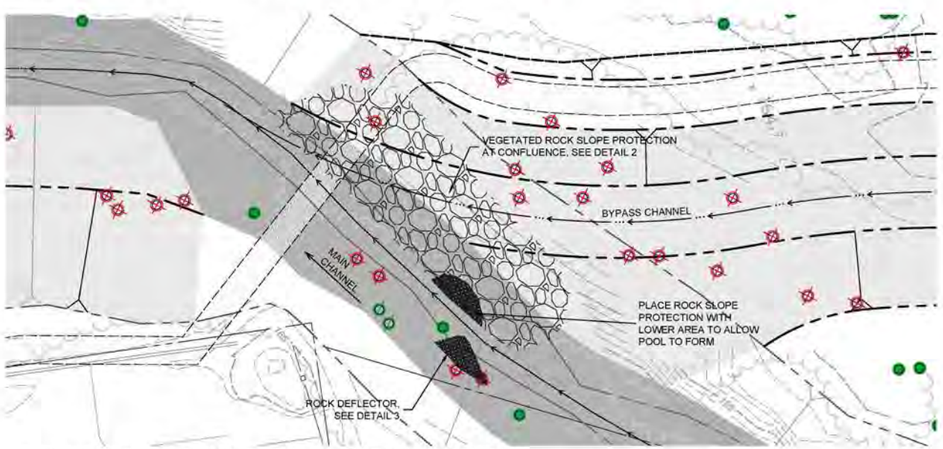
DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO. 90649
SHEET NO: C6 OF 15



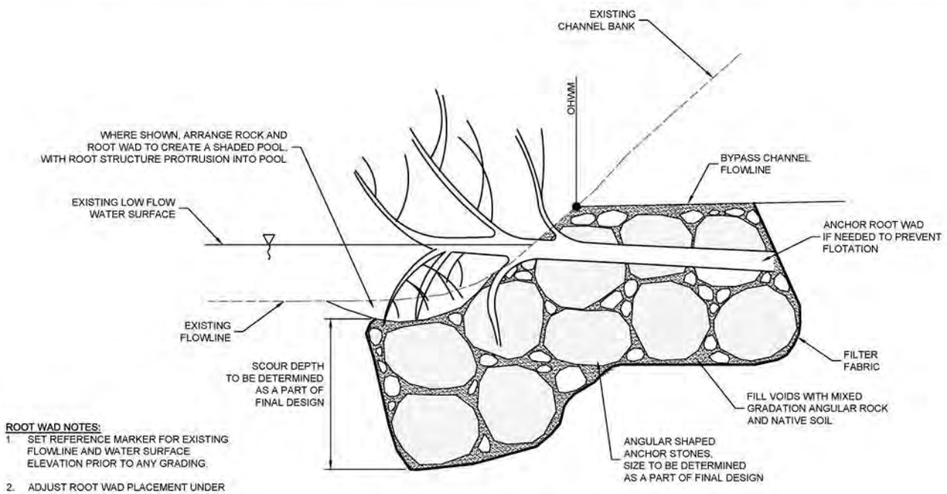
SOUTH STREET BYPASS CHANNEL DOWNSTREAM TRANSITION



SOUTH STREET BYPASS CHANNEL UPSTREAM TRANSITION



BIANCHI BYPASS CHANNEL DOWNSTREAM TRANSITION

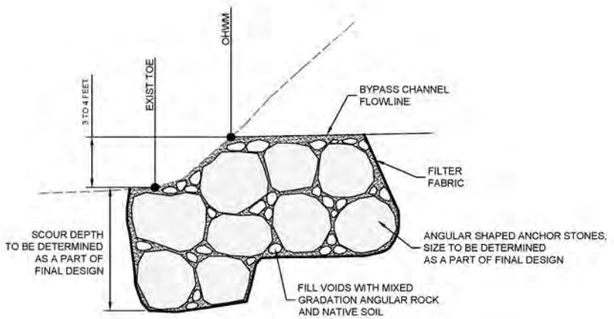


ROOT WAD NOTES:

1. SET REFERENCE MARKER FOR EXISTING FLOWLINE AND WATER SURFACE ELEVATION PRIOR TO ANY GRADING.
2. ADJUST ROOT WAD PLACEMENT UNDER THE DIRECTION OF THE ENGINEER.

1 ROOT WAD DETAIL

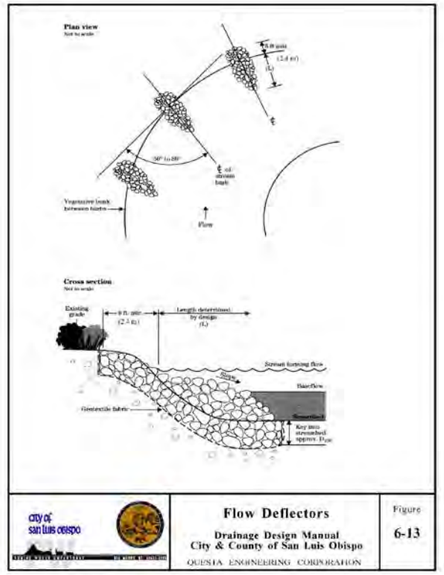
NTS



NOTE: SEE DETAIL 1 SHEET C6 FOR ADDITIONAL VEGETATED ROCK SLOPE PROTECTION REQUIREMENTS.

2 VEGETATED ROCK SLOPE PROTECTION DETAIL

NTS



3 ROCK DEFLECTOR DETAILS

NTS

NORTH

20 10 0 20

SCALE 1" = 20

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
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ENGINEER OF RECORD: 90649

REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

DATE		REVISIONS DESCRIPTION	APPROVAL DESIGN ENGINEER	APPROVAL CITY

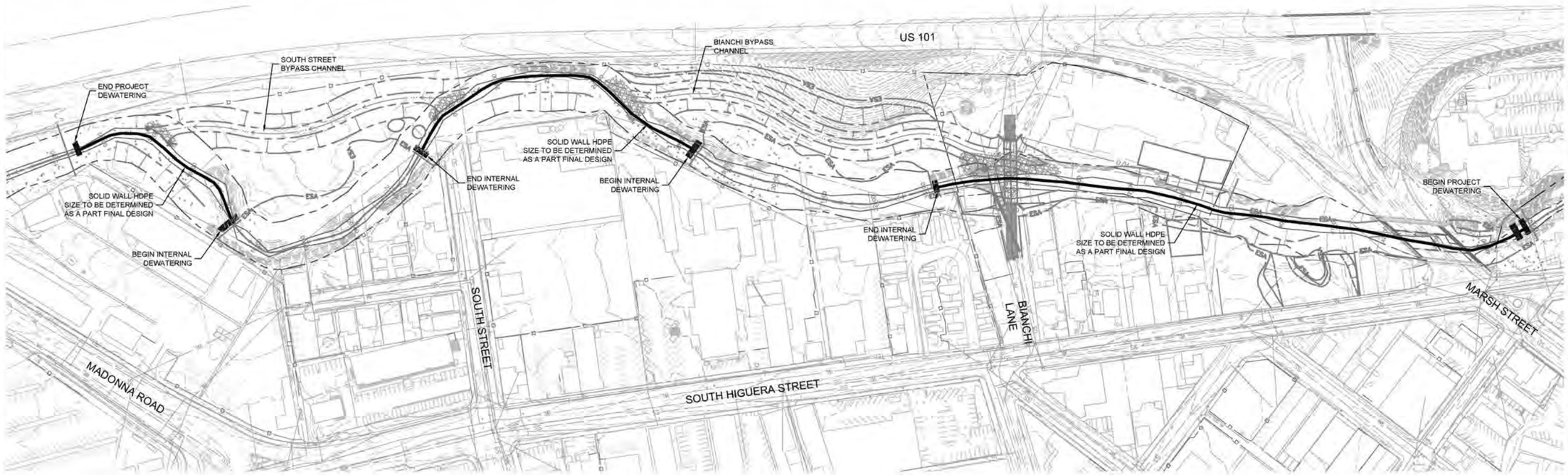
REVISIONS
RECORD DRAWING

city of san luis obispo

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: BYPASS CHANNEL TRANSITION DETAILS

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO.: 90649
SHEET NO.: C7 OF 15



DIVERSION AND DEWATERING GENERAL NOTES

1. PROVIDE DETAILED DIVERSION PLAN AND SCHEDULE, INCLUDING, BUT NOT LIMITED TO, THE STEPS OUTLINED BELOW PLUS PROCEDURES FOR MOVING THE DIVERSION PIPES IN AND OUT OF THE CREEK, TO BE APPROVED BY THE ENGINEER PRIOR TO UNDERTAKING DIVERSION AND DEWATERING OPERATIONS.
2. REFER TO CALTRANS CLEAN WATER DIVERSION NS-5 AND DEWATERING OPERATIONS NS-2 FOR DIVERSION AND DEWATERING PROCEDURES. PUMPED DIVERSION IS NOT AN OPTION.
3. WORK IN THE CREEK SHALL TAKE PLACE IN THE DEWATERED AREAS ONLY.
4. RESTORE THE CREEK FLOWLINE TO PRE-CONSTRUCTION ALIGNMENT, GRADE, AND CROSS SECTION WHEN WORK IN THE CREEK IS COMPLETE.

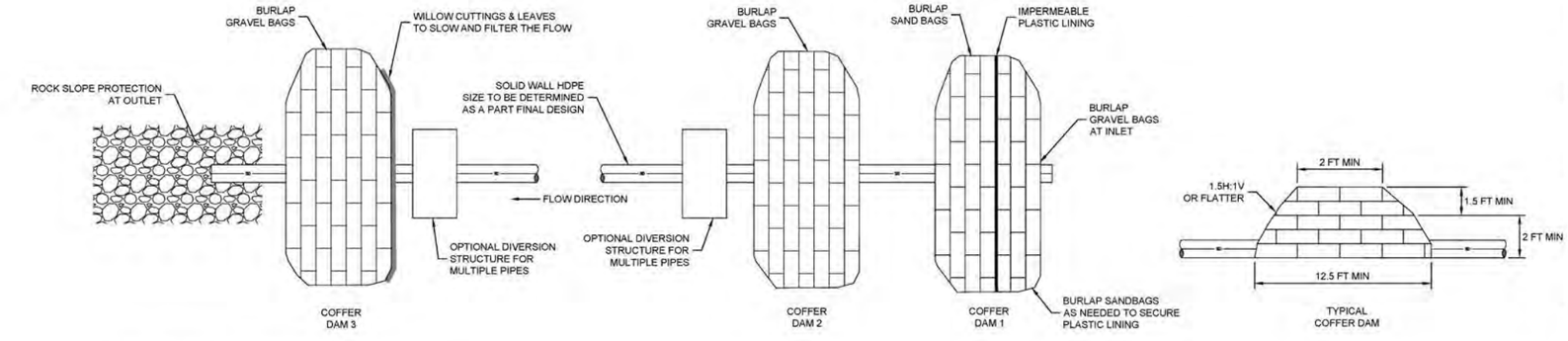
DIVERSION INSTALLATION NOTES

1. CONSTRUCT THE PROJECT DURING LOW FLOWS OR AS DIRECTED BY ENVIRONMENTAL PERMITS. ISOLATE THE WORK AREA FROM THE CREEK BY INSTALLING A TEMPORARY DIVERSION SYSTEM. MAINTAIN THE DIVERSION SYSTEM IN PLACE UNTIL CONSTRUCTION OPERATIONS ARE COMPLETE.
2. FOR WORK AREAS WHERE THE DIVERSION PIPING WILL NEED TO BE RELOCATED DURING THE COURSE OF WORK, THE DIVERSION SYSTEM SHALL UTILIZE EITHER 2-PARALLEL PIPES WITH DIVERSION STRUCTURE, OR ONE PIPE WITH RELOCATION PLAN.
3. CONSTRUCT THE DIVERSION DAM 18-INCHES ABOVE THE ANTICIPATED WATER DEPTH OF THE CREEK IN FRONT OF THE DIVERSION DAM. (WATER DEPTH TO BE DETERMINED AS A PART OF FINAL DESIGN)
4. DO NOT INTERRUPT FLOW THROUGH THE DIVERSION SYSTEM EXCEPT FOR ALLOWANCE OF DIVERTING TO AN ALTERNATIVE PIPE, IF NECESSARY.
5. THE PROJECT BIOLOGIST WILL RELOCATE FISH FROM THE ISOLATED WORK AREA PER ENVIRONMENTAL AGENCY PERMIT REQUIREMENTS. COORDINATE WITH THE BIOLOGIST REGARDING THE NECESSARY SCHEDULES, AND DO NOT PROCEED WITH WORK UNTIL CLEARANCE IS RECEIVED FROM THE BIOLOGIST.
6. AFTER THE DIVERSION SYSTEM IS IN PLACE, REMAINING WATER IN THE WORK AREA MAY BE PUMPED OUT. SCREEN THE SUCTION HOSE TO PREVENT FISH FROM BEING TAKEN INTO THE SUCTION HOSE. DO NOT ALLOW DISCHARGE TO RE-ENTER THE CREEK UNTIL SUSPENDED SOLIDS HAVE SETTLED.
7. THE CREEK BED AND FLOWLINE PROFILE MAY FLUCTUATE DURING CONSTRUCTION. MAINTAIN ADEQUATE FALL IN THE PIPE AT ALL TIMES TO CONVEY FLOW THROUGH THE DIVERSION SYSTEM.

DIVERSION REMOVAL NOTES

1. ALL CONSTRUCTION ITEMS EXCEPT DIVERSION SYSTEM REMOVAL AND CONSTRUCTION ACCESS REMOVAL SHALL BE COMPLETE PRIOR TO REMOVING DIVERSION SYSTEM.
2. REMOVE THE DIVERSION SYSTEM IN PHASES TO SLOWLY SATURATE THE LOW FLOW CHANNEL. REMOVAL MAY REQUIRE A MULTI-DAY PERIOD UNTIL THE FLOW IS ENTIRELY IN THE LOW FLOW CHANNEL.
3. PREVENT CONCENTRATED OVERFLOW FROM SCOURING THE CHANNEL DOWNSTREAM.

PLACEHOLDER - ADDITIONAL PERMIT REQUIREMENTS



1 CREEK DIVERSION DETAILS

NTS

NORTH

100' 50' 0 100'

SCALE 1" = 100'

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
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ENGINEER OF RECORD: 90649
REGISTERED PROFESSIONAL ENGINEER CRAIG A. CAMPBELL No. 34405 CIVIL STATE OF CALIFORNIA

DATE		REVISIONS DESCRIPTION	APPROVAL DESIGN ENGINEER	APPROVAL CITY

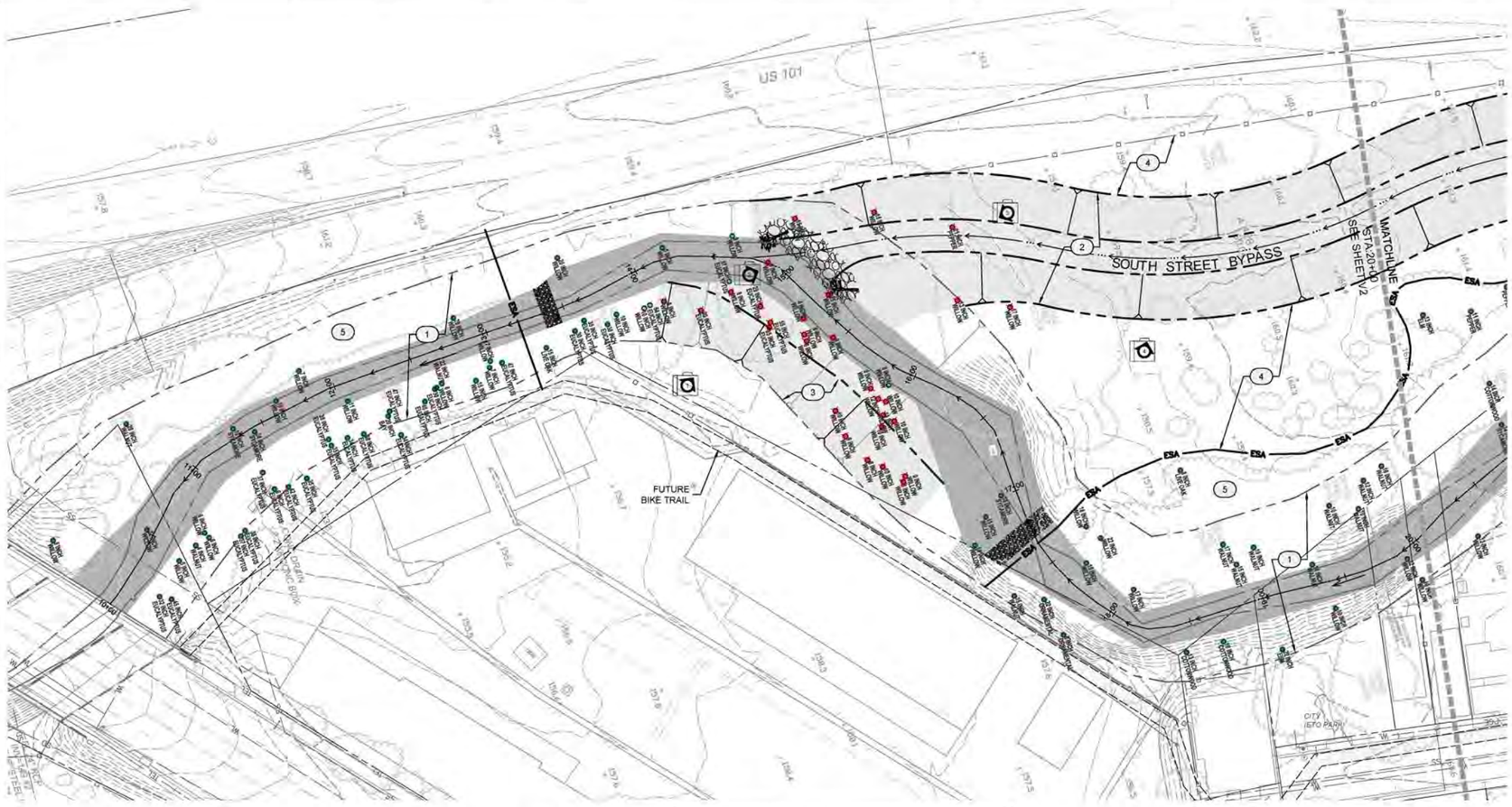
city of san luis obispo

REVISIONS
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: CREEK DIVERSION DETAILS

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO: 90649
SHEET NO.: C8 OF 15



LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN, PROTECT IN PLACE
- EXISTING TREE WITHIN GRADING AREA, REMOVAL MAY BE NECESSARY.
- EXISTING TREE TO BE REMOVED
- TEMPORARY FENCE (TYPE ESA)
- EXISTING TOE/TOP OF SLOPE
- PROPOSED TOE/TOP OF SLOPE
- FLOWLINE
- ORDINARY HIGH WATER MARK (OHWM)
- PARCEL LINE FROM CITY GIS
- EXISTING WATER LINE
- EXISTING GRAVITY SEWER LINE
- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE

VEGETATION NOTES

1. VEGETATION TRIMMING AND REMOVAL

1.a. LOCATION: FROM MADONNA ROAD BRIDGE TO150-FEET NORTH OF THE MARSH STREET BRIDGE, WITHIN THE EXISTING CREEK BANKS.
1.b. REMOVE INVASIVE EXOTIC SPECIES, INCLUDING:
1.b.1. CASTOR BEAN
1.b.2. VINCA, CAPE, OR GERMAN IVY
1.b.3. GIANT REED (ARUNDO DONAX)
1.b.4. HIMALAYAN BLACKBERRY
1.c. TRIM EXISTING VEGETATION AS SHOWN IN DETAIL 1.

2. BYPASS CHANNEL SEEDING

2.a. HYDROSEED THE BYPASS CHANNELS ALONG THE ENTIRE LENGTH AND WIDTH.
2.b. SEED MIX SHALL BE S&S SEEDS BASIC NATIVE EROSION CONTROL SEED MIX OR APPROVED EQUAL.
2.c. PROVIDE TEMPORARY IRRIGATION SYSTEM.

3. CREEK BANK PROTECTION AND SEEDING

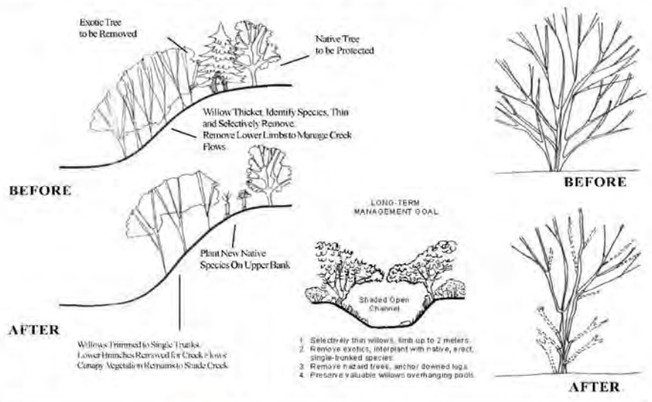
3.a. HYDROSEED OR BROADCAST SEED ALL DISTURBED SLOPES.
3.b. SEED MIX SHALL BE S&S SEEDS BASIC NATIVE EROSION CONTROL SEED MIX OR APPROVED EQUAL.
3.c. PLACE COIR EROSION CONTROL FABRIC PER DDM FIGURE 6-2.
3.d. PLANT SHRUBS AND TREES AS SHOWN IN DETAIL 1 AND UNDER THE DIRECTION OF THE CITY BIOLOGIST.
3.e. PROVIDE TEMPORARY IRRIGATION SYSTEM.

4. DISTURBED SITE AREAS

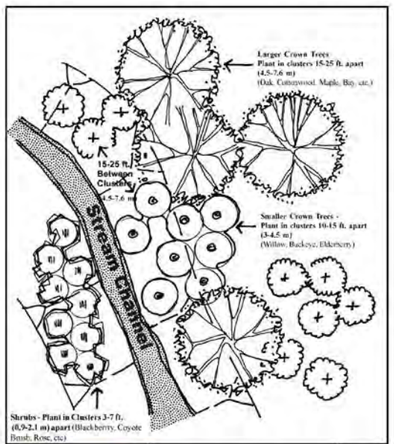
4.a. OUTSIDE OF GRADING AREAS, MINIMIZE DISTURBANCE TO EXISTING VEGETATION.
4.b. APPLY HYDROSEED TO ALL DISTURBED SITE AREAS.
4.c. SEED MIX SHALL BE S&S SEEDS BASIC EROSION CONTROL SEED MIX OR APPROVED EQUAL.
4.d. PROVIDE TEMPORARY IRRIGATION SYSTEM.

5. NO DISTURBANCE

5.a. DO NOT DISTURB AREAS BEHIND THE ESA FENCING, EXCEPT FOR THE FOLLOWING ACTIVITIES:
5.a.1. VEGETATION REMOVAL & TRIMMING USING HAND OPERATED EQUIPMENT.
5.a.2. INSPECTIONS OR MAINTENANCE OF DEWATERING SYSTEMS.



city of san luis obispo	**Vegetative Management** Drainage Design Manual City & County of San Luis Obispo QUESTA ENGINEERING CORPORATION	Figure **11-2**



city of san luis obispo	Plant Clustering Drainage Design Manual City & County of San Luis Obispo QUESTA ENGINEERING CORPORATION	Figure 11-1

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

1 VEGETATION TRIMMING AND REMOVAL DETAILS

NOTE: PLANT TYPES AND DENSITIES TO BE DETERMINED AS A PART OF FINAL DESIGN.

NTS

CONSULTANT NAME:

WALLACE GROUP

CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES
WALLACE SWANSON INTERNATIONAL

612 CLARION COURT
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www.wallacegroup.us

ENGINEER OF RECORD: 60649

REGISTERED PROFESSIONAL ENGINEER CRAIG A. CAMPBELL No. 34405 CIVIL STATE OF CALIFORNIA

DATE		REVISIONS: DESCRIPTION	APPROVAL: DEPUTY ENGINEER	CITY

city of san luis obispo

REVISIONS
RECORD DRAWING

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: VEGETATION ENHANCEMENT PLAN STA. 10+00 TO 20+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO: 90649
SHEET NO.: V1 OF 15

LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN, PROTECT IN PLACE
- EXISTING TREE WITHIN GRADING AREA, REMOVAL MAY BE NECESSARY.
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- EXISTING WATER LINE
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- EXISTING STORM DRAIN
- EXISTING UNDERGROUND GAS LINE
- EXISTING OVERHEAD UTILITY LINE LOCATION
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING UNDERGROUND CABLE TELEVISION LINE
- EXISTING UNDERGROUND TELEPHONE LINE

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2.c. PROVIDE TEMPORARY IRRIGATION SYSTEM.

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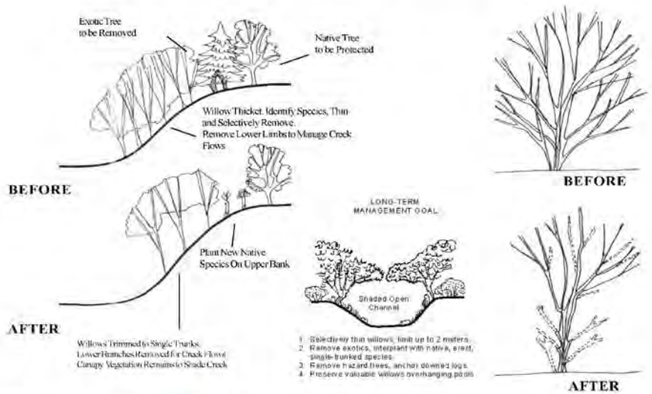
5.a.2. INSPECTIONS OR MAINTENANCE OF DEWATERING SYSTEMS.

NORTH

40 20 0 40

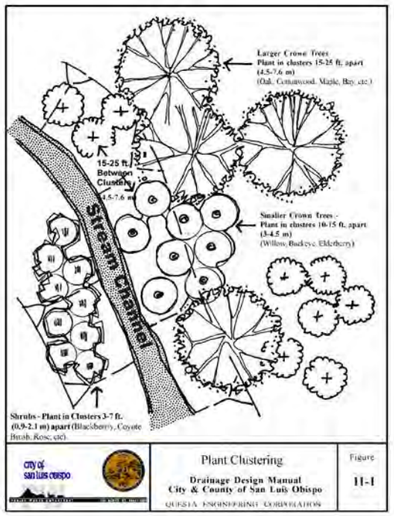
SCALE 1" = 40'



city of san luis obispo

Vegetative Management
Drainage Design Manual
City & County of San Luis Obispo
QUESTA ENGINEERING CORPORATION

Figure 11-2



city of san luis obispo

Plant Clustering
Drainage Design Manual
City & County of San Luis Obispo
QUESTA ENGINEERING CORPORATION

Figure 11-1

1 VEGETATION TRIMMING AND REMOVAL DETAILS

NOTE: PLANT TYPES AND DENSITIES TO BE DETERMINED AS A PART OF FINAL DESIGN.

NTS

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
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CONSTRUCTION MANAGEMENT
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PLANNING
PUBLIC WORKS ADMINISTRATION
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ENGINEER OF RECORD: 90649
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

DATE	△	REVISIONS DESCRIPTION	APPROVAL DESIGN ENGINEER	APPROVAL CITY

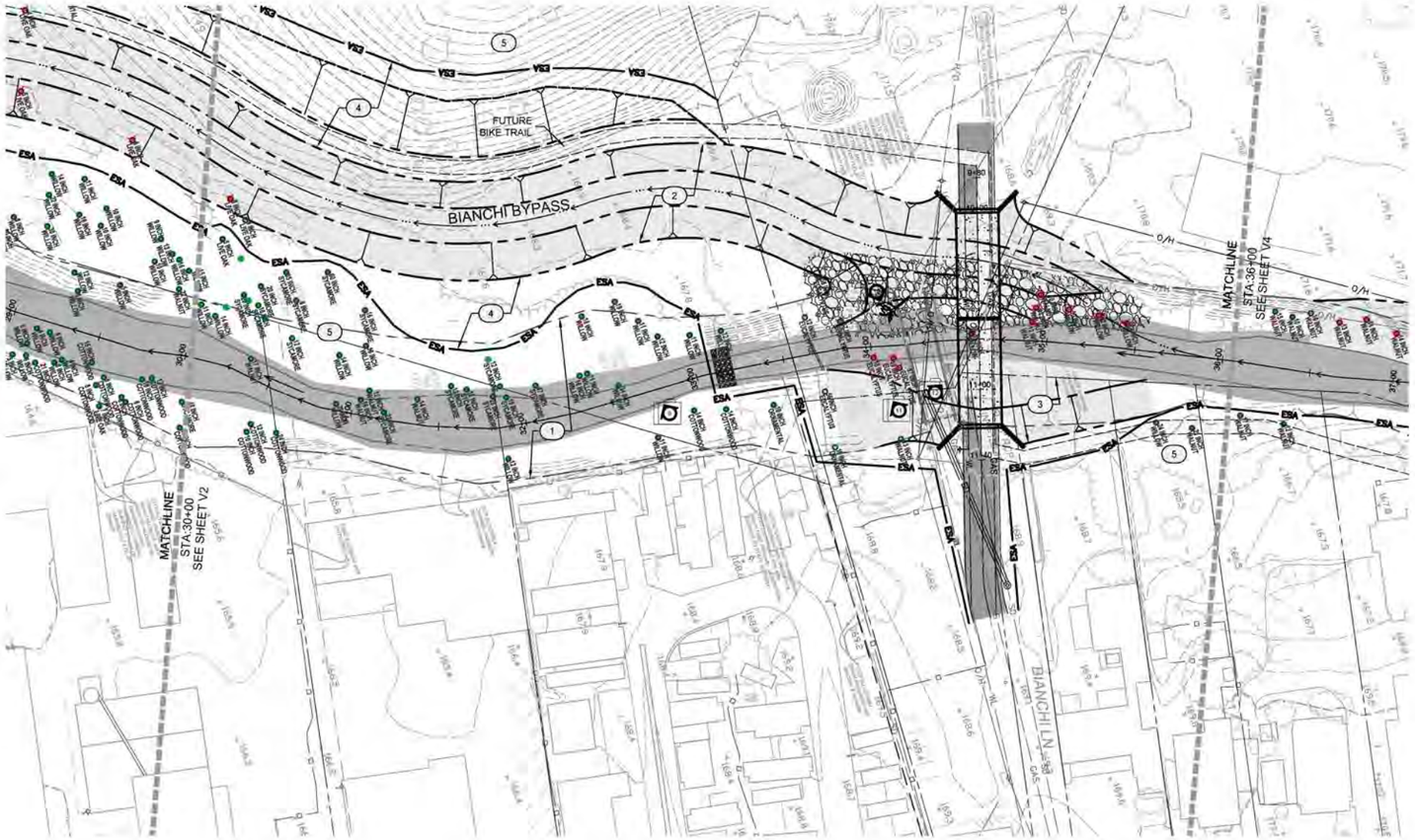
city of san luis obispo

REVISIONS:
RECORD DRAWING:

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: VEGETATION ENHANCEMENT PLAN STA.20+00 TO 30+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO. 90649
SHEET NO: V2 OF 15



LEGEND

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- EXISTING TREE TO REMAIN. PROTECT IN PLACE
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2.c. PROVIDE TEMPORARY IRRIGATION SYSTEM.

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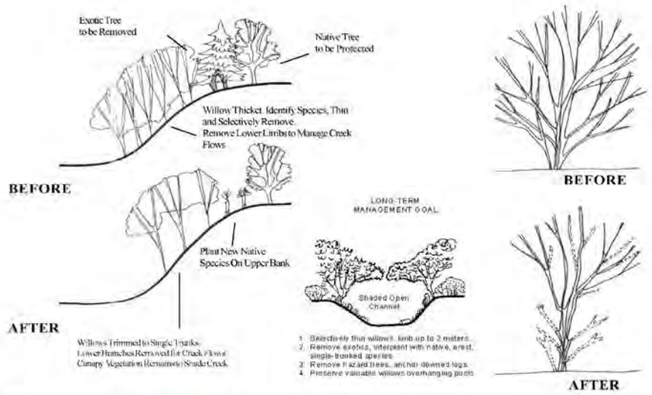
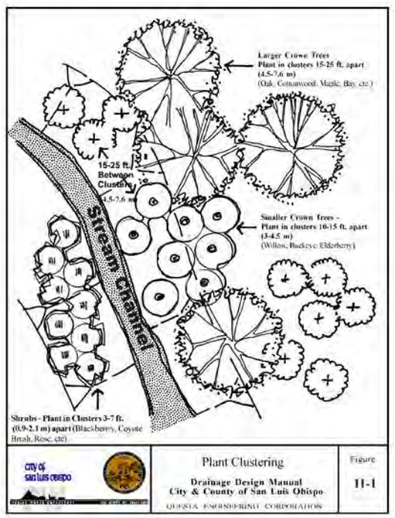
5.a.2. INSPECTIONS OR MAINTENANCE OF DEWATERING SYSTEMS.



city of san luis obispo	**Vegetative Management** Drainage Design Manual City & County of San Luis Obispo QUESTA ENGINEERING CORPORATION	Figure **11-2**



city of san luis obispo	Plant Clustering Drainage Design Manual City & County of San Luis Obispo QUESTA ENGINEERING CORPORATION	Figure 11-1

1 VEGETATION TRIMMING AND REMOVAL DETAILS

NOTE: PLANT TYPES AND DENSITIES TO BE DETERMINED AS A PART OF FINAL DESIGN.

NTS

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
WALLACE GROUP
CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
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www.wallacegroup.us

ENGINEER OF RECORD: 90649
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. CAMPBELL
No. 34405
CIVIL
STATE OF CALIFORNIA

DATE		REVISIONS: DESCRIPTION	APPROVAL: DESIGN ENGINEER	APPROVAL: CITY

REVISIONS:
RECORD DRAWING:

city of san luis obispo

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: VEGETATION ENHANCEMENT PLAN STA. 30+00 TO 36+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO. 90649
SHEET NO.

V3 OF 15

LEGEND

- PHOTO NUMBER AND DIRECTIONAL ARROW (PHOTOS UNDER SEPARATE COVER)
- EXISTING TREE TO REMAIN; PROTECT IN PLACE
- EXISTING TREE WITHIN GRADING AREA, REMOVAL MAY BE NECESSARY
- EXISTING TREE TO BE REMOVED
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- EXISTING TOE/TOP OF SLOPE
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- FLOWLINE
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- EXISTING WATER LINE
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- EXISTING OVERHEAD UTILITY LINE LOCATION
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VEGETATION NOTES

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   - 1.c. TRIM EXISTING VEGETATION AS SHOWN IN DETAIL 1.
2. BYPASS CHANNEL SEEDING
   - 2.a. HYDROSEED THE BYPASS CHANNELS ALONG THE ENTIRE LENGTH AND WIDTH.
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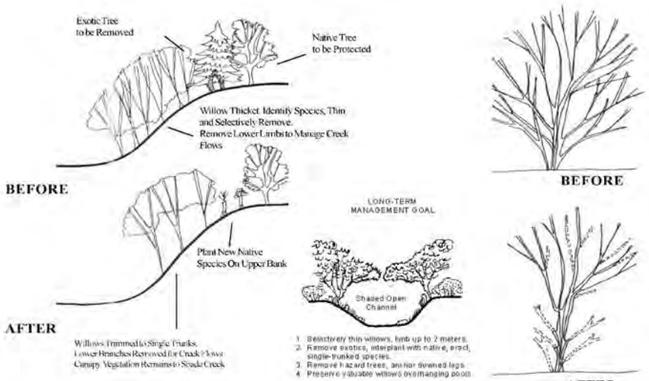
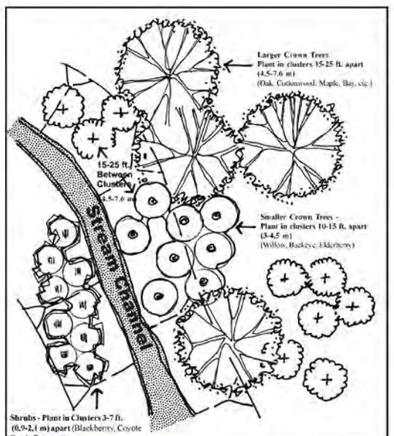
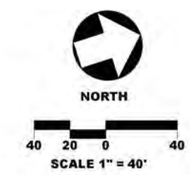


city of san luis obispo	Vegetative Management Drainage Design Manual City & County of San Luis Obispo QUESTA ENGINEERING CORPORATION	Figure 11-2



city of san luis obispo	Plant Clustering Drainage Design Manual City & County of San Luis Obispo QUESTA ENGINEERING CORPORATION	Figure 11-1



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city of san luis obispo

REVISIONS:
RECORD DRAWING:

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: VEGETATION ENHANCEMENT PLAN STA. 36+00 TO 42+00

DESIGNED BY: VGH
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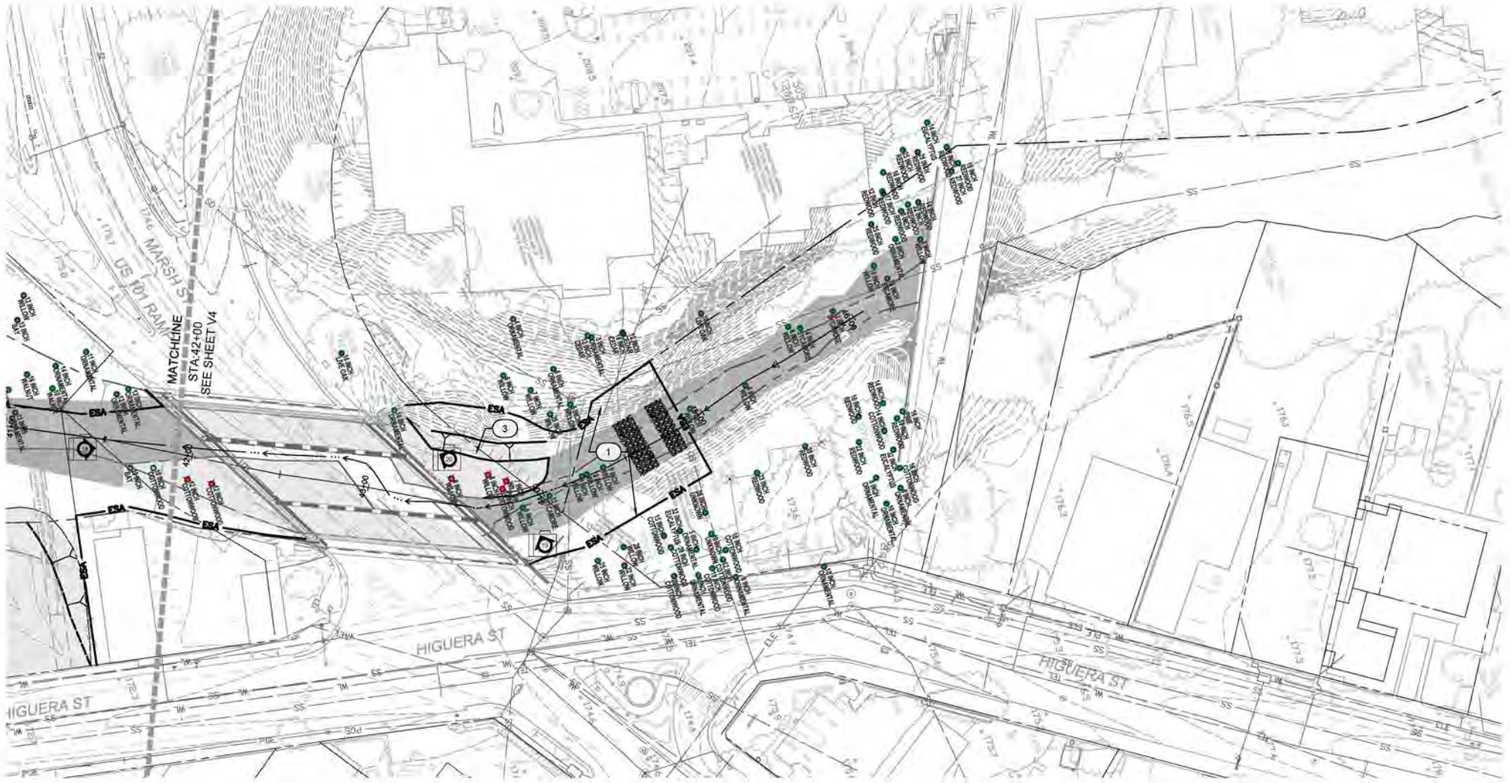
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO.: 90649
SHEET NO.: V4 OF 15



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- EXISTING STORM DRAIN
- GAS — EXISTING UNDERGROUND GAS LINE
- O/H — EXISTING OVERHEAD UTILITY LINE LOCATION
- U/E — EXISTING UNDERGROUND ELECTRICAL LINE
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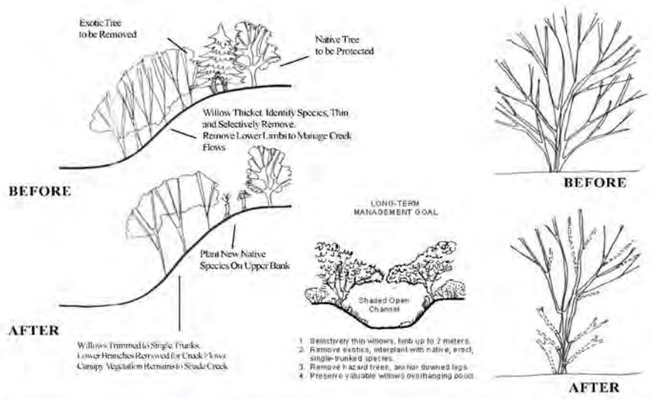
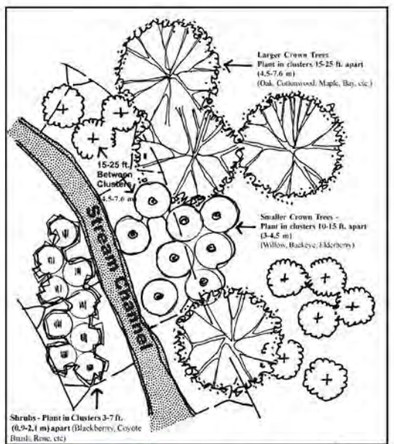
4.d. PROVIDE TEMPORARY IRRIGATION SYSTEM.

5. NO DISTURBANCE

5.a. DO NOT DISTURB AREAS BEHIND THE ESA FENCING, EXCEPT FOR THE FOLLOWING ACTIVITIES:
5.a.1. VEGETATION REMOVAL & TRIMMING USING HAND OPERATED EQUIPMENT.
5.a.2. INSPECTIONS OR MAINTENANCE OF DEWATERING SYSTEMS.



city of san luis obispo	**Vegetative Management** Drainage Design Manual City & County of San Luis Obispo QUESTA ENGINEERING CORPORATION	Figure **11-2**



city of san luis obispo	Plant Clustering Drainage Design Manual City & County of San Luis Obispo QUESTA ENGINEERING CORPORATION	Figure **11-1**

1 VEGETATION TRIMMING AND REMOVAL DETAILS

NOTE: PLANT TYPES AND DENSITIES TO BE DETERMINED AS A PART OF FINAL DESIGN.

NTS

NORTH

40 20 0 40

SCALE 1" = 40'

PRELIMINARY NOT FOR CONSTRUCTION

CONSULTANT NAME:
WALLACE GROUP
CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES
WALLACE SWANSON INTERNATIONAL
612 CLARION COURT
SAN LUIS OBISPO, CA 93401
T 805.544-4011 F 805.544-4294
www.wallacegroup.us

ENGINEER OF RECORD: 90649

REGISTERED PROFESSIONAL ENGINEER — CRAIG A. CAMPBELL — No. 34405 — CIVIL — STATE OF CALIFORNIA

DATE		REVISIONS DESCRIPTION	APPROVAL DESIGN ENGINEER	APPROVAL CITY

city of san luis obispo

REVISIONS: RECORD DRAWING:

PROJECT TITLE: MID-HIGUERA BYPASS

SHEET TITLE: VEGETATION ENHANCEMENT PLAN STA. 42+00 TO 46+00

DESIGNED BY: VGH
DRAWN BY: VGH
CHECKED BY: CAC
APPROVED BY: CAC
DATE: 11/21/2014
CITY SPECIFICATION NO: 90649
SHEET NO: V5 OF 15

Appendix C

Air Quality Background Data:
CalEEMod Datasheets

CONSTRUCTION EMISSIONS MODELING ASSUMPTIONS

Construction Schedule (Estimated Total Months):	Two 6-month periods during consecutive dry seasons	
	Exported	*Imported*
Amount of Fill to be Exported/Imported (cyds):	41440	2400
Total Area to be Disturbed (Acres):	8.37	
Total Area to be Paved (Acres):	0.055	
Demolition-Cyds of Material to be Removed:	600	593
Will the Project Require Removal of Trees?:	yes	
If so, how many and what type:	120 - willow, eucalyptus, sycam ore	
Will the Project Require Planting of New Trees?:	yes	
If so, how many and what type:	360 - sycamore, walnut, cottonwood, maple, bay	

CONSTRUCTION EMISSIONS MODELING ASSUMPTIONS

Primary Construction Activity	Acres Actively Disturbed	Cut/Fill	Construction Schedule (Estimated Days)	Equipment Use		
				Equipment Type	Quantity	Avg. Hours of Daily Use
Demolition/Removal of Bianchi Lane Bridge						
				Excavators	2	8
				Generators	1	8
				Pumps	1	8
				Concrete/Industrial Saws	1	8
				Cranes	1	8
			10	Tractors/Loaders/Backhoes	1	8
Bianchi Lane Bridge Construction						
	NA	NA		Cranes	1	8
				Excavators	2	8
				Tractors/Loaders/Backhoes	2	8
				Generators	1	8
				Welders	1	8
				Concrete/Industrial Saws	1	8
			10	Forklifts/Gradalls	1	8
Bianchi Lane Bridge Road Grading						
	0.37	3,700/0		Graders	1	8
				Tractors/Loaders/Backhoes	1	8
			5	Dozers	1	8
Bianchi Lane Bridge Paving						
	NA	NA		Pavers	1	8
				Paving Equipment	1	8
			5	Rollers	1	8
Excavation of Two New By-Pass Channels						
	South Bypass: 2.2	South Bypass: 11,500/500		Excavators	1	8
	North Bypass: 2.67	North Bypass: 17,000/500		Graders	1	8
				Dozers	1	8
				Tractors/Loaders/Backhoes	3	8
				Generators	1	8
			60	Pumps	1	8
Construction of Terraces and Benches (Grading)						
	2.68	7,140/1,400		Excavators	1	8
				Graders	1	8
				Dozers	1	8
			40	Tractors/Loaders/Backhoes	2	8
Sediment Removal at Marsh Street Bridge						
	0.45	2100/0		Excavators	1	8
				Tractors/Loaders/Backhoes	3	8
				Generators	1	8
			10	Pumps	1	8

CONSTRUCTION PHASING ASSUMPTIONS

OVERALL CONSTRUCTION DURATION: 6 Months

*Construction is anticipated to generally occur during the non-rain season (April 15-October 15), with the heaviest construction likely occurring between July and October. Overall, construction may occur in two six-month periods. To be conservative, construction emissions were quantified assuming all activities would occur within one six-month period (two construction quarters).

CONSTRUCTION ACTIVITY	CONST. QUARTER
Bianchi Lane Bridge Demolition/Removal	2
Bianchi Lane Bridge Construction	2
Bianchi Lane Grading	2
Bianchi Lane Paving	2
Excavation of Two New By-Pass Channels	1 & 2
Construction of Terraces and Benches	1
Sediment Removal at Marsh St. Bridge	1

Construction Activity	DAILY EMISSIONS (LBS)									
					PM10			PM2.5		
	ROG	NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
Bianchi Lane Bridge Demolition/Removal										
On-Site	6.3	62.8	44.7	0.1	0.3	3.4	3.7	0.1	3.2	3.3
Off-Site	0.1	0.6	1.5	0	0.2	7.6	0.2	0.1	0	0.1
Total	6.4	63.4	46.2	0.1	0.5	11	3.9	0.2	3.2	3.4
Bianchi Lane Bridge Construction										
On-Site	4.3	37.1	25.5	0	0	2.3	2.3	0	2.2	2.2
Off-Site	0.1	0.1	1	0	0.2	0	0.2	0.1	0	0.1
Total	4.4	37.2	26.5	0	0.2	2.3	2.5	0.1	2.2	2.3
Bianchi Lane Grading										
On-Site	2.6	27.5	17.8	0	6.6	1.5	8	3.4	1.4	4.7
Off-Site	0.1	0.1	1	0	0.2	0	0.2	0.1	0	0.1
Total	2.7	27.6	18.8	0	6.8	1.5	8.2	3.5	1.4	4.8
Bianchi Lane Paving										
On-Site	1.1	11.2	7.4	0	0	0.6	0.6	0	0.6	0.6
Off-Site	0.7	0.1	1	0	0.2	0	0.2	0.1	0	0.1
Total	1.8	11.3	8.4	0	0.2	0.6	0.8	0.1	0.6	0.7
Excavation of Two New By-Pass Channels										
On-Site	5	48	33.6	0.1	6.7	2.9	9.6	3.4	2.7	6.1
Off-Site	2.1	27.3	19.4	0.1	1.7	0.4	2	0.5	0.3	0.8
Total	7.1	75.3	53	0.2	8.4	3.3	11.6	3.9	3	6.9
Construction of Terraces and Benches										
On-Site	3.3	35.2	23.7	0.1	6.8	1.9	8.8	3.4	1.8	5.2
Off-Site	0.2	2.5	2.6	0	0.3	0	0.3	0.1	0	0.1
Total	3.5	37.7	26.3	0.1	7.1	1.9	9.1	3.5	1.8	5.3
Sediment Removal at Marsh St. Bridge										
On-Site	2.7	23.9	18.3	0	0	1.7	1.7	0	1.6	1.6
Off-Site	0.1	0.1	1	0	0.2	0	0.2	0.1	0	0.1
Total	2.8	24	19.3	0	0.2	1.7	1.9	0.1	1.6	1.7

** Totals may not sum due to rounding.*

Does not include mitigation.

UNMITIGATED EMISSIONS COMPARED TO SAN LUIS OBISPO APCD RECOMMENDED CEQA THRESHOLDS OF SIGNIFICANCE

	LBS/DAY		TONS/QUARTER (TIER 1)			TONS/QUARTER (TIER 1)		
	ROG+NOX	DPM**	ROG+NOX	DPM	FUGITIVE PM10	ROG+NOX	DPM	FUGITIVE PM10
MAXIMUM DAILY EMISSIONS*	220.2	9.9						
CONST. QUARTER 1			2.2	0.09	0.3	2.2	0.1	0.3
CONST. QUARTER 2			1.9	0.08	0.1	1.9	0.1	0.1
SLOAPCD THRESHOLDS	137	7	2.5	0.13	2.5	6.3	0.32	0
EXCEEDS THRESHOLDS	**YES**	**YES**	NO	NO	NO	NO	NO	NO

**Maximum daily emissions assumes excavation of by-pass channels, terrace/bench construction, sediment removal, and bridge demolition could potentially occur simultaneously on the same day.*

***Based on maximum daily emissions generated on-site assuming excavation of by-pass channels, terrace/bench construction, and sediment removal could potentially occur simultaneously..*

ESTIMATED # OF ACTIVITY DAYS	TOTAL EMISSIONS (LBS)									
					PM10			PM2.5		
	ROG	NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
Bianchi Lane Bridge Demolition/Removal										
	63	628	447	1	3	34	37	1	32	33
	1	6	15	0	2	76	2	1	0	1
10	64	634	462	1	5	110	39	2	32	34
Bianchi Lane Bridge Construction										
	43	371	255	0	0	23	23	0	22	22
	1	1	10	0	2	0	2	1	0	1
10	44	372	265	0	2	23	25	1	22	23
Bianchi Lane Grading										
	13	137.5	89	0	33	7.5	40	17	7	23.5
	0.5	0.5	5	0	1	0	1	0.5	0	0.5
5	13.5	138	94	0	34	7.5	41	17.5	7	24
Bianchi Lane Paving										
	5.5	56	37	0	0	3	3	0	3	3
	3.5	0.5	5	0	1	0	1	0.5	0	0.5
5	9	56.5	42	0	1	3	4	0.5	3	3.5
Excavation of Two New By-Pass Channels										
	300	2880	2016	6	402	174	576	204	162	366
	126	1638	1164	6	102	24	120	30	18	48
60	426	4518	3180	12	504	198	696	234	180	414
Construction of Terraces and Benches										
	132	1408	948	4	272	76	352	136	72	208
	8	100	104	0	12	0	12	4	0	4
40	140	1508	1052	4	284	76	364	140	72	212
Sediment Removal at Marsh St. Bridge										
	27	239	183	0	0	17	17	0	16	16
	1	1	10	0	2	0	2	1	0	1
10	28	240	193	0	2	17	19	1	16	17
TOTAL (LBS):	**724.5**	**7466.5**	**5288**	**17**	**832**	**434.5**	**1188**	**396**	**332**	**727.5**

** Totals may not sum due to rounding.*

Does not include mitigation.

CONSTRUCTION QUARTER	TOTAL EMISSIONS (TONS)									
					PM10			PM2.5		
	ROG	NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
Bianchi Lane Bridge Demolition/Removal										
	0.03	0.31	0.22	0.00	0.00	0.02	0.02	0.00	0.02	0.02
	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00
1	0.03	0.32	0.23	0.00	0.00	0.06	0.02	0.00	0.02	0.02
Bianchi Lane Bridge Construction										
	0.02	0.19	0.13	0.00	0.00	0.01	0.01	0.00	0.01	0.01
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.02	0.19	0.13	0.00	0.00	0.01	0.01	0.00	0.01	0.01
Bianchi Lane Grading										
	0.01	0.07	0.04	0.00	0.02	0.00	0.02	0.01	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.01	0.07	0.05	0.00	0.02	0.00	0.02	0.01	0.00	0.01
Bianchi Lane Paving										
	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavation of Two New By-Pass Channels										
	0.15	1.44	1.01	0.00	0.20	0.09	0.29	0.10	0.08	0.18
	0.06	0.82	0.58	0.00	0.05	0.01	0.06	0.02	0.01	0.02
1 & 2	0.21	2.26	1.59	0.01	0.25	0.10	0.35	0.12	0.09	0.21
Construction of Terraces and Benches										
	0.07	0.70	0.47	0.00	0.14	0.04	0.18	0.07	0.04	0.10
	0.00	0.05	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00
2	0.07	0.75	0.53	0.00	0.14	0.04	0.18	0.07	0.04	0.11
Sediment Removal at Marsh St. Bridge										
	0.01	0.12	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.01	0.12	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01
TOTAL Q1 (TONS):	**0.19**	**2.00**	**1.42**	**0.01**	**0.27**	**0.10**	**0.37**	**0.13**	**0.09**	**0.22**
TOTAL Q2 (TONS):	**0.17**	**1.73**	**1.23**	**0.00**	**0.15**	**0.12**	**0.23**	**0.07**	**0.08**	**0.15**

** Totals may not sum due to rounding.*

***Excavation of by-pass channels divided equally between construction phase 1 and 2.*

Does not include mitigation.

Construction Activity	DAILY EMISSIONS (LBS)									
					PM10			PM2.5		
	ROG	NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
Bianchi Lane Bridge Demolition/Removal										
On-Site	1.3	26.7	34.7	0.1	0	1.4	1.4	0	1.4	1.4
Off-Site	0.1	0.6	1.5	0	0.2	7.6	0.2	0.1	0	0.1
Total	1.4	27.3	36.2	0.1	0.2	9	1.6	0.1	1.4	1.5
Bianchi Lane Bridge Construction										
On-Site	1.4	19.7	26.8	0	0	1.2	1.2	0	1.2	1.2
Off-Site	0.1	0.1	1	0	0.2	0	0.2	0.1	0	0.1
Total	1.5	19.8	27.8	0	0.2	1.2	1.4	0.1	1.2	1.3
Bianchi Lane Grading										
On-Site	0.4	8.8	11.7	0	2.6	0.4	3	1.3	0.4	1.7
Off-Site	0.1	0.1	1	0	0.2	0	0.2	0.1	0	0.1
Total	0.5	8.9	12.7	0	2.8	0.4	3.2	1.4	0.4	1.8
Bianchi Lane Paving										
On-Site	0.3	5.5	8.5	0	0	0.3	0.3	0	0.3	0.3
Off-Site	0.7	0.1	1	0	0.2	0	0.2	0.1	0	0.1
Total	1	5.6	9.5	0	0.2	0.3	0.5	0.1	0.3	0.4
Excavation of Two New By-Pass Channels										
On-Site	1	20.8	28.4	0.1	2.6	1.2	3.8	1.3	1.2	2.5
Off-Site	2.1	27.3	19.4	0.1	1.7	0.4	2	0.5	0.3	0.8
Total	3.1	48.1	47.8	0.2	4.3	1.6	5.8	1.8	1.5	3.3
Construction of Terraces and Benches										
On-Site	0.7	13.1	18	0	2.7	0.7	3.3	1.3	0.7	2
Off-Site	0.2	2.5	2.6	0	0.3	0	0.3	0.1	0	0.1
Total	0.9	15.6	20.6	0	3	0.7	3.6	1.4	0.7	2.1
Sediment Removal at Marsh St. Bridge										
On-Site	0.6	13.7	19.1	0	0	0.9	0.9	0	0.9	0.9
Off-Site	0.1	0.1	1	0	0.2	0	0.2	0.1	0	0.1
Total	0.7	13.8	20.1	0	0.2	0.9	1.1	0.1	0.9	1

** Totals may not sum due to rounding.*

Mitigation includes use of heavy-duty off-road equipment meeting Tier 3 emission standards, which were phased-in from 2006 to 2008; watering of exposed areas/on-site unpaved roads for the control of fugitive dust emissions; and onsite speed limit of 15 mph.

MITIGATED EMISSIONS COMPARED TO SAN LUIS OBISPO APCD RECOMMENDED CEQA THRESHOLDS OF SIGNIFICANCE

	LBS/DAY		TONS/QUARTER (TIER 1)			TONS/QUARTER (TIER 1)		
	ROG+NOX	DPM**	ROG+NOX	DPM	FUGITIVE PM10	ROG+NOX	DPM	FUGITIVE PM10
MAXIMUM DAILY EMISSIONS*	111	4						
CONST. QUARTER 1			1.2	0.04	0.1	1.2	0.0	0.1
CONST. QUARTER 2			1.1	0.03	0.1	1.1	0.0	0.1
SLOAPCD THRESHOLDS	137	7	2.5	0.13	2.5	6.3	0.32	0
EXCEEDS THRESHOLDS	NO	NO	NO	NO	NO	NO	NO	NO

**Maximum daily emissions assumes excavation of by-pass channels, terrace/bench construction, sediment removal, and bridge demolition could potentially occur simultaneously on the same day.*

***Based on maximum daily emissions generated on-site assuming excavation of by-pass channels, terrace/bench construction, and sediment removal could potentially occur simultaneously..*

ESTIMATED # OF ACTIVITY DAYS	TOTAL EMISSIONS (LBS)									
					PM10			PM2.5		
	ROG	NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
Bianchi Lane Bridge Demolition/Removal										
	13	267	347	1	0	14	14	0	14	14
	1	6	15	0	2	76	2	1	0	1
10	14	273	362	1	2	90	16	1	14	15
Bianchi Lane Bridge Construction										
	14	197	268	0	0	12	12	0	12	12
	1	1	10	0	2	0	2	1	0	1
10	15	198	278	0	2	12	14	1	12	13
Bianchi Lane Grading										
	2	44	58.5	0	13	2	15	6.5	2	8.5
	0.5	0.5	5	0	1	0	1	0.5	0	0.5
5	2.5	44.5	63.5	0	14	2	16	7	2	9
Bianchi Lane Paving										
	1.5	27.5	42.5	0	0	1.5	1.5	0	1.5	1.5
	3.5	0.5	5	0	1	0	1	0.5	0	0.5
5	5	28	47.5	0	1	1.5	2.5	0.5	1.5	2
Excavation of Two New By-Pass Channels										
	60	1248	1704	6	156	72	228	78	72	150
	126	1638	1164	6	102	24	120	30	18	48
60	186	2886	2868	12	258	96	348	108	90	198
Construction of Terraces and Benches										
	28	524	720	0	108	28	132	52	28	80
	8	100	104	0	12	0	12	4	0	4
40	36	624	824	0	120	28	144	56	28	84
Sediment Removal at Marsh St. Bridge										
	6	137	191	0	0	9	9	0	9	9
	1	1	10	0	2	0	2	1	0	1
10	7	138	201	0	2	9	11	1	9	10

** Totals may not sum due to rounding.*

Mitigation includes use of heavy-duty off-road equipment meeting Tier 3 emission standards, which were phased-in from 2006 to 2008; watering of exposed areas/on-site unpaved roads for the control of fugitive dust emissions; and onsite speed limit of 15 mph.

CONSTRUCTION QUARTER	TOTAL EMISSIONS (TONS)									
					PM10			PM2.5		
	ROG	NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
Bianchi Lane Bridge Demolition/Removal										
	0.01	0.13	0.17	0.00	0.00	0.01	0.01	0.00	0.01	0.01
	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00
2	0.01	0.14	0.18	0.00	0.00	0.05	0.01	0.00	0.01	0.01
Bianchi Lane Bridge Construction										
	0.01	0.10	0.13	0.00	0.00	0.01	0.01	0.00	0.01	0.01
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.01	0.10	0.14	0.00	0.00	0.01	0.01	0.00	0.01	0.01
Bianchi Lane Grading										
	0.00	0.02	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.02	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Bianchi Lane Paving										
	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavation of Two New By-Pass Channels										
	0.03	0.62	0.85	0.00	0.08	0.04	0.11	0.04	0.04	0.08
	0.06	0.82	0.58	0.00	0.05	0.01	0.06	0.02	0.01	0.02
1 & 2	0.09	1.44	1.43	0.01	0.13	0.05	0.17	0.05	0.05	0.10
Construction of Terraces and Benches										
	0.01	0.26	0.36	0.00	0.05	0.01	0.07	0.03	0.01	0.04
	0.00	0.05	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00
1	0.02	0.31	0.41	0.00	0.06	0.01	0.07	0.03	0.01	0.04
Sediment Removal at Marsh St. Bridge										
	0.00	0.07	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.07	0.10	0.00	0.00	0.00	0.01	0.00	0.00	0.01
TOTAL Q1 (TONS):	**0.07**	**1.10**	**1.23**	**0.00**	**0.13**	**0.04**	**0.16**	**0.06**	**0.04**	**0.10**
TOTAL Q2 (TONS):	**0.06**	**0.99**	**1.09**	**0.00**	**0.07**	**0.08**	**0.11**	**0.03**	**0.04**	**0.07**

** Totals may not sum due to rounding.*

***Excavation of by-pass channels divided equally between construction phase 1 and 2.*

Mitigation includes use of heavy-duty off-road equipment meeting Tier 3 emission standards, which were phased-in from 2006 to 2008; watering of exposed areas/on-site unpaved roads for the control of fugitive dust emissions; and onsite speed limit of 15 mph.

Appendix D

Biological Resources Background Data:

Botanical Species Observed

Wildlife Species Observed

Species with Potential to Occur Table

Photo-documentation

CRLF Programmatic Biological Opinion Minimization Measures

Wildlife						
Scientific Name	Common Name	Status		Habitat Requirements	Potential to Occur?	Observed?
		Federal	State			
Amphibians						
Rana boylii	foothill yellow-legged frog	None	SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	**Very low potential**. Suitable habitat present, although the most recent CNDDB record in the vicinity is from Reservoir Canyon in 1953.	**No**
Rana draytonii	California red-legged frog	T	SSC	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	**Low potential**. CRLF has been identified within SLO Creek area approximately 1 mile downstream from the project site.	**No**
Taricha torosa	Coast Range newt	None	SSC	Coastal drainages from Mendocino County to San Diego County.	**Low potential**. Appropriate habitat exists onsite, although none were observed during multiple reconnaissance surveys.	**No**
Birds						
Agelaius tricolor	tricolored blackbird	None	SSC	Requires open water, protected nesting substrate, & foraging area with insect prey within a few kilometers of the colony.	**No potential.** Suitable habitat not present.	**No**
Athene cunicularia	burrowing owl	None	SSC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.	**No potential.** Suitable habitat not present.	**No**
Buteo regalis	ferruginous hawk	None	None	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats.	**No potential.** Suitable habitat not present.	**No**
Elanus leucurus	white-tailed kite	None	None	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	**Very low potential.** Suitable habitat generally not present, although white-tailed kite has been observed in urban San Luis Obispo.	**No**
Eremophila alpestris actia	California horned lark	None	None	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	**No potential.** Suitable habitat not present.	**No**
Lanius ludovicianus	loggerhead shrike	None	SSC	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**No potential.** Suitable habitat not present	**No**
Branchiopods						
Branchinecta lynchi	vernal pool fairy shrimp	T	None	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**No potential.** Vernal pools not present.	**No**
Linderiella occidentalis	California fairy shrimp	None	None	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.	**No potential.** Vernal pools not present.	**No**
Fish						
Oncorhynchus mykiss irideus	steelhead - south-central California coast DPS	T	None	Clear, cool water with abundant instream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	**Present.** Observed annually in various reaches of San Luis Obispo Creek, including the project corridor.	**Yes**

Danaus plexippus	monarch - California overwintering population	None	None	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Potential.** Individuals, but not large populations, observed during reconnaissance surveys.	**Yes**
Polyphylla nubila	Atascadero June beetle	None	None	Known only from sand dunes in San Luis Obispo County.	**No potential.** Suitable habitat not present	**No**
Mammals						
Antrozous pallidus	pallid bat	None	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	**Low potential**. Area is disturbed regularly by adjacent business, City maintenance activities, and homeless population. No bats identified under Bianchi Lane bridge during reconnaissance surveys.	**No**
Corynorhinus townsendii	Townsend's big-eared bat	None	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. extremely sensitive to human disturbance	**No potential**. Area is disturbed regularly by businesses, City maintenance activities, and homeless population. No bats identified under Bianchi Lane bridge during reconnaissance surveys.	**No**
Eumops perotis californicus	western mastiff bat	None	SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral etc. Roosts in crevices in cliff faces, high buildings, trees & tunnels.	**No potential**. Area is riparian corridor with upland areas dominated by invasive species and nonnative grasslands. No bats identified under Bianchi Lane bridge during reconnaissance surveys.	**No**
Myotis yumanensis	Yuma myotis	None	SSC	Near ponds, streams or lakes. Roosts under siding or shingles by day, night roosts often in buildings. Maternity colonies in caves, mines, buildings or bridges.	**Low potential.** Area is disturbed regularly by businesses, City maintenance activities, and homeless population. No bats identified under Bianchi Lane bridge during reconnaissance surveys.	**No**
Taxidea taxus	American badger	None	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Preys on burrowing rodents. Digs burrows.	**Very low potential.** Small area of open land between highway and creek not likely large enough to support badger.	**No**
Mollusks						
Pyrgulopsis taylori	San Luis Obispo pyrg	None	None	Freshwater spring habitats in San Luis Obispo County	**No potential.** No springs observed within the project area.	**No**
Reptiles						
Anniella pulchra pulchra	silvery legless lizard	None	SSC	Sandy or loose loamy soils under sparse vegetation. Soils with high moisture content.	**Very low potential.** Primarily hard-packed clay soils, alluvium, and bedrock in project corridor.	**No**
Emys marmorata	western pond turtle	None	SSC	Quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	**Very low potential.** Suitable habitat not present. No pond turtles observed during multiple surveys.	**No**
Phrynosoma blainvillii	coast horned lizard	None	SSC	Frequents a wide variety of habitats; most commonly in lowlands along sandy washes with scattered low bushes	**Very low potential.** Suitable habitat not present.	**No**
Thamnopsis Hammondii	two-striped garter snake			Perennial and intermittent streams having rocky beds bordered by willow thickets or other dense vegetation. Also inhabits large sandy riverbeds, if a strip of riparian vegetation is present, and stock ponds if riparian vegetation and fish and amphibian prey are present.	**Low potential.** Marginal habitat exists within the project corridor.	**No**

Plants							
Scientific Name	Common Name	Status		CNPS Rank	Habitat Requirements	Potential to Occur?	Observed?
		Federal	State				
Dicots							
Arctostaphylos morroensis	Morro manzanita	T	None	1B.2	Chaparral, cismontane woodland, coastal scrub, on stabilized coastal dunes. 5-205 meters.	**No potential.** No manzanitas observed during multiple reconnaissance surveys.	**No**
Arctostaphylos pechoensis	Pecho manzanita	None	None	1B.2	Closed coniferous forest, chaparral, and coastal scrub on siliceous shale. 125-850 meters.	**No potential.** No manzanitas observed during multiple reconnaissance surveys.	**No**
Arctostaphylos pilosula	Santa Margarita manzanita	None	None	1B.1	Evergreen shrub; occurs in closed coniferous forest, chaparral, and cismontane woodland on shale soils. 170-1100 meters.	**No potential.** No manzanitas observed during multiple reconnaissance surveys.	**No**
Astragalus didymocarpus var. milesianus	Miles' milk-vetch	None	None	1B.2	Annual herb; Occurs in coastal scrub on clay soils. 20-90 meters.	**Very low potential.** Suitable habitat generally absent.	**No**
Calystegia subacaulis ssp. episcopalis	Cambria morning-glory	None	None	1B.2	Grassland and rocky areas associated with chaparral and cismontane woodland. 60-500 meters.	**Low potential.** Suitable habitat generally absent.	**No**
Castilleja densiflora var. obispoensis	San Luis Obispo owl's-clover	None	None	1B.2	Valley and foothill grassland. 10-215 meters	**Very low potential.** Suitable habitat generally absent.	**No**
Centromadia parryi ssp. congdonii	Congdon's tarplant	None	None	4.2	Depressional areas within valley and foothill grassland. Often occupies disturbed areas. 1-230 meters	**Very low potential.** Marginally suitable habitat present. Not observed during surveys in	**No**
Chorizanthe breweri	Brewer's spineflower	None	None	1B.2	Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest; rocky or gravelly serpentine sites; usually in barren areas. 45-800 meters	**No potential.** Suitable habitat not present.	**No**
Cirsium fontinale var. obispoense	Chorro Creek bog thistle	E	E	1B.1	Chaparral, cismontane woodlands; serpentine seeps or bogs. 35-380 meters.	**No potential.** Suitable habitat not present.	**No**
Cirsium occidentale var. lucianum	Cuesta Ridge thistle	None	None	1B.3	A perennial herb that occurs in openings among chaparral with rocky substrates and serpentinite. Often found on steep rocky slopes and road cuts. 500-750 meters.	**No potential.** Serpentinite soils not present.	**No**
Delphinium parryi ssp. eastwoodiae	Eastwood's larkspur	None	None	1B.2	A perennial herb that occurs in coastal areas with serpentinite soil. Often associated with openings in chaparral	**No potential.** Serpentinite soils not present.	**No**

					and valley and foothill grassland. 75-500 meters		
Dudleya abramsii ssp. bettinae	Betty's dudleya	None	None	1B.2	Coastal scrub, valley and foothill grassland, chaparral; rocky barren serpentine exposures. 20-180 meters	**Low potential.** Serpentinite soils not present.	**No**
Dudleya abramsii ssp. murina	mouse-gray dudleya	None	None	1B.2	Serpentine outcrops in chaparral, cismontane woodland. 90-300 meters.	**Low potential.** Serpentinite soils not present.	**No**
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None	None	1B.2	Coastal scrub, chaparral, and valley and foothill grassland habitats on rocky outcrops in clay or serpentine soils. 5-450 meters.	**Low potential.** Serpentinite soils not present.	**No**
Eryngium aristulatum var. hooveri	Hoover's button-celery	None	None	1B.3	Vernal pools in alkaline depressions near the coast. 5-45 meters.	**No potential.** Vernal pools not present.	**No**
Horkelia cuneata var. puberula	mesa horkelia	None	None	1B.1	Perennial herb that occurs in chaparral, cismontane woodlands, coastal scrub; in sandy or gravelly sites. 70-810 meters.	**Low potential.** Suitable habitat generally absent.	**No**
Layia jonesii	Jones' layia	None	None	1B.1	Chaparral and valley and foothill grassland on clay or serpentine outcrops. 5-400 meters.	**Low potential.** Suitable habitat generally absent.	**No**
Monardella palmeri	Palmer's monardella	None	None	1B.1	Chaparral and cismontane woodland on serpentine slopes. 200-800 meters	**No potential.** Suitable habitat not present.	**No**
Plagiobothrys uncinatus	hooked popcornflower	None	None	1B.2	Annual herb occurs in chaparral, cismontane woodland, and valley and foothill grassland with sandy soils. 300-760 meters	**Low potential.** Suitable habitat generally absent.	**No**
Sanicula maritima	adobe sanicle	None	Rare	1B.2	Moist seeps within coastal prairie, chaparral, meadows, and valley and foothill grassland habitats in clay or serpentine soils. 30-240 meters	**Low potential.** Suitable habitat generally absent.	**No**
Senecio aphanactis	chaparral ragwort	None	None	1B.2	Chaparral, cismontane woodlands; coastal scrub/ alkaline. 15-800 meters	**Low potential.** Suitable habitat generally absent.	**No**
Sidalcea hickmanii ssp. anomala	Cuesta Pass checkerbloom	None	Rare	1B.1	Closed-cone coniferous forest with rocky serpentine slopes. 600-800 meters	**No potential.** Suitable habitat not present.	**No**
Streptanthus albidus ssp. peramoenus	most beautiful jewelflower	None	None	2B.2	Chaparral, cismontane woodlands, valley and foothill grasslands on serpentine soil. 110-1000 meters	**No potential.** Suitable habitat not present.	**No**
Trifolium hydrophilum	saline clover	None	None	1B.2	Annual herb that occurs in marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools. 0-300 meters.	**No potential.** Suitable habitat not present.	**No**
Herbaceous							
Serpentine Bunchgrass	Serpentine Bunchgrass	None	None	None	An open grassland community that is dominated by perennial bunch grasses. Typically, total cover is low but native species' dominate the	**No potential.** Suitable habitat not present.	**No**

					composition. Always occurring on serpentine substrates.		
Marsh							
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	None	None	None	A wetland community that is found in areas of permanently or prolonged freshwater saturation without significant current or flow. Vegetation is dominated by perennial emergent monocots including cattails and rushes	**No potential.** No coastal and freshwater marsh communities identified during reconnaissance surveys.	**No**
Monocots							
Calochortus obispoensis	San Luis mariposa-lily	None	None	1B.2	Chaparral, coastal scrub, valley and foothill grassland. Often in serpentine grassland. 75-665 meters	**No potential.** Suitable habitat not present.	**No**
Calochortus simulans	La Panza mariposa-lily	None	None	1B.3	Chaparral, cismontane woodlands, lower montane coniferous forest, valley and foothill grassland; often in sandy, granitic, or serpentine soils. 395-1100 meters	**No potential.** Suitable habitat not present.	**No**
Carex obispoensis	San Luis Obispo sedge	None	None	1B.2	Closed cone coniferous forests, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. Usually adjacent to seeps, springs, stream sides or other water source with sand, clay or serpentine. 5-790 meters	**No potential.** Suitable habitat not present.	**No**
Chlorogalum pomeridianum var. minus	dwarf soaproot	None	None	1B.2	Chaparral habitats with serpentine soils. 305-1000 meters	**No potential.** Suitable habitat not present.	**No**
Fritillaria ojaiensis	Ojai fritillary	None	None	1B.2	Broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland. Usually loamy soil. Sometimes on serpentine; sometimes along roadsides. 225-1000 metrers	**Low potential.** Suitable habitat generally absent.	**No**
Fritillaria viridea	San Benito fritillary	None	None	1B.2	Chaparral on serpentine slopes; elev. 200-1525 meters.	**No potential.** Suitable habitat not present.	**No**

E = Endangered
T = Threatened
SSC =Species of Special Concern
CNPS Rank 1B= Plants Rare, Threatened, or Endangered in California and Elsewhere
0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Mid-Higuera Biological Resources Photo-documentation

Photo 1. Looking downstream through the active "channel" of the Marsh Street Bridge.

Photo 2. Looking north across the Flow Return area. South Higuera Street is on the right.

Photo 3. Looking southwest at the existing Bianchi Lane Bridge abutment. This area would be the upstream confluence of San Luis Obispo Creek and the Bianchi Bypass. Creek flows right to left.

Photo 4. Looking north at the Bianchi Bypass area. The alignment roughly follows the existing “trail” in the center of the picture. San Luis Obispo Creek is to the right side, out of the photo, Highway 101 to the left, also out of the photo.

Photo 5. Looking south and downstream at the proposed bench between the Bianchi and South Street Bypasses. A sacrete wall and the northbound Highway 101 guardrail are visible photo right. This is an area where tree removal is assumed for impact calculation, but it may be feasible to protect some of the trees in place during construction.

Photo 6. Looking south at the proposed South Street Bypass area. The San Luis Obispo Creek riparian corridor is visible on the far left, Highway 101 is to the right, out of the photo. This area, between the existing riparian corridor and the new bypass channel provides opportunities to remove nonnative species and enhance the riparian corridor.

Photo 7. Looking south/downstream at a typical section of San Luis Obispo Creek within the project area. The Bianchi Lane Bridge is in the center of the photo. This area is near the “pinch point” between the Flow Return and the Bianchi Lane Bridge.

Wildlife Species Observed or Detected on the Mid-Higuera Bypass Project

Scientific Name	Common Name
Fishes	
Rhinichthys osculus	Speckled dace
Oncorhynchus mykiss	South-central California coast steelhead
Amphibians	
Pseudacris regilla	Pacific Chorus Frog
Reptiles	
Sceloporus occidentalis	Western Fence Lizard
Elgaria multicarinata	Southern Alligator Lizard
Birds	
Ardea herodias	Great Blue Heron
Cathartes aura	Turkey Vulture
Anas platyrhynchos	Mallard
Buteo lineatus	Red-shouldered Hawk
Buteo jamaicensis	Red-tailed Hawk
Streptopelia decaocto	Eurasian Collared-Dove
Calypte anna	Anna's Hummingbird
Picoides nuttallii	Nuttall's Woodpecker
Empidonax difficilis	Pacific Slope Flycatcher
Sayornis nigricans	Black Phoebe
Cyanocitta stelleri	Steller's Jay
Aphelocoma californica	Western Scrub-Jay
Corvus brachyrhynchos	American Crow
Stelgidopteryx serripennis	Northern Rough-winged Swallow
Hirundo rustica	Barn Swallow
Poecile rufescens	Chestnut-backed Chickadee
Psaltriparus minimus	Bushtit
Thryomanes bewickii	Bewick’s Wren
Turdus migratorius	American Robin
Mimus polyglottos	Northern Mockingbird
Sturnus vulgaris	European Starling
Geothlypis trichas	Common Yellowthroat
Wilsonia pusilla	Wilson's Warbler
Piranga ludoviciana	Western Tanager
Pipilo crissalis	California Towhee
Melospiza melodia	Song Sparrow
Pheucticus melanocephalus	Black-headed Grosbeak
Carpodacus mexicanus	House Finch
Passer domesticus	House Sparrow
Setophaga townsendi	Townsend’s Warbler
Bombycilla cedrorum	Cedar Waxwing
Zenaida macroura	Mourning Dove
Setophaga coronate	Yellow-Rumped Warbler
Lonchura punctulata	Scaly-Breasted Munia/Nutmeg Mannikin
Thryomanes bewickii	Bewick’s wren

Mammals

Sciurus griseus	Western Gray Squirrel
Spermophilus beecheyi	California ground squirrel

Floral Checklist for the Mid-Higuera Bypass Project

Scientific Name[1]	**Common Name[2]**
EQUISETACEAE	HORSETAIL FAMILY
Equisetum telmateia var. *braunii*	giant horsetail
PINACEAE	PINE FAMILY
Pinus radiata	Monterey pine
ACERACEAE	MAPLE FAMILY
Acer macrophyllum	big-leaf maple
ADOXACEAE	ADOXAS FAMILY
Sambucus nigra ssp. caerulea	blue elderberry
ANACARDIACEAE	SUMAC or CASHEW FAMILY
*Schinus molle**	Peruvian pepper tree
Toxicodendron diversilobum	western poison oak
APIACEAE	CARROT FAMILY
*Apium graveolens**	garden celery
*Conium maculatum**	poison hemlock
*Foeniculum vulgare**	fennel
APOCYNACEAE	DOGBANE FAMILY
Vinca major	greater periwinkle
ASTERACEAE	SUNFLOWER FAMILY
Ambrosia psilostachya	western ragweed
Artemisia californica	California sagebrush
Artemisia douglasiana	mugwort
Baccharis pilularis	coyote brush
Conyza canadensis	horseweed
*Carduus pycnocephalus**	Italian thistle
*Delairea odorata**	cape ivy
*Helminthotheca echioides**	bristly ox-tongue
*Lactuca serriola**	prickly lettuce
*Silybum marianum**	milk thistle
*Taraxacum officinale**	
*Tragopogon porrifolius**	salsify, oyster plant
ARALIACEAE	ARALIA FAMILY
*Hedera helix**	English Ivy
ARACEAE	ARUM FAMILY
*Zantedeschia aethiopica**	Calla lily

[1] Exotic species are signified by an asterisk (*)

[2] Scientific and common names of plants are according to Jepson Flora Project**:** Jepson Interchange for California Floristics, 2008

BETULACEAE	BIRCH FAMILY
Alnus rhombifolia	white alder
BORAGINACEAE	BORAGE FAMILY
Pholistoma auritum	Fiesta flower
BRASSICACEAE	MUSTARD FAMILY
Brassica sp.*	mustard
Nasturtium officinale	water cress
*Raphanus sativus**	radish
CONVOLVULACEAE	MORNING-GLORY FAMILY
*Convolvulus arvensis**	bindweed
EUPHORBIACEAE	SPURGE FAMILY
*Ricinus communis**	castor bean
FABACEAE	LEGUME FAMILY
*Cytisus scoparius**	Scotch broom
Hoita macrostachya	leather-root
*Lathyrus odoratus**	sweet pea
Lupinus succulentus	arroyo lupine
*Medicago polymorpha**	California burclover
*Melilotus indicus**	annual yellow sweetclover
*Robinia pseudoacacia**	black locust
*Trifolium hirtum**	rose clover
Vicia villosa ssp. *varia**	winter vetch
FAGACEAE	OAK FAMILY
Quercus agrifolia	coast live oak
Quercus kelloggii	black oak
Quercus lobata	valley oak
GERANIACEAE	GERANIUM FAMILY
*Erodium cicutarium**	storksbill, filaree
*Geranium dissectum**	
HIPPOCASTANACEAE	BUCKEYE FAMILY
Aesculus californica	California buckeye
JUGLANDACEAE	WALNUT FAMILY
Juglans californica	California black walnut
LAMIACEAE	MINT FAMILY
Mentha spicata var. *spicata**	spearmint
MALVACEAE	MALLOW FAMILY
*Malva parviflora**	cheeseweed, little mallow
MYOPORACEAE	MYOPORUM FAMILY
*Myoporum laetum**	

MYRSINACEAE	MYRSINE FAMILY
*Anagallis arvensis**	scarlet pimpernel
MYRTACEAE	MYRTLE FAMILY
*Eucalyptus globulus**	blue gum
OXALIDACEAE	WOOD SORREL FAMILY
*Oxalis pes-caprae**	Bermuda buttercup, sourgrass
PAPAVERACEAE	POPPY FAMILY
*Fumaria capreolata**	white ramping fumitory
Eschscholzia californica	California poppy
PLANTAGINACEAE	PLANTAIN FAMILY
*Plantago lanceolata**	English plantain
*Veronica anagallis-aquatica**	Water speedwell
PLATANACEAE	PLANE TREE, SYCAMORE FAMILY
Platanus racemosa	western sycamore
POLYGONACEAE	BUCKWHEAT FAMILY
*Rumex crispus**	curly dock
ROSACEAE	ROSE FAMILY
Rosa californica	California wild rosebottle
*Rubus ulmifolius**	elmleaf blackberry
Rubus ursinus	California blackberry
RUBIACEAE	MADDER FAMILY
Galium aparine	Common bedstraw
SALICACEAE	WILLOW FAMILY
Populus fremontii ssp. *fremontii*	Alamo or Fremont cottonwood
Populus balsamifera ssp. *trichocarpa*	black cottonwood
Salix lasiolepis	arroyo willow
SAPINDACEAE	SOAPBERRY FAMILY
Acer negundo	Boxelder
SOLANACEAE	NIGHTSHADE FAMILY
*Solanum nigrum**	Black nightshade
TROPAEOLACEAE	NASTURTIUM FAMILY
*Tropaeolum majus**	garden nasturtuim
TYPHACEAE	CATTAIL FAMILY
Typha sp.	cattail
URTICACEAE	NETTLE FAMILY

Urtica dioica ssp. *holosericea*	hoary nettle
ARECACEAE	PALM FAMILY
*Phoenix canariensis**	Canary Island date palm
CYPERACEAE	SEDGE FAMILY
Cyperus eragrostis	
POACEAE	GRASS FAMILY
*Arundo donax**	giant reed
*Avena barbata**	slender wild oat
*Bromus diandrus**	ripgut grass
Bromus madritensis ssp. *rubens**	
*Bromus hordeaceus**	
Cortaderia sp.*	pampas grass
*Cynodon dactylon**	Bermuda grass
Elymus glaucus	blue wildrye
Hordeum marinum ssp. *gussoneanum**	Mediterranean barley
*Lolium multiflorum**	Italian ryegrass
*Pennisetum clandestinum**	kikuyu grass
*Pennisetum setaceum**	fountain grass
*Phalaris aquatica**	Harding grass
*Piptatherum millaceum**	smilo grass
Vulpia myuros var. *hirsuta**	

Minimization Measures
CRLF Programmatic Biological Opinion between USFWS and Corps
January 26, 1999

1. At least 15 days prior to the onset of activities, the applicant or project proponent shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the Service that the biologist(s) is qualified to conduct the work.

2. A Service-approved biologist shall survey the work site two weeks before the onset of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist shall contact the Service to determine if moving any of these life-stages is appropriate. In making this determination the Service shall consider if an appropriate relocation site exists. If the Service approves moving animals, the approved biologist shall be allowed sufficient time to move California red-legged frogs from the work site before work activities begin. Only Service-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

3. Before any construction activities begin on a project, a Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the CRLF and its habitat, the importance of the CRLF and its habitat, the general measures that are being implemented to conserve the CRLF as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

4. A Service-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor on-site compliance with all minimization measures. The Service-approved biologist shall ensure that this individual receives training outlined above in measure 3 and in the identification of California red-legged frogs. The monitor and the Service-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the Corps and Service during review of the proposed action. If work is stopped, the Corps and Service shall be notified immediately by the Service-approved biologist or on-site biological monitor.

5. During project activities, all trash that may attract predators shall be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

6. All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 20 meters from any riparian habitat or water body. The Corps and permittee shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the Corps shall ensure that the permittee has prepared a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

7. A Service-approved biologist shall ensure that the spread or introduction of invasive exotic plants shall be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project areas shall be removed.

8. Project sites shall be revegetated with an appropriate assemblage of native riparian wetland and upland vegetation suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for review and approval by the Service and the Corps. Such a plan must include, but not be limited to, location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.

9. Stream contours shall be returned to their original condition at the end of project activities, unless consultation with the Service has determined that it is not beneficial to the species or feasible.

10. The number of access routes, number and size of staging areas, and the total area of the work site activity shall be limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated, and these areas shall be outside of riparian and wetland areas. Where impacts occur in these staging areas and access routes, restoration shall occur as identified in measures 8 and 9 above.

11. Work activities shall be completed between April 1 and November 1. Should the proponent or applicant demonstrate a need to conduct activities outside this period, the Corps may authorize such activities after obtaining the Service's approval.

12. To control erosion during and after project implementation, the applicant shall implement best management practices, as identified by the appropriate Regional Water Quality Control Board.

13. If a work site is to be temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than five millimeters (mm) to prevent California red-legged frogs from entering the pump system. Water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

14. A Service-approved biologist shall permanently remove, from within the project area, any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent possible. The permittee shall have the responsibility to ensure that their activities are in compliance with the California Fish and Game Code.

Appendix E

Response to Comments of the Draft EIR

RESPONSE TO COMMENTS ON THE DRAFT EIR

The Response to Comments section includes comment letters received on the Draft EIR for the Mid-Higuera Bypass Project (project). Any changes referenced in this chapter will be noted through use of strikeout and underline. These changes have been made in the text of the Final EIR as well. The following agencies, organizations, and members of the public submitted comments on the Draft EIR:

1. State of California Office of Planning and Research State Clearinghouse
2. Federal Emergency Management Agency (FEMA)
3. San Luis Obispo Air Pollution Control District
4. Christine Mulholland

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

November 8, 2016

Keith Miller
San Luis Obispo County
County Government Center, Room 207
San Luis Obispo, CA 93408

Subject: Mid-Higuera Bypass Project
SCH#: 2016021077

Dear Keith Miller:

The State Clearinghouse submitted the above named Supplemental EIR to selected state agencies for review. The review period closed on November 7, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2016021077
Project Title Mid-Higuera Bypass Project
Lead Agency San Luis Obispo County

Type SIR Supplemental EIR

Description The Mid Higuera Bypass Project would include flood control and habitat restoration activities along an approx. 0.56 mile long stretch of San Luis Obispo Creek. The project includes the construction of two bypass channels, channel terraces/benches, the replacement of the Bianchi Lane Bridge, and riparian habitat enhancement.

Lead Agency Contact

Name Keith Miller
Agency San Luis Obispo County
Phone 805-781-5714 **Fax**
email
Address County Government Center, Room 207
City San Luis Obispo **State** CA **Zip** 93408

Project Location

County San Luis Obispo
City
Region
Lat / Long 34° 16' 15.4" N / 120° 40' 18.6" W
Cross Streets Marsh Street and Madonna Road
Parcel No. 004-511-018, 003-711-025
Township 30S **Range** 12E **Section** 34 **Base**

Proximity to:

Highways 101
Airports SLO
Railways UPRR
Waterways San Luis Obispo Creek
Schools Mission Prep; Hawthorne
Land Use Open Space; Commercial Retail

Project Issues Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Noise; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Vegetation; Water Quality; Wetland/Riparian; Aesthetic/Visual; Traffic/Circulation

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 4; Department of Fish and Wildlife, Marine Region; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 5; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 3; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Date Received 09/23/2016 **Start of Review** 09/23/2016 **End of Review** 11/07/2016

KM

U.S. Department of Homeland Security
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052

FEMA

October 4, 2016

Keith Miller, Project Manager
County Department of Public Works
976 Osos Street, Room 207
San Luis Obispo, California 93408

Dear Mr. Miller:

This is in response to your request for comments regarding the Mid-Higuera Bypass Project – Notice of Availability of Draft Supplemental Environmental Impact Report (EIR) (455R277627; ED 15-151).

Please review the current effective Flood Insurance Rate Maps (FIRMs) for the County of San Luis Obispo (Community Number 060304) and City of San Luis Obispo (Community Number 060310), Maps revised November 16, 2012. Please note that the City of San Luis Obispo, San Luis Obispo County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

FEMA-1

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.

FEMA-2

- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any ***development*** must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

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COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PUBLIC WORKS

FEMA-3

- All buildings constructed within a coastal high hazard area, (any of the "V" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.

FEMA-4

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at http://www.fema.gov/business/nfip/forms.shtm.

Please Note:

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The City of San Luis Obispo floodplain manager can be reached by calling Hal Hannula, Supervising Civil Engineer, at (805) 781-7015. The San Luis Obispo County floodplain manager can be reached by calling Tim Tomlinson, Floodplain Manager, at (805) 781-5271.

If you have any questions or concerns, please do not hesitate to call me at (510) 627-7186.

Sincerely,

Gregor Blackburn, CFM, Branch Chief
Floodplain Management and Insurance Branch

cc:
Hal Hannula, Supervising Civil Engineer, City of San Luis Obispo
Tim Tomlinson, Floodplain Manager, San Luis Obispo County
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources, Southern Region IX

Gregor Blackburn, CFM, Branch Chief, Floodplain Management and Insurance Branch
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

SLO COUNTY apcd | Air Pollution Control District
San Luis Obispo County

November 13, 2016

Keith Miller
County Department of Public Works
976 Osos St Rm 207
San Luis Obispo CA 93408

SUBJECT: APCD Comments Regarding the Mid-Higuera Bypass Project Draft Supplemental Environmental Impact Report (ED 15-151)

Dear Mr. Miller:

Thank you for including the San Luis Obispo County Air Pollution Control District (APCD) in the environmental review process. We have completed our review of the Mid-Higuera Bypass Project Draft Supplemental Environmental Impact Report (DSEIR).

The San Luis Obispo County Flood Control and Water Conservation District, is proposing a Mid-Higuera Bypass Project to implement flood control and habitat restoration activities along an approximately 0.56-mile-long stretch of San Luis Obispo Creek. The project includes the construction of two bypass channels, channel terraces/benches, the replacement of the Bianchi Lane Bridge and riparian habitat enhancement. The project is located between Highway 101, South Higuera Street, Marsh Street, and Madonna Road within the City of San Luis Obispo.

The following are APCD comments that are pertinent to this project. Page numbers refer to the Draft Supplemental EIR for the Mid-Higuera Bypass Project (September 2016)

Page 4-13

APCD-1 Based on APCD maps Naturally Occurring Asbestos (NOA) could be present at this location and therefore the following condition as outlined in the response to this NOP should be incorporated into the projection conditions of approval. If testing of this area has already been conducted and NOA was not present, test results should be submitted with an exemption request.

> Naturally occurring asbestos has been identified by the state Air Resources Board as a toxic air contaminant. Serpentine and ultramafic rocks are very common throughout California and may contain naturally occurring asbestos. The SLO County APCD has identified areas throughout the County where NOA may be present (see the APCD's 2012 CEQA Handbook, Technical Appendix 4.4). If the project site is in a candidate area for NOA, the following requirements apply. Under the ARB Air Toxics Control Measure (ATCM) for Construction, Grading,

t 805.781.5912 f 805.781.1002 w slocleanair.org 3433 Roberto Court, San Luis Obispo, CA 93401

Quarrying, and Surface Mining Operations (93105), **prior to any construction activities at the site, the project proponent shall ensure that a geologic evaluation is conducted to determine if the area disturbed is exempt from the regulation. An exemption request must be filed with the APCD.** If the site is not exempt from the requirements of the regulation, the applicant must comply with all requirements outlined in the Asbestos ATCM. This may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the APCD. More information on NOA can be found at slocleanair.org/business/asbestos.php

Page 4-13

APCD-2 For future reference, the most recent version of Cal EE Mod is 2016.3.1 and is available for download at http://caleemod.com.

Page 4-16

APCD-3 As shown in table AQ-2, the project will exceed both the APCD daily threshold for ROG+ NOx (137 lb./day) and diesel particulate matter (DPM) (7 lbs./day). Also, as indicated in the SDEIR, a Construction Activity Management Plan (CAMP) will be submitted to the APCD for review and approval prior to the start of the project. Due to the toxic nature of DPM, the CAMP should address on-site measures to reduce the emissions to below the daily threshold. One way to reduce DPM is to utilize newer construction equipment. To ensure adequate time to review and evaluate the measures proposed in the CAMP, this document should be submitted to the APCD for review and approval at least 3 months before the start of construction.

Page 4-18

APCD-4 AQ Impact 2 indicates that the project could expose sensitive receptors to pollutants such as lead and fugitive dust. In addition, the project also has the potential to expose sensitive receptors to DPM and asbestos. AQ-mm-2 item 4 addresses some idling restrictions. Since the project will exceed the daily DPM threshold, APCD staff recommends the following measures be included in the project:

- Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
- Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;
- Use of alternative fueled equipment is recommended;
- Proposed truck routes should be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors such as schools, parks, day care centers, nursing homes, and hospitals. If the project requires significant hauling/truck trips that are routine activity and operate near sensitive receptors, toxic risk needs to be evaluated.

Page 4-18

APCD-5 AQ-mm-2- addresses the requirement of National Emission Standards for Hazardous Air Pollutants (NESHAP). It should be noted that the Bianchi Lane Bridge would fall under this requirement.

Page 4-19, Section 4.2.54.4

APCD-6 The organic soil in and around the creek bed, when excavated, could produce odors. Measures should be included in the project to minimize any associated odors to the extent feasible (i.e. covering piles of soil that may be producing odors).

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, feel free to contact me at (805) 781-4667.

Sincerely,

Melissa Guise
Air Quality Specialist

MAG/ihs

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Keith L. Miller

From: Christine Mulholland
Sent: Tuesday, October 18, 2016 2:10 PM
To: Keith L. Miller
Subject: DSEIR - Mid-Higuera Bypass Project

Hi, Keith,

Thanks for the quick return phone call.

This is my short list of comments on the Supplemental Draft Environmental Impact Report for the Mid-Higuera Bypass Project.

I believe the use of the word "should" has no place in mitigation measures and ask that all such uses be changed to "shall."

Thank you,

Christine Mulholland

MUL-1

ES-9. BR-Impact 4. BR-mm 8.
I do not support the use of "should" and request that word, used twice, be replaced with "shall."

ES-11. BR-Impact 7. BR-mm-21
Replace "should" with "shall" in opening statement.

ES-11. CR-Impact 1. CR-mm-1.
Replace "should" with "shall" in both opening statements regarding monitoring plan.

ES-12. NS-Impact 1. NS-mm-1.
In 4th bullet, replace "should" with "shall."

Table 8-1 Response to Comments

Respondent	Comment #	Response
State Clearinghouse	Not applicable	This letter is a notification that the proper noticing was performed and that no State agencies responded to the Clearinghouse request for comments. No response is required.
Federal Emergency Management Agency	FEMA-1	Comment noted. No buildings are proposed as part of the project. Buildings proposed in the future would be subject to the City's building and storm water regulations, which are consistent with or more restrictive than the federal regulations.
	FEMA-2	The area of construction is within a Regulatory Floodway. A hydraulic analysis has been performed. The project is expected to reduce the flooding potential of adjacent properties during storm events. This is described in the Project Description and the Hydrology / Water Quality sections.
	FEMA-3	Comment noted. The project is not within a coastal high hazard area.
	FEMA-4	Comment noted. The City will provide the necessary hydrologic and hydraulic data to FEMA, as applicable.
San Luis Obispo Air Pollution Control District	APCD-1	The Air Quality section incorrectly notes that the area is *not* near an area containing ultramafic rock. The APCD maps do indicate that geologic formations containing Naturally Occurring Asbestos could be present in the project area. That text has been amended accordingly. Nevertheless, the Hazards and Hazardous Materials section notes the following: *"Surface soil samples were collected near Hwy 101 on the northern-most area of the South Street Bypass and within the Bianchi Lane Bypass nearest Hwy 101. The samples were chemically analyzed for lead and naturally occurring asbestos. The lead concentrations did not exceed the Residential RSL and asbestos was not detected in the two samples collected."* Prior to construction an exemption request will be submitted to the APCD.
	APCD-2	Comment noted.

	APCD-3	To allow flexibility in meeting the APCD requirements, the CAMP will be prepared by the construction contractor chosen by the City to perform the grading work. The City will submit the CAMP to the APCD as soon as feasible, with a goal of at least 3 months in advance of construction to allow for review and approval.
	APCD-4	Due to the project location, it is infeasible to locate staging and queuing areas 1,000 feet from sensitive receptors. It is also infeasible to prohibit diesel idling within 1,000 feet of sensitive receptors. Diesel idling will be limited to 5 minutes or less, as described in measure. AQ-mm 2(4). There is only one feasible truck route to and from the project site. This route includes Higuera Street either north or south to Highway 101 ramps at Madonna Road and Marsh Street. There are no schools, parks, day care centers, nursing homes or hospitals located between Marsh Street and Madonna Road on Higuera Street.
	APCD-5	Comment noted.
	APCD-6	While there is a potential for organic soils to produce odors when disturbed, project construction will disturb a small amount of these soils. Further, they would be they would likely be mixed with non-organic soils associated with the bypass channels and removed from the project quickly due to a lack of space for stockpiles in the project area. Any stockpiled material onsite would be subject to dust control and erosion control measures, which may include watering and covering. These measures would also reduce odors. Any residual odor impacts to sensitive receptors would be less than significant. No mitigation beyond that already recommended is necessary.
Christine Mulholland	MUL-1	The requested changes were made except for BR-mm 21. That text has not been modified as the measure allows multiple methods of compliance.

ERRATA SHEET

Based on the comments received on the Draft EIR, the following five changes, shown in ~~strikeout~~ and underline, to the text are necessary.

1. **Page 4-13, Section 4.2.1.3 Asbestos**

Asbestos is the common name for a group of naturally-occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Naturally-occurring asbestos, which was identified as a TAC in 1986 by the ARB, is located in many parts of California and is commonly associated with ultramafic rock. The project site is ~~not~~ located near areas that are likely to contain ultramafic rock; however, geologic surveys in the project area have not identified any asbestos-containing materials (Padre 2015).

2. **BR-mm 8**

To avoid impacts to monarch butterflies, construction ~~should~~ shall be avoided as feasible during the monarch butterfly wintering period (November to February). However, if work is scheduled to occur during this time, the project corridor ~~should~~ shall first be surveyed for overwintering monarch butterfly. If substantial monarch butterfly population is observed, tree removal shall cease within 200 feet of the population, and sufficient dust control measures shall be implemented to minimize dust emissions and associated impacts to any eucalyptus groves within or directly adjacent to project-related ground disturbance.

3. **BR-mm 21**

To protect special-status avian species and those species protected by the MBTA, the District ~~should~~ shall avoid vegetation clearing and earth disturbance during the typical nesting season (February 15 to September 1). If avoiding construction during this season is not feasible, a qualified biologist shall survey the area within one week prior to activity beginning on site. If nesting birds are located on or near the proposed project site, they shall be avoided until they have successfully fledged. A buffer zone of 50 feet will be placed around all non-sensitive, passerine bird species, and a 250-foot buffer will be implemented for raptor species, and all activity will remain outside of that buffer until the qualified biologist has determined that the young have fledged. Buffer reductions and/or work within non-disturbance buffer areas can be completed only with approval from relevant resource agencies.

4. **CR-mm 1**

Prior to construction, a detailed excavation and monitoring plan ~~should~~ shall be prepared and implemented by a qualified historical archaeologist. The monitoring plan ~~should~~ shall specify the following:

1. A description of preconstruction exploratory excavations at the Flow Return;
2. A description of how and where the monitoring will occur;
3. Description of monitoring intensity at different project locations;
4. A description of the resources anticipated to be discovered;
5. A description of the circumstances under which construction will be halted;
6. Description of the procedures to be followed in the event significant resources are found;
7. Personnel involved in monitoring activities; and
8. Arrangements for curation and a description of those materials that would qualify for curation.
9. Procedures to be implemented in the event there is an unanticipated historical or prehistoric discovered within the project area during construction to ensure compliance with State and local code.

5. NS-mm 1

NS-mm 1 To reduce potential noise impacts, the following measures shall be implemented during construction:

- *Noise-generating construction activities shall be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday.*
- *Noise-generating construction activities shall be prohibited on Sundays and holidays.*
- *Construction equipment ~~should~~ shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.*
- *Equipment engine shrouds ~~should~~ shall be closed during equipment operation.*
- *Lay-down yards and semi-stationary equipment such as pumps or generators shall be located at the furthest practical distance from noise-sensitive land uses.*

Appendix F

Mitigation Monitoring and Reporting Plan

MITIGATION MONITORING AND REPORTING PLAN

When a Lead Agency makes findings on significant environmental effects identified in an EIR, the agency must also adopt a "reporting or monitoring program for the changes to the project which it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment" (Public Resources Code §21081.6(a) and CEQA Guidelines §15091(d) and §15097). The Mitigation Monitoring and Reporting Plan (MMRP) is implemented to ensure that the mitigation measures and project revisions identified in the EIR are implemented. Therefore, the MMRP must include all changes in the proposed project either adopted by the project proponent or made conditions of approval by the Lead or Responsible Agency.

The County of San Luis Obispo is the Lead Agency responsible for the adoption of the MMRP. According to CEQA Guidelines §15097(a), a public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity that accepts the delegation. However, until mitigation measures have been completed, the Lead Agency remains responsible for ensuring that the implementation of the measure occurs in accordance with the program.

The table on the following pages is structured to enable quick reference to mitigation measures and the associated monitoring plan based on the environmental resource. The numbering of mitigation measures correlates with numbering of measures found in Chapter 4 of the Final EIR.

Mitigation Monitoring and Reporting Plan

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
Aesthetic Resources					
AR-mm-1	**Prior to initiation of the project**, the District shall ensure that revised grading and site plans show the following: 1. All channel benches and bypass channels shall employ contour grading design and construction techniques to reduce their engineered appearance. All grade breaks shall be rounded and avoid angular slope-interface. 2. All top-of-slope hinge-points shall employ slope-rounding where doing so would not adversely affect existing vegetation.	Revise the grading and site plans	San Luis Obispo County Flood Control and Water Conservation District (District)	Review draft and final plans	Prior to initiation of the project
AR-mm-2	**Prior to initiation of the project**, the District shall ensure preparation and implementation of a planting plan, which shall supplement the Vegetation Enhancement Plan, be developed and signed by a licensed landscape architect or restoration specialist, and include the following: 1. Visual screen planting between the easternmost extent of channel and bench grading and the adjacent parcels east of the project, between Stations 13+50 and 17+00, and between Stations 22+50 and 27+00. 2. Screen planting shall be a mix of evergreen trees and shrubs placed in natural-looking patterns. 3. Trees planted for screening along the fence shall be planted from primarily 24-inch box containers. Shrubs shall be planted from minimum 5-gallon containers. 4. Screen planting shall include the appropriate number and density of plants to achieve a minimum of 90 percent visual screening of the adjacent development as seen from Highway 101 within five years. 5. Additional planting between the bypass channels and the Highway 101 right-of-way, to the maximum extent possible. 6. Planting along Highway 101 shall be a mix of evergreen trees and shrubs placed in natural-looking patterns. 7. Trees planted along Highway 101 shall be planted from primarily 24-inch box containers. Shrubs shall be planted from minimum 5-gallon containers.	Prepare and implement a planting plan	District	Submit planting plan	Prior to initiation of the project
Air Quality/Greenhouse Gases					
AQ-mm-1	A Construction Activity Management Plan (CAMP) shall be prepared for the proposed project. The CAMP shall be submitted to the SLOAPCD for review and approval **prior to the start of construction**. The CAMP shall include, at a minimum, the following elements: 1. Identification of the project construction schedules. To the extent possible, construction activities should be phased to minimize cumulative increases of daily emissions from multiple activities. 2. Identification of schedules for truck hauling activities and associated haul routes. Haul routes and schedules that would have the least impact to nearby sensitive receptors shall be selected. Construction activities and haul truck trips should be scheduled during non-peak hours (as determined by the Public Works Director) to reduce peak hour emissions. 3. Identification of construction-equipment permitting requirements. Portable equipment, 50 horsepower (hp) or greater, used during construction activities may require California statewide portable equipment registration (issued by the California Air Resources Board) or a SLOAPCD permit. Examples of such equipment may include, but are not limited to, standby generators, material processing equipment (e.g., crushers, conveyors, portable batch plants, tub grinders, trammel screens). 4. Identification of a designated person or persons responsible for implementation of the CAMP and emissions monitoring and compliance. The designated individual(s) shall be responsible for monitoring of fugitive dust	Submit CAMP to SLOAPCD	District	Submit CAMP	Prior to the start of construction

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	emissions and the implementation/enhancement of measures, as necessary, to minimize dust complaints, reduce visible emissions below the SLOAPCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition. 5. Tabulation of on-road and off-road construction equipment. Emissions shall be quantified in accordance with SLOAPCD-recommended methodologies based on project-specific construction requirements (e.g., construction schedules, construction vehicle trips, and off-road equipment fleet to be used during project construction. 6. Identification of fugitive dust and mobile-source emission control measures to be implemented sufficient to demonstrate compliance with SLOAPCD's CEQA thresholds of significance and to minimize nuisance impacts at nearby sensitive receptors.				
AQ-mm-2	The following measures shall be implemented during construction to reduce potential expose of sensitive receptors to substantial pollutant concentrations. These measures shall also be included in the CAMP to be prepared for this project: 1. Demolition of onsite structures shall comply with the National Emission Standards for Hazardous Air Emissions (NESHAP) requirements (NESHAP, 40 CFR, Part 61, Subpart M) for the demolition of existing structures. The SLOAPCD is delegated authority by the Environmental Protection Agency (EPA) to implement the Federal Asbestos NESHAP. Prior to demolition of onsite structures, the SLOAPCD shall be notified, per NESHAP requirements. 2. If during demolition of Bianchi Lane Bridge, paint is separated from the construction materials (e.g. chemically or physically), the paint waste will be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed in accordance with local, state and federal regulations. 3. According to the Department of Toxic Substances Control (DTSC), if paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as construction debris (a non-hazardous waste). The landfill operator will be contacted prior to disposal of building material debris to determine any specific requirements the landfill may have regarding the disposal of lead-based paint materials. The disposal of demolition debris shall comply with any such requirements. 4. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. In general, the regulation specifies that drivers of said vehicles: • Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and, • Shall not operate a diesel-fueled auxiliary power system to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation. • Off-road diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use off-Road Diesel regulation. • Signs must be posted in the designated queuing areas and job sites to remind drivers and operators of the state's 5 minute idling limit. • Construction truck trips shall be scheduled, to the extent feasible, to occur during non-peak hours.	Implement CAMP and additional air quality mitigation measures	District	Review project plans and monitor onsite.	During construction

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	• The burning of vegetative material shall be prohibited. 5. Should hydrocarbon contaminated soil be encountered during construction activities, the SLOAPCD shall be notified as soon as possible and no later than 48 hours after affected material is discovered to determine if a SLOAPCD Permit will be required. In addition, the following measures shall be implemented immediately after contaminated soil is discovered: • Covers on storage piles shall be maintained in place at all times in areas not actively involved in soil addition or removal; • Contaminated soil shall be covered with at least six inches of packed uncontaminated soil or other TPH –non-permeable barrier such as plastic tarp. No headspace shall be allowed where vapors could accumulate; • Covered piles shall be designed in such a way to eliminate erosion due to wind or water. No openings in the covers are permitted; • The air quality impacts from the excavation and haul trips associated with removing the contaminated soil must be evaluated and mitigated if total emissions exceed the SLOAPCD's construction phase thresholds; • During soil excavation, odors shall not be evident to such a degree as to cause a public nuisance; and, • Clean soil must be segregated from contaminated soil.				
Biological Resources					
BR-mm-1	Through the USACE permit process, conduct consultation with the USFWS to develop avoidance and minimization measures for the CRLF. These measures may include, for example, the measures described in the 1999 CRLF Programmatic Biological Opinion between the USFWS and the USACE.	Consult with the USFWS	District	Obtain authorization from the USFWS	During permit process
BR-mm-2	Construction requiring stream dewatering, stream crossings, or work in the channel bed will not start before June 1. Upstream and downstream passage for fish, including juvenile steelhead, will be provided through or around construction sites at all times. Cofferdams will be installed to divert streamflow around each in-stream construction area.	Initiate dewatering and/or channel bed after June 1.	District	Monitor during construction	Prior to construction
BR-mm-3	Through the USACE permit process, conduct consultation with the NMFS to develop avoidance and minimization measures for steelhead. These measures may include, for example, having a qualified biologist onsite during the installation of cofferdams and during the cofferdam dewatering process to capture and move trapped salmonids and other fish as well as identifying the appropriate procedures for relocating fish. Protocols for the capture, handling, and release of fish will be developed in cooperation with NMFS and CDFW and implemented during project construction.	Consult with the NMFS and CDFW	District	Obtain authorization from the NMFS and CDFW	During permit process
BR-mm-4	Prior to construction the project plans shall be revised to show the bypass channels sloped towards the "inside" bank to minimize the potential for ponding water.	Revise the grading and site plans	District	Review draft and final plans	Prior to construction
BR-mm-5	Prior to construction the project plans shall incorporate additional boulder clusters or similar features into the design of the transition areas.	Revise the grading and site plans	District	Review draft and final plans	Prior to construction

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR-mm-6	At the appropriate time following applicable storm events, the bypass channels shall be inspected to determine the potential for ponded water and to confirm no fish have been stranded. In the event that special-status fish are observed stranded in the bypass channels, they shall be relocated by a qualified biologist consistent with necessary permits and authorizations.	Inspect bypass channels	District	Conduct field inspections and record observations	Following applicable storm events
BR-mm-7	Prior to construction and following construction at appropriate intervals, the habitat assessments consistent with those performed for the WMP shall be conducted by qualified biologists. These efforts shall be described in and coordinated with habitat restoration monitoring to be described in the HMMP for the project.	Conduct habitat assessments within project reach	District	Field surveys by qualified biologist	Prior to and post-construction
BR-mm-8	To avoid impacts to monarch butterflies, construction should be avoided as feasible during the monarch butterfly wintering period (November to February). However, if work is scheduled to occur during this time, the project corridor shall first be surveyed for overwintering monarch butterfly. If substantial monarch butterfly population is observed, tree removal shall cease within 200 feet of the population, and sufficient dust control measures shall be implemented to minimize dust emissions and associated impacts to any eucalyptus groves within or directly adjacent to project-related ground disturbance.	Avoid construction during November to February or conduct survey	District	Review project schedule and conduct field survey as necessary	Prior to construction
BR-mm-9	Prior to construction, one daytime and one night-time pre-construction surveys shall be conducted by qualified biologists no more than 30 days prior to construction to determine if bats are day or night roosting in the project area. The biologist(s) conducting the preconstruction surveys will also identify the nature of the bat utilization of the area (i.e., no roosting, night roost, day roost, maternity roost). If bats are found to be roosting in the surveyed areas, the following measures will be implemented during construction: 1. If there is only night roosting by bats and the roost substrate will not be impacted, work may proceed as normal provided that no night-time work is scheduled. 2. If there is day roosting by bats (or night roosting and work during nighttime), qualified biologists shall monitor any construction activities within 100 ft for disturbance to bat roosting. If bat roosting behavior is determined to be adversely impacted by construction activities, construction must be avoided in the vicinity of bat roosts until either bats are no longer roosting or they have been excluded from roosting. 3. If maternity roosts are detected, construction activities must be avoided within 100 ft (30 m) of an active maternity roost until the end of the maternity roosting season (end of September). No roost exclusion shall be conducted if maternity roosts are detected. 4. Readily visible exclusion zones shall be established in areas where roosts must be avoided.	Conduct surveys for roosting bats	District	Field surveys by qualified biologist	Prior to construction
BR-mm-10	The design of the new Bianchi Lane Bridge shall incorporate bat friendly features and/or provide areas where manmade roosts can be easily attached during construction. If manmade roosts are to be attached to the bridge, this shall be accomplished prior to the conclusion of construction activities.	Incorporate bat roosts into new bridge	District	Review plans and monitor construction	Prior to conclusion of construction
BR-mm-11	Prior to construction, the project proponent will retain a qualified biological monitor(s) to monitor construction and ensure compliance with Avoidance and Minimization Measures within the project environmental documents.	Retain qualified biological monitor(s)	Project proponent	Retain monitor(s)	Prior to construction
BR-mm-12	Before any activities begin on a project, a qualified biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the important vegetation and special-status resources that occur in the project area, the specific measures that are being implemented to conserve them and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.	Conduct worker training	District	Complete training sign-in sheet and save in project files	Before any activities being on the project

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR-mm-13	During construction, work within the creek shall be conducted when the creek does not contain flowing or standing water, if feasible. If work activities must occur when water is present in the creek channel, the contractor shall dewater the creek prior to conducting the activities.	Avoid work in standing or flowing water to the extent feasible.	District	Onsite monitoring	During construction
BR-mm-14	Prior to any construction work beginning, including any vegetation clearing, sturdy high visibility fencing shall be installed to protect jurisdictional areas and sensitive resource areas adjacent to the work area. This fencing shall be placed so that unnecessary impacts to adjacent habitat are avoided. No construction work (including storage of materials) shall occur outside of the “Project Limits”. The required fencing shall remain in place during the entire construction period and maintained as needed by the contractor.	Fence project limits	District	Observe flagging in field	Prior to construction
BR-mm-15	During construction, the cleaning and refueling of equipment and vehicles will occur only within a designated staging area and as far from aquatic areas as feasible. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills.	Refuel in designated areas	District	Include in training and observe during monitoring	During construction
BR-mm-16	During construction, the biological monitor(s) will ensure that the spread or introduction of invasive exotic plant species is avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site will be removed and properly disposed.	Avoid spreading invasive species	District	Field observation	During construction
BR-mm-17	During construction, trash will be contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas. All vegetation removed from the construction site shall be taken to a certified landfill to prevent the spread of invasive species.	Trash shall be contained and removed from the work site	District	Field observation	During construction
BR-mm-18	During construction, no pets will be allowed on the construction site.	Prohibit pets onsite	District	Field observation	During construction
BR-mm-19	Prior to construction, a comprehensive Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared that reflects the guidance of the WMP and includes the following guidelines: 1. Results in an improved pool to riffle ratio, reduction in invasive species, and increase of canopy cover provided by native species for Reach 10 compared to the 2002 assessment. 2. A 1:1 replacement ratio for temporary impacts to riverine and riparian vegetation communities. 3. A 2:1 replacement ratio for permanent impacts to riverine and riparian communities. 4. A replacement ratio for native trees and shrubs impacted by the project that will result in equal to or better habitat conditions within the project corridor as quickly as feasible. 5. Considers invasive species and debris removal in-lieu of a strict tree replacement ratio where appropriate 6. Allows for flexibility in species to be planted so that predominately single-trunk species such as black walnut, black cottonwood, and bay laurel can be substituted for willows, for example. 7. Takes advantage of the bypass channels and terraces between the bypass channels and the creek to replace the ruderal and nonnative annual grassland vegetation communities with riparian and upland ones, even in areas not directly impacted by the project construction.	Prepare a HMMP	District	Submit HMMP	Prior to construction
BR-mm-20	During construction, the project will make all reasonable efforts to limit the use of imported rock. Imported material should be obtained from a source that is known to be free of invasive plant species; or the material must consist of purchased clean material such as crushed aggregate, sorted rock, or similar.	Limit use of imported rock	District	Field monitoring	During construction

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
BR-mm-21	To protect special-status avian species and those species protected by the MBTA, the District shall avoid vegetation clearing and earth disturbance during the typical nesting season (February 15 to September 1). If avoiding construction during this season is not feasible, a qualified biologist shall survey the area within one week prior to activity beginning on site. If nesting birds are located on or near the proposed project site, they shall be avoided until they have successfully fledged. A buffer zone of 50 feet will be placed around all non-sensitive, passerine bird species, and a 250-foot buffer will be implemented for raptor species, and all activity will remain outside of that buffer until the qualified biologist has determined that the young have fledged. Buffer reductions and/or work within non-disturbance buffer areas can be completed only with approval from relevant resource agencies.	Avoid vegetation clearing and earth disturbance during nesting season to the extent feasible	District	Review schedule and/or conduct surveys	Prior to activity beginning on site
Cultural Resources					
CR-mm-1	Prior to construction, a detailed excavation and monitoring plan shall be prepared and implemented by a qualified historical archaeologist. The monitoring plan should specify the following: 1. A description of preconstruction exploratory excavations at the Flow Return; 2. A description of how and where the monitoring will occur; 3. Description of monitoring intensity at different project locations; 4. A description of the resources anticipated to be discovered; 5. A description of the circumstances under which construction will be halted; 6. Description of the procedures to be followed in the event significant resources are found; 7. Personnel involved in monitoring activities; and 8. Arrangements for curation and a description of those materials that would qualify for curation. 9. Procedures to be implemented in the event there is an unanticipated historical or prehistoric discovered within the project area during construction to ensure compliance with State and local code.	Prepare and implement an excavation and monitoring plan	District	Submit excavation and monitoring plan	Prior to construction
Hazards and Hazardous Materials					
Haz-mm-1	Prior to initiation of construction, the District shall submit to the City of San Luis Obispo Fire Department, a Construction Materials Management Plan (CMMP). The CMMP plan shall be implemented throughout construction. The CMMP shall at minimum present an overview of the procedures and protocols that will be utilized during the project to safely and appropriately recover, handle, characterize, store, transport, and dispose of any contaminated materials encountered during construction of the project. In the event that hazardous materials are encountered during excavation activities, the contaminated soil shall be excavated to the extent necessary to safely construct the project.	Submit CMMP to City of San Luis Obispo Fire Department	District	Submit CMMP	Prior to construction
Hydrology/Water Quality					
HWQ-mm-1	Prior to construction, to minimize the potential for concentrating pollutants at the Flow Return where flood waters would re-enter San Luis Obispo Creek, this component shall be designed to maximize the potential for passive storm water treatment.	Revise project plans	District	Review plans	Prior to construction
Noise					
NS-mm-1	To reduce potential noise impacts, the following measures shall be implemented during construction:	Observe City standard construction hours of operation	District	Field monitoring	During construction

Mitigation Measure	Requirements of Measure	Applicant Responsibilities	Party Responsible for Verification	Method of Verification	Verification Timing
	• Noise-generating construction activities shall be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. • Noise-generating construction activities shall be prohibited on Sundays and holidays. • Construction equipment should be properly maintained and equipped with noise-reduction intakes and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. • Equipment engine shrouds should be closed during equipment operation. • Lay-down yards and semi-stationary equipment such as pumps or generators shall be located at the furthest practical distance from noise-sensitive land uses.				