County of Santa Barbara Department of Public Works, Transportation Division

Proposed Final Mitigated Negative Declaration
Bridge 51C-163 over Toro Creek Scour Repair Project
15NGD-00000-00013
State Clearinghouse No. 2016031043
April 2016

Owner/Applicant
County of Santa Barbara
Public Works Department
Transportation Division,
Engineering Section
123 E. Anapamu Street
Santa Barbara, CA 93101

Prepared By:
Morgan M. Jones
Engineering Environmental
Planner, Senior
County of Santa Barbara
Public Works Department
123 Anapamu Street, Santa
Barbara, CA 93101-2026

Project Engineer
Ron Bensel
County of Santa Barbara
Public Works Department
620 W Foster Road
Santa Maria, CA 93455

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1.0 INTRODUCTION

1.1 PURPOSE AND LEGAL AUTHORITY

The California Environmental Quality Act (CEQA) requires that local, regional, and state agencies and special purpose districts prepare an Initial Study to identify potential environmental impacts associated with discretionary actions. An Initial Study is generally used to determine if significant impacts would occur, and to determine the need for preparation of either a Negative Declaration or further analysis in an EIR. The Santa Barbara County Public Works Department has prepared this Initial Study for the proposed scour repair of the Padaro Lane bridge (51C-163) over Toro Canyon creek to comply with the provisions of CEQA.

1.2 PROJECT PROPONET

County of Santa Barbara Public Works Department
123 E. Anapamu Street
Santa Barbara, California 93101
Contact: Mr. Morgan M. Jones (805) 568-3039

1.3 PROJECT BACKGROUND

The Santa Barbara County Public Works Department (SBPW), with funding from the Federal Highway Authority Administration (FHWA) and California Department of Transportation (Caltrans) oversight has received funding to conduct a scour protection project at Bridge 51C-163 over Toro Canyon creek on Padaro Lane in southern coastal Santa Barbara County. SBPW proposes to protect bridge piers on the west side of the Toro Canyon creek bed from scour caused by high flows of water during above normal rainfall years by installing buried articulated concrete blocks adjacent to the piers.

1.4 PROJECT LOCATION

The project site is located in southern Santa Barbara County on Padaro Lane between the communities of Summerland and Carpinteria. Bridge 51C-163 on Padaro Lane crosses Toro Canyon creek, in the Summerland area of Santa Barbara County. The Toro Canyon creek Bridge is located south of Highway 101 on Padaro Lane at approximately 1,000 feet east of the Loon Point parking lot at an approximate elevation of 49 feet.

1.5 PROJECT PURPOSE AND OBJECTIVES

The objective of the project is to improve the safety and reliability of the Padaro Lane Bridge crossing Toro Canyon creek. The purpose of the under-bridge reinforcement is to correct the scour damage around the existing structures and to protect the existing structures from further scour damage. The area beneath the Toro Canyon Bridge on Padaro Lane has sustained some undercutting and scouring beneath and around the existing support structures. Reinforcement of these protective measures is needed to prevent further damage which could, in turn, cause structural integrity issues with the bridge. Prevention of further damage now may extend the life of the current bridge which is structurally sound, and avoid the need for complete bridge replacement.

1.6 PROJECT APPROVALS AND PERMITS

Project implementation may require the County to obtain permits and other forms of approval from Federal and State agencies. These agencies may include, but are not limited to the following:

1.6.1 Federal Agencies

- A United States Army Corps of Engineers Nationwide 14 Permit is required as there is a proposed fill activity within Ordinary High Water Mark of the creek bed.

1.6.2 State Agencies

- California Regional Water Quality Control Board 401 Certification is required pursuant to Section 404 of the Clean Water Act.
- California Department of Fish and Wildlife Streambed Alteration Agreement will be required for temporary impacts and the substantial changes to the creek bed caused by excavation and placement of scour protection measures within the creek channel.

1.6.3 Local Agencies

- Santa Barbara County Planning and Development requires a Coastal Development Permit with hearing.
- Santa Barbara County Public Works Department requires a roadway encroachment permit for contractors to work within the County owned right of way.

1.7 PUBLIC COMMENTS

In compliance with Section 15703 of the State Guidelines for the implementation of the California Environmental Quality Act, the Santa Barbara County Public Works Department will accept written comments on the adequacy of the information contained in the Draft MND during the public review period.

Section 15074(b) of the State Guidelines for the Implementation of the California Environmental Quality Act, requires the decision-making body to consider comments received on the MND when approving a project.

No public comments were received at the County or from the State Clearinghouse.

2.0 PROJECT DESCRIPTION

Santa Barbara County is proposing a project that will utilize articulated concrete blocks for the scour protection repairs of the bridge columns of bridge 51C-163 over Toro creek. The existing grouted rock will be removed and articulated concrete blocks will be placed around the perimeter of the pier columns. These interlocking blocks will be arranged in predetermined matrices specially engineered to surround each pier on the lead edge and down both sides.

Work is anticipated to be accomplished with minimal equipment in the creek bed. The concrete block units will be lowered down from the bridge deck and placed into location by workers on foot. The blocks will be banded around the perimeter by a stainless steel cable to make the matrices of blocks more stable. If small mechanical equipment, such as a bobcat, is necessary for minor excavation to install the blocks, it will be lowered down from the bridge deck in the same manner as the blocks. Jackhammers and drills may be used to fracture the damaged existing grouted rock scour protection The Existing grouted rocks and pieces of concrete will be hauled away from the project location and will not be used as additional repair materials.

The work would be completed during the dry season of the year (between May 1 and November 30) when the amount of surface water in this reach of the creek will be at its lowest point. If work is completed by personnel with only hand-held tools and equipment, there will be no need for water diversion. In the event that small mechanical equipment is utilized for the block installation, water diversion may be necessary. Best Management Practices (BMPs) will be used during construction, which may include waiting until surface water in the creek is at a low point. If water is present in the channel during construction, scour repair of the bridge may require a temporary diversion of the creek flows around the construction site and a temporary dewatering of a small reach of the stream. The diversion would be approximately 100 feet long and composed of a gravel bag berm and visqueen located upstream (between the railroad bridge and the Toro Canyon creek bridge) to impound surface flow. To convey flow downstream of the project site, a polyethylene pipe would be installed along with an energy dissipation device, such as a siltation bag or hay bales, at the pipe outlet below the existing bridge. Any surface flow diversion would be removed prior to the onset of the rainy season.

The sequence of work will approximately follow the description below:

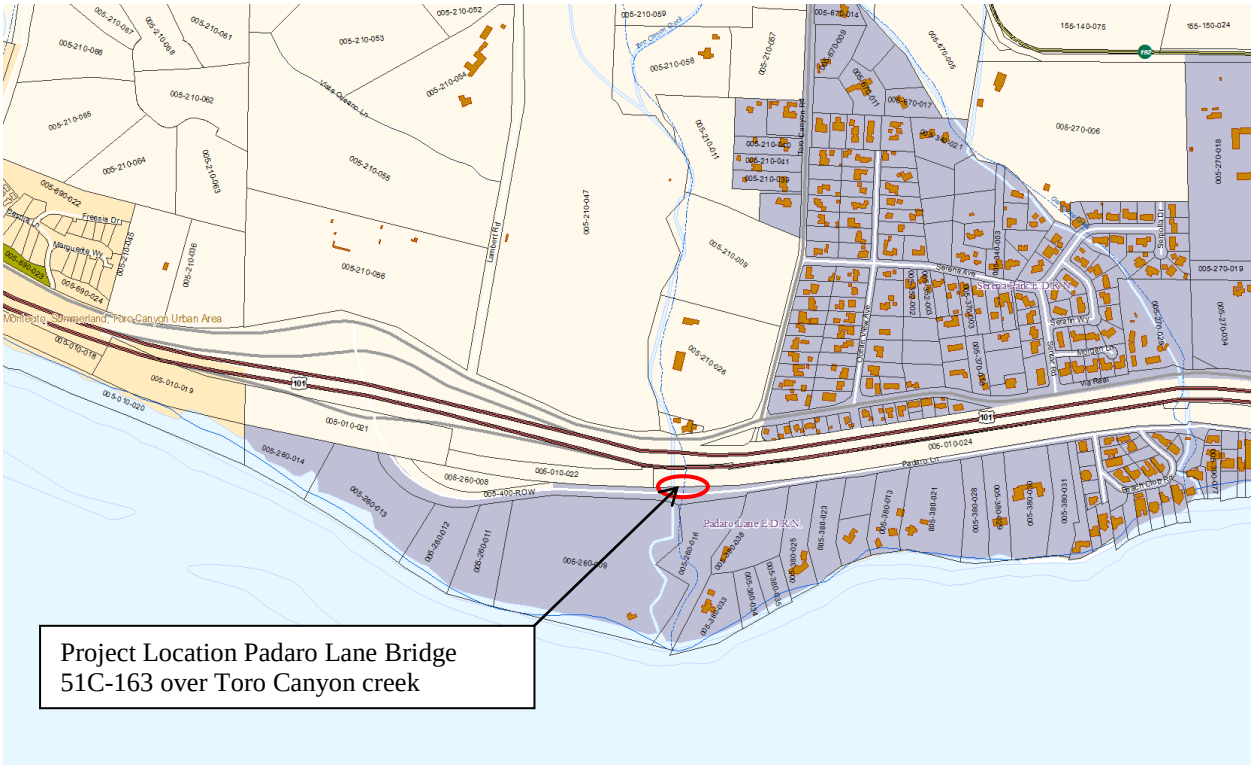
1. Limited clearing and grubbing in the construction area (begin in-water work);
2. Diversion of Toro Canyon creek, if necessary, into a pipe through the construction site;
3. Break apart damaged existing grouted rock scour protection with jackhammers and drills;
4. Remove damaged existing grouted rock scour protection from creek bed;
5. Band articulated blocks together into matrices;
6. Lower articulated concrete blocks from bridge deck to creek bed;
7. Place blocks by hand;
8. If necessary, lower bobcat into creek bed from bridge deck and finish placement of block;
9. If bobcat was used in creek bed, remove; and
10. If water diversion used, remove.

Total grading of the project is estimated to be 41 cubic yards. 41 cubic yards of cut resulting in 24 cubic yards of fill and 17 cubic yards of export according to project engineer.

The project area will be restored after construction by a qualified restoration biologist. Plantings will consist of native shrubs found in the local area with an extensive effort to remove non-native and invasive species. The restoration plan will be developed to meet the requirements of the California Department of Fish and Wildlife (CDF&W) Lake and Streambed Alteration Agreement (LSAA) for the project.

Padaro Lane may be closed temporarily just at the bridge for the crane work from the bridge during construction. The easterly portion and approach on Padaro Lane to the bridge and a small portion of Loon Point Park parking lot (4 spaces) may be used for staging, stock piling and vehicle parking. Project plans depicting the bridge layout and impacts areas are shown in below Figure 4, 4A and 4B and articulated concrete blocks in 4C. Preliminary construction plans (65%) are attached in Appendix D.

2.1 SITE LOCATION MAP FIGURE 1



2.2 SITE PHOTOGRAPHS FIGURE 2

Western side Toro Creek bank

Eastern side creek channel view

Upstream view under Bridge 51C-163

Downstream view under Bridge 51C-163

2.3 AERIAL PHOTOGRAPH FIGURE 3

Bridge 51C-163 Location on Padaro Lane

2.5 BRIDGE SCOUR REPAIR LAYOUT FIGURE 4.

Figure 4

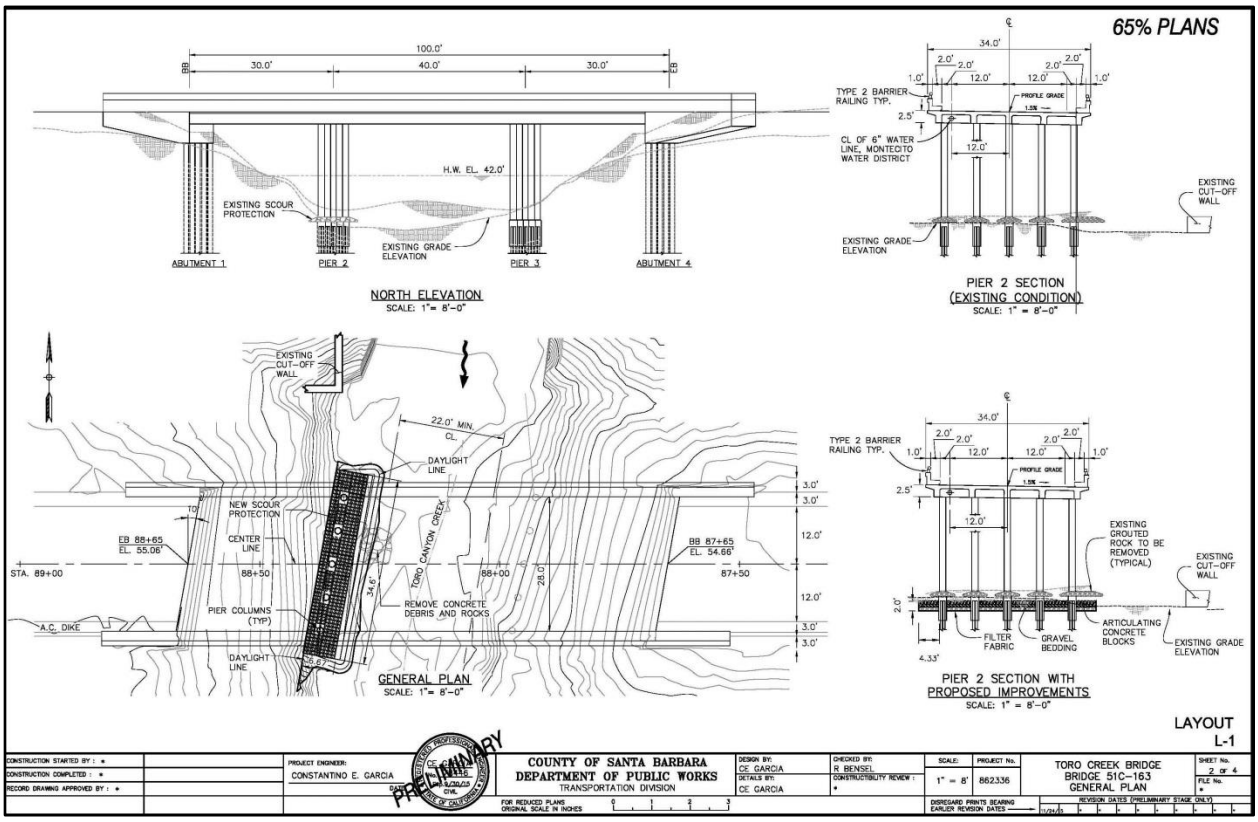


Figure 4A **Figure 4B**

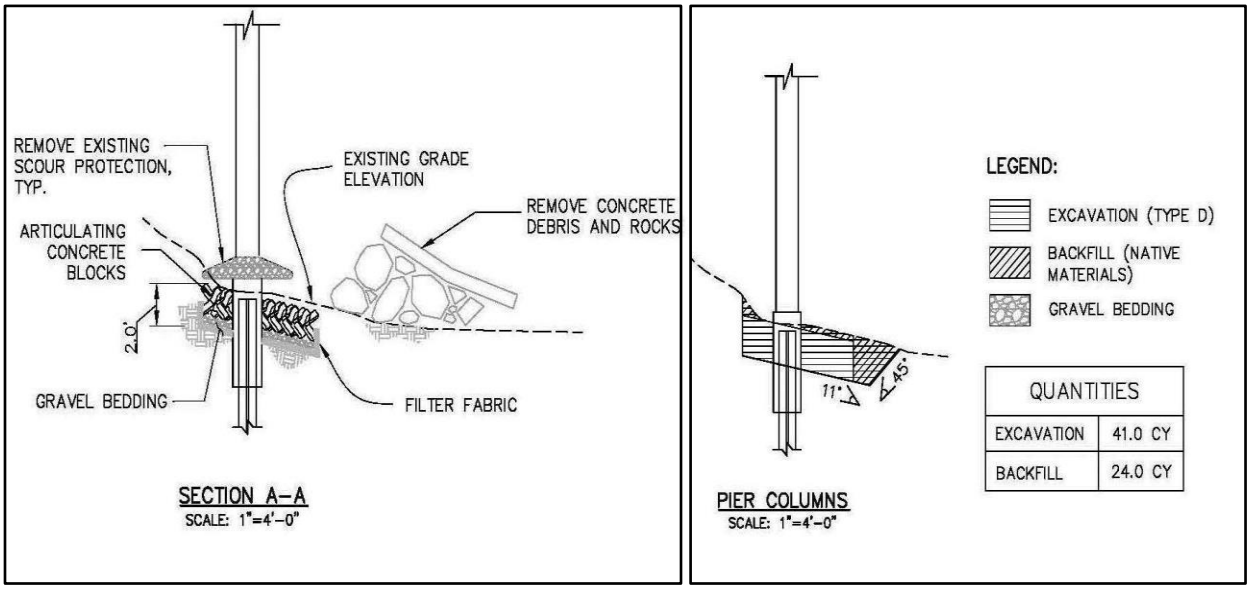
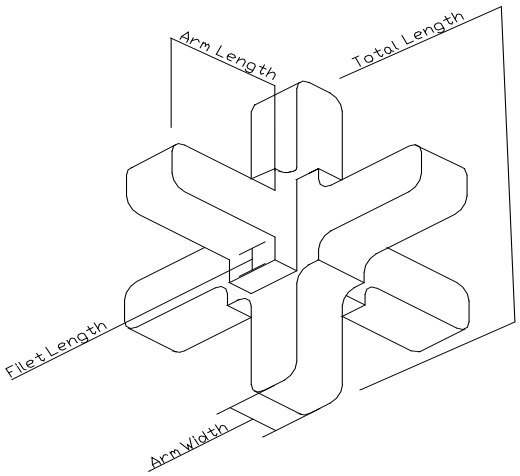


Figure 4C Articulated Concrete Block Specifications



A-JACKS Model	Total Length in (cm)	Arm Length in (cm)	Fillet Length in (cm)	Arm Width in (cm)	Volume ft^3 (m^3)	Weight lbs. (kg)
AJ-24	24 (60.96)	4.00 (10.16)	1.84 (4.67)	3.68 (9.35)	.56 (.016)	78 (35)

Site Information	
Comprehensive Plan Designation	Coastal, Summerland Community Plan Area, Rural Area, Padaro Lane Existing Developed Rural Neighborhood, Bridge 51C-163 is between APN 005-260-009 and Railroad Right of Way (ROW) APN 005-010-024. Residential 0.33 (033 units per acre or 1 unit per three acres) Summerland Community Plan. First Supervisorial District.
Zoning District, Ordinance	Santa Barbara County Coastal Zoning Ordinance, Article II. Appeals Jurisdiction. 3-E-1. Residential with a minimum lot size of 3 acres. Environmentally Sensitive Habitat and Design Control overlays. Coastal Commission Appeals Jurisdiction
Site Size	Project area is .31 acres including staging area.
Present Use & Development	Santa Barbara County Public Road Right of Way. APN 005-400-ROW.
Surrounding Uses/Zoning	North: Railroad and US101 ROW. Existing Developed Rural Neighborhood. South: Existing Developed Rural Neighborhood. Pacific Ocean. East: Toro Creek , Existing Developed Rural Neighborhood, Toro Canon Plan Area West: Existing Developed Rural Neighborhood. Summerland Community Plan Area
Access	Bridge 51C-163 spans Toro Canyon creek, access from Padaro Lane ROW.
Public Services	Water Supply *N/A* Sewage: *N/A* Fire: Carpinteria Summerland Fire Department, Fire Station #2. Other: Summerland Elem. School District; Santa Barbara High School. District First Supervisorial District.

3.0 ENVIRONMENTAL SETTING

3.1 PHYSICAL SETTING

All proposed construction would occur within the existing roadway right-of-way of Padaro Land. However construction access and staging may cause partial disruptions and delay on Padaro Lane and temporarily restrict driveway access at:

- APN 005-260-018, 2825 Padaro Lane, 10.25 acres, zoned Coastal, Residential (3-E-1); land use designation is Existing Developed Rural Neighborhood.

The immediate project area is urban with large residential beach front estates in an area comprised of larger parcels from 17.25 acres to approximately 1 acre. The topography is generally flat along the sides of Padaro Lane. Toro Canyon creek bisects Padaro Lane and supports an oak woodland and riparian habitat along the creek banks draining into the Pacific Ocean 293 yards to the south.

The Biological Study Area (BSA) for the Padaro Lane bridge project covers and includes an area extending from approximately 100 feet east of the bridge along Padaro Lane, approximately 1,000 feet west of the bridge along Padaro Lane to the Loon Point parking lot, the parking lot, and approximately 100 feet upstream and downstream of the bridge along Toro Canyon creek. The BSA includes the parking area that may be utilized for equipment storage and construction staging. Parking and staging will occur along the shoulders of Padaro Lane and may occur in the Loon Point parking lot.

The area within the BSA subject to both permanent and temporary disturbance is referred to as the Project Impact Area (PIA) and covers 0.31 acres or 13504 square feet.

3.2 OTHER PENDING AND APPROVED DEVELOPMENT

3.2.1 Santa Barbara County

The following list of projects was obtained from Santa Barbara County Planning and Development cumulative projects list (dated July 31, 2015) for the South Coast, detailing projects within approximately a four mile radius of the project in the unincorporated Santa Barbara County area.

- 09DVP-00000-00014. Approved, Caltrans High Occupancy Vehicle Lanes. US 101Highway. Planned Caltrans project to replace the U.S. Highway 101 bridges over Arroyo Pardon, Romero, San Ysidro, Oak, and Toro Canyon creeks, and widen bridge structures on Santa Monica Creek.
- 12TMP-00000-00006. Approved, 2825 Padaro Lane. Family trust Lot Split. 2825 Padaro Lane 005-260-018.
- 10DVP-00000-00017. Approved, Summerland Community Public Safety Center 2450 Lillie Drive, APN 005-194-001.
- 13TMP-00000-0006. In Process, Perkins Lot Split, 2425 Lille Drive APN 005-192-009.
- 08GPA-00000-00007. In Process, O'Neil Coastal Plan Amendment 2551 Wallace Drive APN 005- 250-001.
- 08DVP-00000-00009. Approved, Capinteria Valley Farms, 120 Montecito Ranch Lane. APN 005-210-056.
- 04DVP-00000-00045. Approved, Carsey Mixed Use 2334 Lille Drive APN 005-182-006.
- 10DVP-00000-00001. In Process, Van Wingerden Green house, 4444 Foothill Road. APN 005-310-024.

- 12TPM-00000-00002. In Process, Light Lot Spilt 580 Freehaven Drive, APN 005-030-011 & 023.
- 06CUP-00000-00045. In Process, Estancia La Serena Equestrian Center, 3215 Foothill Road APN 005-270-006.
- 07DVP-00000-00015. Under Construction, Claus Properties Mixed Use, 3715, 3717, 3719 Santa Claus Lane. APN 005-450-001 & 002.
- 09CUP-00000-00014. Under Construction. Holani Farms Horse Boarding Facility, 331 Lambert Road. APN 005-210-050.
- 05TPM-00000-00017. Approved, Stein Lot Split 3373 & 3375 Padaro Lane. APN 005-400-052 & 053.
- 04DVP-00000-00036. Approved Santa Claus Lane As-Built DP 3805, 3811, 3819 and 3875 Santa Claus Lane. APN 005-450-008; 009; 015.
- 02NEW-00000-00001. Approved. Pacifica Institute 88-CP-005 RV01. 249 Lambert Road. APN 005-210-054.

Section 15355 of the State CEQA Guidelines states that "cumulative impacts refers to two or more individual effects which when considered together are considerable or which compound or increase other environmental impacts." Further, "the individual effects may be changes resulting from a single project or a number of separate projects", and "the cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects." "Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is defined as follows:

Potentially Significant Impact: A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

Less Than Significant Impact with Mitigation: Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to a Less Than Significant Impact.

Less Than Significant Impact: An impact is considered adverse but does not trigger a significance threshold.

No Impact: There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

Reviewed Under Previous Document: The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case and is summarized in the discussion below. The discussion should include reference to the previous documents, a citation of the page(s) where the information is found, and identification of mitigation measures incorporated from the previous documents.

4.1 AESTHETICS/VISUAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view?				X	
b. Change to the visual character of an area?				X	
c. Glare or night lighting which may affect adjoining areas?				X	
d. Visually incompatible structures?				X	

Existing Setting: The project site is located approximately .27 miles east of the intersection of Padaro Lane the US 101 Highway in an existing developed rural area.

The project site is within the Highway 101 corridor in an area with a designated scenic value level of "One-Most Scenic" in the Open Space Element of the Santa Barbara County Comprehensive Plan. State Highway 101 from Montecito to Rincon is designated as "most scenic, major capacity, primary destination route" (Table 3. Page 36).

The project will not impact important visual resources, obstruct public views, substantially alter the natural character of the landscape or involve extensive grading visible from public areas. No tree removals are proposed. Public views from the roadway are limited to immediately neighboring properties and are dominated by non-native trees such as Blue Gum Eucalyptus which precludes most major skyline features and ocean views.

Impact Discussion:

a. The proposed scour repair project would be constructed at the same location and elevation as the existing grade and would not block public views or create an aesthetically offensive site. The project will call for non-native vegetation removal in the immediate project impact area and for periodic equipment activity over the construction period. This impact is considered less than significant due to the very small area affected and that none of the disturbance would be visible from the 101 Highway. Graded areas will be treated with a native seed mix as a Best Management Practice and then will be replanted with native vegetation as required by the California Department of Fish and Wildlife. Therefore, no impact or obstruction of any scenic vista or view open to the public in the area is anticipated.

b. The installation of the scour repair measures will occur under bridge 51C-163 and Padaro Lane. No tree removals are proposed, the project will not degrade the visual quality of Padaro Lane or surrounding corridor. Minor tree trimming will be required to allow a crane to lower equipment and material down to the work site. Therefore, no impact to visual character of the area is anticipated.

c. Project related construction activities will not require any night lighting. There will be no increase in ambient light level at the residences along Padaro Lane. Therefore, no impact to visual character of the area is anticipated.

d. The proposed scour repairs under the bridge would be constructed at the same location with roughly the same alignment and configuration as the existing grade of the creek bank. No new structure is proposed. Therefore, the bridge scour repairs would be compatible with adjacent land uses and no impact is foreseen.

Mitigation and Residual Impact:

No mitigation measures are required. The project would not create any significant project-specific aesthetic impacts or substantially contribute to cumulative impacts. Residual impacts would be less than significant.

4.2 AGRICULTURAL RESOURCES

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?				X	
b. An effect upon any unique or other farmland of State or Local Importance?				X	

Setting:

An important farmland map by the California Department of Conservation was reviewed for the project area. The project site is not within any lands designated as prime farmland, statewide-importance farmland and unique farmland. The project area is designated as "Urban and Built-up Land". Urban and Built-up Land is occupied by structures and building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

The nearest agricultural land to the project site is located approximately less than 100 yards south, on the ocean side of Padaro Lane from the project location. There is an area of land designated as "Farmland of Statewide Importance". Farmland of Statewide Importance is similar to prime farmland but with minor short comings, such as greater slopes or less ability to store soil moisture. Land must have been used for agricultural production at a sometime during the four years prior to the mapping date.

The project impact area is exclusively within County owned right-of-way adjacent to an existing developed rural neighborhood.

Impact Discussion:

a. The proposed project would not involve the conversion of agricultural lands, or conflict with existing uses of preserve programs.

b. The proposed project would not affect farmland of State or Local Importance.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary. Residual impacts would be less than significant.

4.3 AIR QUALITY

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?				X	
b. The creation of objectionable smoke, ash or odors?				X	
c. Extensive dust generation?		X			
Greenhouse Gas Emissions	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				X	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X	

County Environmental Threshold:

Chapter 5 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (as amended in 2006) addresses the subject of air quality. The thresholds provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- emit (from all project sources, mobile and stationary), less than the daily trigger for offsets for any pollutant (currently 55 pounds per day for NOx and ROC, and 80 pounds per day for PM10);
- emit less than 25 pounds per day of oxides of nitrogen (NOx) or reactive organic compounds (ROC) from motor vehicle trips only;
- not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and
- be consistent with the adopted federal and state Air Quality Plans.

No thresholds have been established for short-term impacts associated with construction activities. However, the County's Grading Ordinance requires standard dust control conditions for all projects involving grading activities. Long-term/operational emissions thresholds have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary source emissions (i.e., stationary boilers, engines, paints, solvents, and chemical or industrial processing operations that release pollutants).

A recent APCD document, http://www.sbcapcd.org/apcd/ScopeContentMarch2014.pdf, includes a screening table for air quality pollutants other than GHGs showing the size estimates of the types of land use projects that may have air quality impacts exceeding threshold levels. This table is a useful tool for screening out projects that are below the air quality thresholds. Since Santa Barbara County violates the state standard for PM10, dust mitigation measures are required for all discretionary activities regardless of significance of the fugitive dust impacts based on the policies in the 1979 Air Quality Attainment Plan.

Impact Discussion:

a-c. Potential Air Quality Impacts

Project-related construction activities would require grading that has been minimized to the extent possible under the circumstances. With the implementation of standard dust control measures that are required for all new development in the County, earth moving operations at the project site would not have the potential to result in significant project-specific short-term emissions of fugitive dust and PM10. Impacts would be significant but mitigable. Emissions of ozone precursors (NOx and ROC) during project construction would result primarily from the on-site use of excavation equipment. Due to the limited period of time that grading activities would occur on the project site, construction-related emissions of NOx and ROC would not be significant on a project-specific or cumulative basis. However, due to the non-attainment status of the air basin for ozone, the project should implement measures recommended by the APCD to reduce construction-related emissions of ozone precursors to the extent feasible. The Santa Barbara County Board of Supervisors has determined there is no impact from short term air quality impacts. Compliance with these measures to reduce construction-related emission of ozone precursors is routinely required for all new development in the County.

Short-Term Operational Emissions.

Short term and construction emission quantitative threshold of significance are not currently in place.

Long-Term Operational Emissions.

Long-term emissions are typically estimated using the CalEEMod computer model program. However, the proposed project, consisting of scour repair measures below an existing bridge is below threshold levels for significant air quality impacts, pursuant to the screening table maintained by the Santa Barbara County APCD.

a-b. Greenhouse Gas Emissions/Global Climate Change

The small scale of the project should have no impact on Greenhouse gas emissions and global climate change.

Existing Setting: Greenhouse gases (GHGs) include carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3). The largest source of greenhouse gas emissions from human activities in the United States is from fossil fuel combustion for electricity, heat, and transportation. Specifically, the Inventory of U.S. Greenhouse Gasses and Sinks (U.S. Environmental Protection Agency, 2013) states that the primary sources of greenhouse gas emissions in 2013 included electricity production (31%), transportation (27%), industry (21%), commercial and residential (12%), and agriculture (9%). This release of gases creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing it's escape into space. While this is a naturally occurring process known as "the

greenhouse effect," there isstrong evidence that human activities have accelerated the generation of greenhouse gases beyond natural levels. The overabundance of greenhouse gases in the atmosphere has led to a warming of the earth and has the potential to severely impact the earth's climate system. For instance, Santa Barbara County is projected to experience an increase in the number of wildfires, land vulnerable to 100-year flood events, and temperature increases, even under a low-emissions scenario (California Energy Commission, 2015). Climate change results from greenhouse gas emissions "…generated globally over many decades by a vast number of different sources" rather than from greenhouse gas emissions generated by any one project (County of Santa Barbara Planning and Development, 2008). As defined in CEQA Guidelines Section 15355 and discussed in Section 15130, "…a cumulative impact consists of an impact which is created as a result of the combination of the [proposed] project…evaluated…together with other projects causing related impacts." Therefore, by definition, climate change under CEQA is a cumulative impact.

The County of Santa Barbara's *Final Environmental Impact Report for the Energy and Climate Action Plan* (EIR) (PMC, 2015) contains a detailed description of the proposed project's existing regional setting as it pertains to greenhouse gas emissions

Environmental Threshold: CEQA Guidelines Section 15183.5(a) states, "Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in…a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from…that existing programmatic review…a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan".

In May 2015, the County of Santa Barbara Board of Supervisors adopted the *Energy and Climate Action Plan* (ECAP) (County of Santa Barbara Long Range Planning Division, 2015) and certified the accompanying EIR (SCH# 20144021021) (PMC, 2015). The ECAP meets the criteria in CEQA Guidelines Section 15183.5(b) for a "plan to reduce greenhouse gas emissions." The ECAP commits the County to reduce community-wide greenhouse gas emissions by 15 percent below 2007 levels by 2020 consistent with the California Global Warming Solutions Act of 2006 (AB 32) and the related *Climate Change Scoping Plan* (California Air Resources Board, 2008). The ECAP includes specific local measures that will help meet this emission reduction target. Concurrent with the ECAP, the Board of Supervisors also adopted an amendment to the Energy Element of the Comprehensive Plan that requires the County to monitor progress meeting the emission reduction target and, as necessary, update the ECAP.

The ECAP included a greenhouse gas emissions forecast for unincorporated Santa Barbara County to 2020.The growth estimates used in the emissions forecast came from the *Santa Barbara County Regional Growth Forecast 2005-2040* (Santa Barbara County Association of Governments, 2007) and incorporated 2010 U.S. Census data where available. The estimates were based on factors such as population projections, vehicle trends, and planned land uses. The sources of greenhouse gas emissions included various sectors, such as transportation, residential energy, commercial energy, off-road, solid waste, agriculture, water and wastewater, industrial energy, and aircraft. As a result, most residential and commercial projects that are consistent with the County's zoning (in 2007) were included in the forecast. However, certain projects were not included in the emissions forecast, such as stationary source projects (e.g., large boilers, gas stations, auto body shops, dry cleaners, oil and gas production facilities, and water treatment facilities), Comprehensive Plan amendments, and community plans that exceed the County's projected population and job growth. A proposed project that was included in the ECAP's emissions forecast may tier from the ECAP's EIR for its CEQA analysis of greenhouse gas emissions. A project that tiers from the ECAP's EIR is considered to be in compliance with the requirements in the ECAP and, therefore, its incremental contribution to a cumulative effect is not cumulatively considerable (Class III).

Cumulative Impacts:

The ECAP quantifies and forecasts greenhouse gas emissions for certain nonstationary sectors within unincorporated Santa Barbara County through 2020. It also contains specific local measures that will collectively reduce those emissions by 15 percent below 2007 levels by 2020. As discussed under "Impact Discussion" above, the proposed project was included in the ECAP's greenhouse gas emissions forecast. As a result, the project will tier from the ECAP's certified EIR for its cumulative impact analysis of greenhouse gas emissions. The EIR contains a programmatic analysis of greenhouse gas emissions for unincorporated Santa Barbara County.

The ECAP contains County and community-wide programmatic rather than mandatory project-specific measures to achieve the specified greenhouse gas emissions reduction target by 2020. The County recently created the Energy and Sustainability Initiatives Division and is taking other steps to implement and monitor the effectiveness of these measures throughout the unincorporated county. Therefore, the project complies with the requirements of the ECAP and, as provided in CEQA Guidelines 15183.5(b), its incremental contribution to the cumulative effect is not cumulatively considerable and would not have a significant impact on the environment (Class III).

Mitigation and Residual Impact:
The following mitigation measures would reduce the project's air quality impacts to a less than significant level:

1. **Air-01 Dust Control**. The Contractor shall comply with the following dust control components at all times including weekends and holidays:

a. Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site.

b. During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease.

c. During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. Reclaimed water shall be used if feasible.

d. Wet down the construction area after work is completed for the day and whenever wind exceeds 15 mph.

e. When wind exceeds 15 mph, have site watered at least once each day including weekends and/or holidays.

f. Order increased watering as necessary to prevent transport of dust off-site.

g. Cover soil stockpiled for more than two days or treat with soil binders to prevent dust generation. Reapply as needed.

h. If the site is graded and left undeveloped for over four weeks, the Contractor shall immediately:

i. Seed and water to re-vegetate graded areas; and/or

ii. Spread soil binders; and/or
iii. Employ any other method(s) deemed appropriate by Public Works or APCD.

PLAN REQUIREMENTS: These dust control requirements shall be noted in all specifications for project development and verified by the County Resident Engineer.

PRE-CONSTRUCTION REQUIREMENTS: The contractor shall provide Public Works with monitoring staff and APCD with the name and contact information for an assigned onsite dust control monitor(s) who has the responsibility to:

a. Assure all dust control requirements are complied with including those covering weekends and holidays.

b. Order increased watering as necessary to prevent transport of dust offsite.

c. Attend the pre-construction meeting.

TIMING: The dust monitor shall be designated prior initiation of construction by the contractor. The dust control components apply from the beginning of any grading or construction throughout all development activities until project completion.

MONITORING: PW resident engineer shall ensure measures are on plans and in specifications are in compliance onsite. APCD inspectors shall respond to nuisance complaints.

With the incorporation of this measure, **residual impacts would be less than significant.**

4.4 BIOLOGICAL RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
Flora					
a. A loss or disturbance to a unique, rare or threatened plant community?		X			
b. A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants?			X		
c. A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)?		X			
d. An impact on non-native vegetation whether naturalized or horticultural if of habitat value?		X			
e. The loss of healthy native specimen trees?			X		
f. Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat?		X			
Fauna					
g. A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals?		X			
h. A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)?		X			
i. A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)?		X			
j. Introduction of barriers to movement of any resident or migratory fish or wildlife species?			X		
k. Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?		X			

Setting: Existing Plant and Animal Communities and Conditions

The Biological Study Area (BSA) includes all areas subject to disturbance in the Project Impact Area, (PIA), as well as an additional 100 feet upstream and downstream of the bridge (Figure 1 in **Natural Communities and Land Use Types**). The PIA also includes Padaro Lane and the road shoulders approximately 325 yards to the west of the bridge to the Loon Point parking lot and 20 feet to the east of the bridge. In addition, the Loon Point parking lot is included. The BSA and PIA contain land use and habitat types, including a reach of Toro Canyon creek, a portion of Padaro Lane, and a residential neighborhood.

Vegetation and land uses present in the BSA include:

- California sycamore riparian woodland (degraded)
- Landscaped
- Ruderal

The southern (downstream) side of Padaro Lane, adjacent to and incorporating the BSA, is comprised of two large private residential properties that open onto the beach at Loon Point. The area lies at or below

48 feet above sea level. Both properties are bordered by large, dense privacy hedges along Padaro Lane. The northern (upstream) side of the BSA compromises of two medians vegetated by mature trees that separate Padaro Lane from the rail road tracks and U.S. Highway 101, both of which run parallel to Padaro Lane, extending 248 feet to the north.

The BSA is located approximately 0.18 miles east of the Loon Point Beach parking lot, approximately 1.25 miles south of the town of Summerland. Padaro Lane parallels U.S. Highway 101. Portions of the BSA occur on land that has been landscaped. Areas that contain riparian vegetation occur downstream of the bridge, but also are characterized by many non-native and invasive species. As such, this area is considered degraded riparian habitat.

Hydrologic resources in the BSA are associated with Toro Canyon creek. The Watershed, of which Toro Canyon creek is a part, extends from the Santa Ynez Mountains to the Pacific Ocean, encompassing all tributaries to Toro Canyon creek.

Some of the reach of Toro Canyon creek within the upstream side of the BSA has been channelized with concrete. The channelization begins slightly upstream of the bridge and continues under the rail road bridge and the bridges associated with north- and south-bound lanes of Highway 101, a distance of approximately 250 feet. The channel is approximately 15 to 20 feet wide. A four-foot concrete drop structure and a 50- to 60-foot apron are present between the Toro Canyon Bridge and the rail road bridge. The channelization is completely devoid of soil and vegetation, save for a thin, patchy layer of dried filamentous algae.

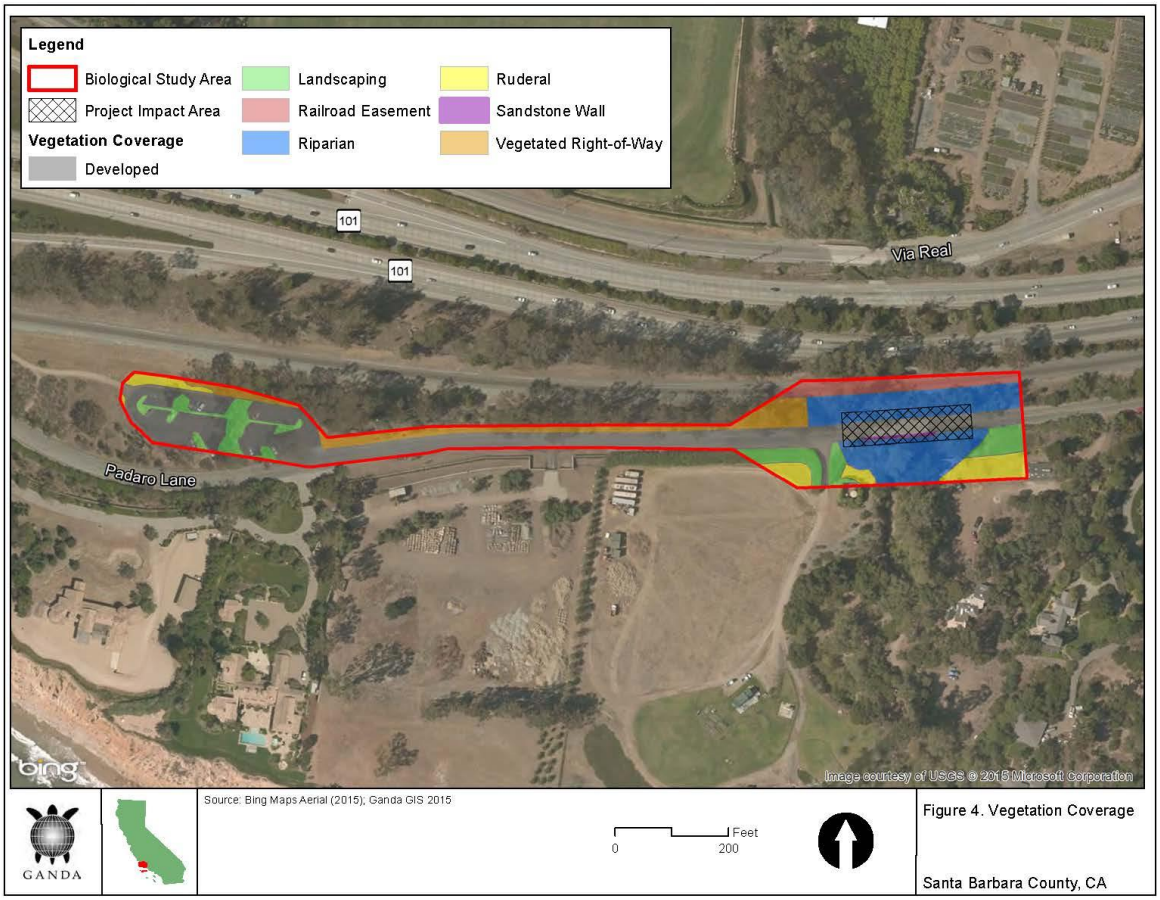
Downstream, the creek has a natural streambed substrate comprised mostly of boulders. Trash and debris are present. The stream channel is narrow with steep sides. Downstream of the BSA, Toro Canyon creek opens into an area of restoration before entering the Pacific Ocean.

Natural Communities and Land Use Types

The natural community in the BSA would be described as California Sycamore (*Platanus racemosa*) riparian woodland. The riparian community is characterized by non-native and native riparian vegetation, heavily interspersed with weedy and invasive species. In addition to the riparian community, there are areas of unmaintained landscaping, ruderal road shoulders, and the existing roadway. The landscaping areas are located adjacent to the downstream creek banks where the private property owners have installed large, native and non-native trees and shrubs for screening purposes.

The distribution of the vegetation communities and land use types is shown on Figure 1 below. A listing of all plant species detected during the field surveys and identified in the BSA are included in Appendix A. The descriptions of vegetative and land use types are provided below.

Figure 1. Biological study area and distribution of the vegetation communities and land use types



Riparian woodland

This riparian woodland occurs mainly downstream of the Toro Canyon creek bridge where no channelization is present. The canopy cover is dominated by large individual sycamore trees on either side of the bridge with smaller coast live oak (*Quercus agrifolia*) trees comprising the understory. Arroyo willow (*Salix lasiolepis*) is present in limited distribution downstream from the BSA. Some remnants of riparian species are present downstream within the stand of mature native and non-native trees that delineate the property boundary between the creek channel and the private properties. The banks on either side of the bridge are dominated by the non-native, invasive species, periwinkle (*Vinca major*), German ivy (*Delairea odorata*), English ivy (*Hedera helix*), and the native woody vine, poison oak (*Toxicodendron diversilobum*). The rocky creek bed is mostly devoid of vegetation except for a 40-foot wide shallow pool just upstream of the bridge with a moderate cover of watercress (*Nasturtium officinale*). Horsetail (*Equisetum palustre*) and sedges (*Scirpus microcarpus*) grow along the water's edge. Non-native, invasive crofton weed (*Ageratina adenophora*) occurs along the water's edge under and downstream of the bridge.

The area of riparian woodland in the BSA is 0.80 acre and shown in Table 2 below. The area of this natural community in the PIA is 0.15 acre.

Landscape

Mature landscaping comprised of trees and shrubs for screening purposes is present in much of the downstream side of the BSA on the private parcels along each side of the creek. These trees and shrubs have blended over time with the riparian woodland producing a dense privacy screen. An additional area of landscaping occurs on the southwest side of Padaro Lane where ornamental screening hedges line the side of the road on the adjacent private property.

The area of landscape in the BSA is 0.41 acre and shown in Table 2 below. There is no landscaping within the PIA.

General Wildlife

Based on survey results by Peter Gaede on April 23 and 27, 2012, May 18 and 23, 2012 and on July 6, 2012, wildlife species diversity and overall numbers are low in the BSA, with the exception of birds. One active bird nest was found in the PIA during the survey by Peter Gaede: an American robin incubating chicks. Additionally, one inactive black phoebe nest was observed under the bridge. An active Anna's hummingbird (*Calypte anna*) nest was also found incidental to other observations by Morgan Jones on May 17, 2012. One raptor, an American kestrel (*Falco sparverius*), was observed during the survey. Twenty-three bird species were observed; however, no sensitive or listed species were included in the observations. Birds observed by sight, song, or sign are listed below.

Birds Observed in the BSA (Table 1)

Species		#	**Notes**
Common Name	**Scientific Name**		
American Kestrel	*Falco sparverius*	1	flyby
Western Gull	*Larus occidentalis*	1	
Mourning Dove	*Zenaida macroura*	1	active nest found
Anna's Hummingbird	*Calypte anna*	1	
Downy Woodpecker	*Picoides pubescens*	1	
Nuttall's Woodpecker	*Picoides nuttallii*	1	1 singing
Pacific-slope Flycatcher	*Empidonax difficilis*	2	old nest under bridge
Black Phoebe	*Sayornis nigricans*	2	
Western Scrub jay	*Aphelocoma californica*	1	
American Crow	*Corvus brachyrhynchos*	1	
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	2	
Bushtit	*Psaltriparus minimus*	5	1 singing
Bewick's Wren	*Thryomanes bewickii*	2	active nest found
American Robin	*Turdus migratorius*	1	
Northern Mockingbird	*Mimus polyglottos*	1	
Orange-crowned Warbler	*Oreothlypis celata*	2	
Common Yellowthroat	*Geothlypis trichas*	1	singing
Spotted Towhee	*Pipilo maculatus*	1	

Song Sparrow	*Melospiza melodia*	1	
Brown-headed Cowbird	*Molothrus ater*	1	
Hooded Oriole	*Icterus cucullatus*	1	
House Finch	*Haemorhous mexicanus*	4	
Lesser Goldfinch	*Spinus psaltria*	2	

In addition to bird species, Baja California tree frog (*Pseudacris hypochondriaca*) larvae were observed in the creek under the bridge. No adult frogs or any other amphibians were observed.

Habitats of Concern

One habitat of concern was identified in the CNDDB for the nine-quad area, which was Southern coastal salt marsh. The Southern coastal salt marsh does not occur in the BSA.

Other habitats in the BSA that might be considered to be of concern are California sycamore riparian woodland. In addition, the riparian habitat represented by this habitat type that occurs in the BSA will come under CDFW jurisdiction for a Section 1602 streambed alteration agreement. This habitat provides potential habitat for plant and wildlife species of concern. For example, riparian habitats provide nesting habitat for birds, including special status species such as Cooper's hawk (*Accipiter cooperii*). The occurrence of this habitat in the BSA, as well as the potential impacts to the habitats are described in the section of **Regional Habitats of Concern.**

Regional Species of Concern

Species of concern include:

- Wildlife listed by the federal and state governments as threatened or endangered, or proposed or candidates for such listing, (CDFW 2015b);
- Plants listed as rare, threatened, or endangered, or proposed for such listing by the federal and state governments (CDFW 2015c);
- State species of concern (CDFW 2015d);
- Plants included on the California Rare Plant Rank Lists 1-4 (California Native Plant Society [CNPS] 2015);
- Fully protected species in California (California Fish and Game Code, Sections 3511, 4700, 5050, and 5515); and
- Other species considered by biologists to be "locally rare."

Wildlife species observed with the BSA are included in Appendix B. Database and literature review, as well as a review of the habitats within the BSA were utilized to evaluate the need for additional study. Those requiring additional study are described under **Wildlife and Special Status Species** and **Special Status Plant Species**.

Habitat is absent for all 16 of 24 plants of special concern. Suitable habitat was lacking for the federally-endangered salt marsh bird's-beak, Ventura marsh milk-vetch, and Sonoran maiden fern, as well as the state-rare Santa Barbara false-lupine. At 48 feet above sea level, the project site is outside the reported elevational range for a number of species, such as late-flowered mariposa lily, Palmer's mariposa lily, umbrella larkspur, and Ojai fritillary. The field survey was conducted when all the plant species of special concern were identifiable and all plant species observed during the field surveys were documented. As such, had any of those 24 species occurred in the project area, they would have been identified during the field surveys. Field Survey were conducted by Tom Olson, Kathy Rindlaub, Susan Kissee and Mark Bibbo on April 23, 2013, May 25, 2012 and July 12, 2012.

The only special-status habitat (southern coastal salt marsh) known to occur in the region is absent from the BSA and PIA. No tree count was necessary for this project because no trees will be removed. Suitable or marginal habitat is present for 8 of the 24 special-status wildlife species with potential to occur in the region. The species included southern California steelhead, two-striped garter snake, Cooper's hawk, Townsend's big-eared bat, western mastiff bat, big free-tailed bat, Yuma myotis, and pallid bat. In addition, two other special-status species (California red-legged frog and western pond turtle) may have utilized the BSA when water in Toro Canyon creek was near perennial. Increased use for irrigation may have reduced the seasonality of water in the creek to intermittent. Monarch butterflies roost nearby, but not in the BSA.

Vegetation:

This section presents descriptions of natural and vegetation communities, including discussions of common and characteristic plant species. Other biological conditions described cover invasive species, followed by aquatic resources and common wildlife species in each community. The BSA includes all areas subject to disturbance.

Table 2. Summary Table of Acreages of Natural Communities and Land Uses in the Project Area

Natural Community/Land Use Type	Acreage in the Project Area Subject to Impacts		
	Temporary	Permanent	Total
Riparian Woodland	0.144	0.006	0.150
Landscaping	0.000	0.000	0.000
Vegetated Right-of Way	0.000	0.000	0.00
Railroad Easement	0.000	0.000	0.000
Sandstone Wall	0.010	0.000	0.010
Developed	0.150	0.000	0.150
Ruderal	0.000	0.000	0.000
TOTAL	0.300	0.006	0.0310

Wildlife and Special Status Animal Species

Toro Creek and its riparian habitat provide important habitat for wildlife. The project area supports a large variety of bird species and varied wild life species.

Twenty-five species of special-status animals have the potential to occur in the BSA on more than just an occasional basis. Prior to development years ago, the BSA likely supported tidewater goby, southern steelhead, California red-legged frog, two-striped garter snake, and other special-status species. Due to past construction of the Railroad Bridge and channelized creek bed, US101 freeway and Padaro lane and bridge 51C-163 the area now provides habitat for only a few special-status species, and even then, not always on an annual basis. For example, it is now unlikely that red-legged frogs or western pond turtles utilize this reach due to habitat fragmentation, but two-striped garter snakes might during rain years.

There is no critical habitat for southern California steelhead in the BSA or anywhere on Toro Canyon creek. NMFS considers the potential for steelhead to be in the PIA as low, as described below (Ruvelas 2012). Seven other special-status animals potentially occur in the region, but suitable breeding/roosting habitat is lacking. However these species could occur on a rare to occasional basis during migration, dispersal, or foraging: two-striped garter snake (*Thamnophis hammondii*) Cooper's hawk, southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), western mastiff bat (*Eumops perotis californicus*), Yuma myotis bat (*Myotis yumanensis*), pallid bat (*Antrozous pallidus*), big free-tailed bat (*Nyctinomops macrotis*), and Townsend's big-eared bat (*Corynorhinus townsendii*). Because this area may have historically supported these species, they are described in the following sections. No disturbance to habitat is assumed for the least Bell's vireo and southwestern willow flycatcher because those two species are unlikely to use the PIA except on uncommon to rare occasions during migration.

A list of all vertebrate wildlife species observed has been included in Appendix B and reviewed in **General Wildlife** above.

Monarch Butterfly

The monarch butterfly is a milkweed butterfly. Its wings feature an easily recognizable orange and black pattern, with a wingspan of 8.9–10.2 centimeters (3½–4 in). Female monarchs have darker veins on their wings, and the males have a spot called the androconium in the center of each hind wing from which pheromones are released. Males are also slightly larger than female monarchs. This species is considered by CDFW to be "globally secure and state-vulnerable." In response to a dramatic decrease in numbers over the past 20 years, the USFWS is now reviewing the potential need to list this species as federally-threatened or federally-endangered.

The monarch can be found in a wide range of habitats such as fields, meadows, prairie remnants, urban and suburban parks, gardens, trees, and roadsides. The Monarch is famous for its southward migration and northward return in summer between Canada and Mexico/California which spans the life of three to four generations of the butterfly. The western population overwinters in various sites in central coastal and southern California.

There are three established occurrences of the monarch butterfly roost trees reported by the CNDDB within two miles of the project area. Two are within 0.5 mile of the project area: one near Loon Point that is presumed extant but decreasing as none have been observed since 1998; the other is approximately 0.5 mile northwest of the BSA and is listed as extirpated. The second location is 75 meters (about 250 feet) southeast of the PIA. The third occurrence is approximately 2 miles northwest of the project area and is listed as possibly extirpated.

Monarch butterflies have not been observed in or reported from the BSA during terrestrial wildlife surveys conducted on April 23 and 27, 2012, May 18 and 23, 2012 and on July 6, 2012, by Peter Gaede. Moreover, no roost trees were observed; thus, no impacts are expected to occur and avoidance and minimization measures are not necessary.

Southern California Steelhead

The Southern California steelhead is federally-listed as endangered under the ESA (NMFS 1997) and is a state Species of Special Concern. This species migrates up coastal streams in Santa Barbara County during years with adequate rainfall.

The BSA was evaluated for a number of special-status wildlife species, including steelhead by biologists Larry Hunt and Tom Olson on May 18 and 23, 2012. No steelhead individuals were observed; the channel is completely channelized upstream from just above the bridge and includes two barriers to fish passage: a

large 50- to 60-foot sloping apron and a four-foot drop structure under the rail road bridge. Additionally, this reach of Toro Canyon creek is not listed as critical habitat for steelhead. These conditions make it unlikely to accommodate fish (Ruvelas 2012). This species is not expected to occur in the BSA.

Tidewater Goby

The tidewater goby is federally-listed as endangered and is a state species of special concern. It is benthic in nature, living at the bottom of shallow bodies of water. Its habitat is characterized by brackish (somewhat salty) water in shallow lagoons and in lower stream reaches where the water is fairly still but not stagnant. The tidewater goby, the only species in the genus *Eucyclogobius*, is mostly restricted to waters with low to moderate salinities in California's coastal wetland habitats. The tidewater goby appears to spend all life stages in lagoons, estuaries, and salt marshes where brackish water conditions occur. Adult tidewater gobies may enter marine environments when flushed out of their preferred estuarine habitats by seasonal breaching of the sandbars following storm events but may not survive for long periods in the marine environment. The closest observation of tidewater goby to the BSA was noted in 1984 over two miles east of the BSA.

No tidewater goby individuals were observed during the aquatic species April 27, 2012 survey by Rob Aramayo and Susan Kissee. It should be noted that no species-specific surveys were conducted for this species. As noted above, suitable habitat may have historically occurred within the BSA prior to the concrete channelization of portions of Toro Canyon creek; however, the reach of Toro Canyon creek within the BSA no longer has suitable habitat to support tidewater gobies. This species is not expected to occur presently in or near the PIA.

California Red-legged Frog

The California red-legged frog is federally-listed under the Endangered Species Act as a threatened species throughout its range in California. It is also a species of special concern in California. The main cause of its decline is habitat loss and destruction, but introduced predatory species such as bullfrogs might also be a factor.

California red-legged frogs occur in slow-moving or standing deep ponds, pools and streams. Tall vegetation, like grasses, cattails and shrubs, provide protection from predators and the sun. They cannot tolerate excessive heat. During times when streams have low or absent water, California red-legged frogs they may find cover in wet meadows, damp grasses, or woody debris piles.

No red-legged frog individuals were observed during the May 18, 2012 aquatic species field surveys by Larry Hunt and Tom Olson. Good habitat for red-legged frogs occurs in Toro Canyon creek upstream of Toro Canyon. However, in reaches of the creek below the park (including the reach that contains the BSA and PIA), it appears that irrigation needs for agricultural production have changed the creek from perennial to intermittent. Although the PIA has some areas of cover for this species, surface water is not persistent enough. Thus, California red-legged frogs are not expected to occur in the BSA or PIA

The nearest reported occurrence (CDFW 2015) of this species is approximately 1.50 miles northeast of the BSA along Arroyo Paredon creek, approximately 0.5 mile northeast of the junction of Arroyo Paredon creek at State Route 192. Critical habitat for the California red-legged frog does not occur in the BSA.

Two-striped Garter Snake

The two-striped garter snake is a California Species of Special Concern that occurs along the central and southern California coastal streams from Monterey County to northern Baja California. It is a highly aquatic species and is dependent on freshwater aquatic habitats for breeding and foraging. It is typically found in streams, ponds, and reservoirs with permanent water and sufficient emergent vegetation. It appears to prefer relatively slow-moving waters in small streams with a large prey-base of tadpoles, frogs, and fish. Highest densities are associated with arroyos or coastal lagoons with open areas of bare soil, short grass, or large, flat boulders with southern exposures for basking that are adjacent to deep pools with plentiful prey.

Two-striped garter snakes are active both day and night and feed primarily on frogs, tadpoles, small fish, salamanders, and earthworms. Females give birth to live young in mid to late summer. Adults reach an average snout-vent length of about 24 to 28 inches. Populations have undergone a relatively recent decline brought about by modifications of streams and adjacent habitats.

No two-striped garter snake individuals were observed during the field surveys by Larry Hunt and Tom Olson on May 18 and 23, 2012. Similar to habitat for red-legged frogs, good habitat for two-striped garter snakes occurs in Toro Canyon creek upstream of Toro Canyon. However in reaches of the creek below the Toro Canyon Park (including the reach that contains the BSA and PIA), it appears that irrigation needs for agricultural production have changed the creek from perennial to intermittent. Thus, two-striped garter snakes not expected to occur in the BSA or PIA in most years. This species could potentially occur in the PIA during years with above-normal rainfall when surface water is more persistent.

Only two occurrences have been noted within the Carpinteria quad. In 1985, one two-striped garter snake was observed in the Santa Ynez River, 0.25 mile east of Juncal Campground in the Los Padres National Forest. Also in 1985, one snake was observed at Gibraltar Reservoir.

Impacts to two-striped garter snakes are not expected to occur in the PIA in most years. If work occurs after an above-normal rainfall season, this species might utilize the PIA however no work will occur in the wetted portion of the creek and a biologist will be present during work in the creek area.

Cooper's Hawk

The Cooper's hawk is considered to be a Species of Special Concern by CDFW. Habitat for this species has been declining statewide due to conversion of riparian and oak woodlands. In the northern Santa Barbara County area, Cooper's hawk is a regular winter visitor and is known to nest in limited numbers in the area. It is regularly sighted, particularly during winter months, but is not a common breeding species. When they are observed in the region, Cooper's hawks tend to nest in oak trees, especially if the oaks are in or adjacent to riparian zones. Cottonwoods and large willows also provide potential nest sites.

No Cooper's hawk individuals were observed, either by sight, sound, or sign during surveys conducted on April 23 and 27, 2012, May 18 and 23, 2012 and on July 6, 2012, by Peter Gaede. Cooper's hawks could potentially use the BSA and PIA during migration. Nesting in the region by Cooper's hawk is uncommon and there is only limited suitability for nesting in the PIA. However, there is better nesting habitat nearby in other portions of the BSA where additional over story occurs.

Construction will be scheduled, as practicable, to coincide with the non-nesting times for Cooper's hawks. Although nesting by this species is not expected in the PIA, there is a low potential for nesting in the BSA. There is also potential to occur in the PIA during migration. Therefore, the potential occurrence of an active Cooper's hawk nest would be a focus of the pre-construction survey and biological monitoring. If one is found, the biologist will recommend a suitable buffer distance that would accommodate construction and successful completion of the nest. This would be done in consultation with CDFW and USFWS.

Least Bell's Vireo

Least Bell's vireo is federally- and state-listed as endangered. It was formerly abundant in the riparian woodlands of California's Central Valley and low elevation riparian streams in southern California and northern Baja, Mexico. It was one of California's most abundant birds in the late 19th and early 20th centuries but was reduced to just 300 pairs by 1986. Historically, the least Bell's vireo was a common to locally abundant species in lowland riparian habitat, ranging from coastal southern California through the Sacramento and San Joaquin valleys as far north as Red Bluff. Populations also occurred in the foothill streams of the Sierra Nevada and coast ranges, and in Owens Valley, Death Valley, and scattered locations in the Mojave Desert. By the time the species was listed by the USFWS in 1986, it had been extirpated from most of its historic range, and numbered just 300 pairs statewide. Populations were confined to eight counties south of Santa Barbara, with the majority of birds occurring in San Diego County. In the decade since its listing, Least Bell's Vireo numbers have increased, and the species is expanding into its historic range.

The breeding season is mostly mid-April to early June (Baicich and Harrison 1997). The open-cup nest is constructed of a variety of items, such as pieces of bark, fine grasses, plant down, and horse hair, and is often placed on a slender branch of willow, other shrub, mesquite, or other small tree, usually 2–3 feet, but sometimes 1–10 feet, aboveground. Nests are typically located near dense thickets along water or along dry parts of intermittent streams, and are placed low in dense riparian vegetation with a large degree of vertical strata. This taxon is typically associated with willow, cottonwood, mule fat, wild blackberry, or mesquite in desert localities (Zeiner et al. 1990).

The nearest reported occurrences in the CNDDB was in 1980 well over ten miles from the BSA in the Juncal Campground near the Santa Ynez River in the Carpinteria quad.

Suitable nesting habitat is not present within the BSA or PIA. The small patches of degraded riparian vegetation do not contain the lower-level shrub components needed to support the least Bell's vireo. Marginal potential for use as a migration corridor exists; however, birds are more likely to use more suitable habitat corridors. No least Bell's vireo individuals were observed during the survey surveys conducted on April 23 and 27, 2012, May 18 and 23, 2012 and on July 6, 2012, by Peter Gaede.

This species is unlikely to occur in or near the PIA. Restriction of work, parking, and staging areas to previously disturbed sites will keep impacts out of the riparian habitat. If any least Bell's vireos are observed during the pre-construction survey or biological monitoring during construction, USFWS and CDFW will be contacted and an avoidance plan will be prepared.

Southwestern Willow Flycatcher

Southwestern willow flycatchers nest in riparian habitats, usually with surface water present. Vegetation is normally dense with a height of 10 feet or greater. Over story vegetation may or may not be present as well. Nesting has been noted in habitat patches of about two acres to hundreds of acres in size (Sogge et al. 2010). This species arrives later in the spring than many of the other migratory species. Nesting can be spread out from late May until mid-August. Nesting normally occurs in riparian habitats that are adjacent to flowing water.

No southwestern willow flycatcher individuals were observed during surveys conducted in the BSA on July 6, 2012 by Peter Gaede. As noted above, suitable habitat is not present within the BSA or PIA. The riparian vegetation in the BSA lacks the density and structure to be suitable nesting habitat for this species. The degraded riparian vegetation lacks the shrub component required to support the southwestern willow flycatcher. No other suitable vegetation is present. There is potential for this species, on very rare occasions, to use the PIA during migration.

The nearest reported occurrences in the CNDDB data base is a report of two males at Mono Campground near Gibraltar Reservoir within a dense southern cottonwood-willow riparian forest in the Hildreth Peak Quad, well over ten miles from the BSA.

This species is unlikely to occur in or near the PIA. Restriction of work, parking, and staging areas to previously disturbed sites will minimize impacts in the riparian habitat. If any southwestern willow flycatcher individuals are observed during the pre-construction survey or biological monitoring during construction, USFWS and CDFW will be contacted and an avoidance plan will be prepared. Therefore, no take of southwestern willow flycatchers or disturbance to nests is expected

Western Mastiff Bat

The potential for bats to utilize the bridge as roosting habitat by bats was evaluated by Tom Olson and Larry Hunt on May 18, 2012. They evaluated the BSA and the bridge in particular for use by all species of bats. The existing bridge does not provide potential roosting habitat for bats. Because there is potential for some use of the BSA for as foraging habitat, five special-status bats are discussed in this section.

The western mastiff bat is Species of Special Concern in California and is found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. The western mastiff bat is primarily a cliff-dwelling species, where maternity colonies roost generally under exfoliating rock slabs (e.g., granite, sandstone or columnar basalt), but roosts can also be found in high buildings, trees, and tunnels.

During the May 18, 2012 survey, there were no protected hollows under the existing bridge that would be suitable for bat night or day roosting. There was no evidence of bat use in the understructure of the bridge (i.e., urine staining or bat guano). No western mastiff bats were identified elsewhere in the BSA during the wildlife survey.

No bats of any species are expected to utilize the Toro Creek bridge for roosting. Foraging could occur over the riparian woodland area. This would include 0.15 acre of the PIA. No potential bat habitat in the PIA would be permanently impacted.

The only reported identification of western mastiff bats in the CNDDB was in the San Marcos quad and occurred on June 13, 1998, in the White Rock Recreation Area in the upper Santa Ynez Valley, north of Paradise Canyon. The observation was over 10 miles from the BSA.

Although the habitat evaluation indicated no use of the bridge by bats, an inspection of the bridge will be included in the biologist's pre-construction survey. If bats are found on the bridge, an impact minimization plan will be developed before work begins. Other efforts will mitigate the potential effects of increased human presence. The principal measures to be implemented will be the prohibition of night work and the minimization of night lighting to that needed for security purposes. The lights will be directed inward to reduce potential impacts to bats foraging at night. These efforts will minimize potential impacts to the bats described here, as well as any other bats that might occur in the vicinity, such as pallid bat, big free-tailed bat, and Yuma myotis.

Although the western mastiff bat is likely to utilize the PIA to a limited extent, there is potential for direct and indirect impacts.

Big Free-tailed Bat

The big free-tailed bat is a species of special concern in California. As described above, there was no evidence of bats, including big free-tailed bats, using the existing bridge for roosting. Although this species is more likely to roost in crevices instead of on bridges, it has the potential to forage in and near the PIA and is described below.

No evidence of bat use was found under or on the existing bridge during the May 18, 2012 survey by Tom Olosn and Larry Hunt; however, the 0.15 acre of riparian woodland in the PIA represent seasonal foraging habitat for bat species, including the big free-tailed bat.

Yuma Myotis

Yuma myotis is a species of special concern in California. As described in above, there was no evidence of bats, including Yuma myotis, using the existing bridge for roosting. Although this species is more likely to roost in crevices and caves instead of on bridges, it has the potential to forage in and near the PIA and is described below.

No evidence of bat use was found under or on the existing bridge during the May 18, 2012 survey by Tom Olson and Larry Hunt, however the 0.15 acres of riparian woodland in the PIA represent seasonal foraging habitat for bat species, including the Yuma myotis.

The direct and indirect impacts described for the western mastiff bat above also apply to the Yuma myotis bat. Impacts will be mostly associated with increases in human presence and lighting, which could affect the foraging behavior of this species.

Pallid Bat

The pallid bat is a species of special concern in California. As described above, there was no evidence of bats, including pallid bats, using the existing bridge for roosting. Although this species is more likely to roost in buildings, caves, or crevices instead of on bridges, it has the potential to forage in and near the PIA and is descried below.

No evidence of bat use was found under or on the existing bridge during the May 18, 2012 survey by Tom Olson and Larry Hunt; however, the 0.15 acre of riparian woodland in the PIA represent seasonal foraging habitat for bat species, including the pallid bat.

Townsend's Big-eared Bat

This species has been proposed for state-endangered status, and is a species of special concern in California. It utilizes a variety of habitats, usually near roosting habitat which includes caves and mines. As described above, there was no evidence of bats, including Townsend's big-eared bat, using the existing bridge for roosting. Although this species is more likely to roost in crevices instead of on bridges, it has the potential to forage in and near the PIA and is described below.

No evidence of bat use was found under or on the existing bridge during the May 18, 2012 survey by Tom Olson and Larry Hunt ; however, the 0.15 acre of riparian woodland in the PIA represent seasonal foraging habitat for bat species, including Townsend's big-eared bat

Wildlife Corridors

Toro Creek is a major wildlife corridor that supports numerous birds, small mammals, and aquatic species. The over story consists of mature large western sycamore, coast live oak, and occasional Eucalyptus trees, with many sycamore and oak trees exceeding 3 feet in diameter. The oak riparian forest

understory is dominated by non-native weedy species, although native species are also present. In the lower portion of the watershed, there are numerous weedy species in the oak riparian forest understory include garden nasturtium. It is expected that wildlife use Toro Canyon creek as a movement corridor, allowing access from the ocean, under the US 101 freeway, railroad into the coastal foothills and Santa Ynez mountains while traversing through rural developed areas.

Flora and Fauna Surveys.

A Natural Environment Study (NES) was prepared for this project by Tom Olson of Garcia and Associates. The NES is available for review upon request at the Santa Barbara County Public Works downtown office. The NES included biological surveys for flora and fauna in the project area. Flora surveys were conducted by Kathy Rindlaub for common and rare plants and mapped vegetation types on May 25, 2012 and July 7, 2012 within the BSA. Mark Bibbo conducted Flora surveys for common and special-status plant species on April 23, 2012. Mr. Bibbo also conducted a preliminary wetland delineation on April 23, 2012, and Brett Hartman delineated the Waters of the U.S. on May 1, 2015. The studies and surveys listed above were conducted to assess potential occurrence of, and project related effects on sensitive biological resources listed below. Following the completion of these surveys, vegetation types were described and lists of plants and wildlife observed were complied. The list of all plant species observed during the surveys was compiled and is included in Appendix A.

Invasive Plant Species

Executive Order 13112 establishes a national policy to prevent the introduction of invasive species and provide for their control, as well as to minimize the economic, ecological, and human health impacts that invasive species cause.

This site is dominated by non-native plants. During field surveys on May 25, 2012 and July 7, 2012, of the 27 most common and characteristic plants observed, 13 were non-native species, including 11 that are included on either the Natural Resource Conservation Service's list of noxious weeds in California (USDA 2015a, 2015b) or the California Invasive Species Advisory Committee Invasive Species List (a list compiled from the CDFA list, the Cal-IPC Invasive Plant Inventory, and Weeds of California book/list) (CDFA 2015, DiTomaso 2008). The 11 species are listed below:

Invasive Plant Species Observed in the BSA during field surveys on May 25, 2012 and July 7, 2012.

Crofton weed *Ageratina adenophora*
Sea fig *Carpobrotus edulis*
Cape ivy *Delairea odorata*
Panic veldt grass *Ehrharta erecta*
Blue gum *Eucalyptus globulus*
Fennel *Foeniculum vulgare*
English ivy *Hedera helix*
Sourgrass *Oxalis pes-caprae*
Smilo grass *Piptatherum miliaceum*
Castor bean *Ricinus communis*
Curly dock *Rumex crispus*
Periwinkle *Vinca major*

The spread of invasive plant seeds by construction equipment will be controlled by the mitigation measures requiring that project vehicles and equipment be thoroughly washed prior to the start of this

project. Invasive plant material removed from the project area will be taken to a landfill certified to accept such material.

Several actions during the post-construction restoration process will be taken to reduce the likelihood of introduction of invasive plant species. If restoration is necessary, only native plant species will be used. Only weed-free straw mulch will be used. Regular maintenance and monitoring of the restored areas will be performed, during which times weed control will be conducted as required by the project Coastal Development Permit and the California Department of Fish and Wildlife Lake and Streambed Alteration Agreement.

Invasive Animal Species

No invasive animals were observed during the surveys by Peter Gaede on July 6, May 18, May 23, April 23, April 27, or July 12, 2012. But it is likely that some bird species occur the PIA and vicinity, such as Eurasian collared dove (*Streptopelia decaocto*), European starling (*Sturnus vulgaris*), rock pigeon (*Columba livia*) and house sparrow (*Passer domesticus*). In addition due to the proximity to residences, house mice (*Mus musculus*) might also utilize some portions of the PIA. All of these species are widespread non-native species. Other invasive species found in aquatic habitats were not observed, such as bullfrog (*Lithobates catesbeiana*), red swamp crayfish (*Procambarus clarkii*), or signal crayfish (*Pacifastacus leniusculus*).

Regional Habitats of Concern

Santa Barbara County considers oak woodlands, oak forests and individual oak trees as important biological resources. The County Deciduous Oak Tree Protection and Regeneration Ordinance (no. 4490) was adopted in 2003 to protect Valley and Blue oaks. The County's Grading Ordinance was subsequently revised to include native oak tree removal (Ordinance # 4491) which included Coast Live oak. The ordinance set limits on the number of oak tree removals and required replacement thresholds. Valley oak trees are considered protected when they are six inches in diameter at breast height (four feet). Coast Live oaks are considered protected if they are at least eight inches diameter at breast height. Oak trees in the Coastal Zone are also protected by the Coastal Zoning Ordinance (Article II) with the same required replacement threshold if they are at least 8 inches diameter at breast height.

The State of California also recognizes oak forests as important biological resources. Senate Concurrent Resolution 17 – Protection of Oaks - This resolution identifies four species of native oaks (Valley oak [Quercus lobata], Blue oak [Q. douglasii], Coast live oak [Q. agrifolia], and Engelmann oak [Q. engelmannii]) as sensitive biological resources, and requires that impacts to oak habitats be avoided or lessened, and that losses be mitigated.

Toro Canyon has the largest, contiguous coast live oak riparian forest on the South Coast. Covering roughly 550 acres, the habitat extends down the branches of Toro Creek and Garrapata Creek, spreading out from the creek banks hundreds and sometimes thousands of feet onto the floodplains, connecting as one system between Lambert and Toro Canyon Roads. The forest is comprised of about 90 percent coast live oak and 10 percent western sycamore. These trees reach about 60 feet in height and have average diameters of 20 to 30 inches.

The coast live oak community ranges from Sonoma County to Carpinteria, reaching its southern limit of distribution in the Toro Canyon area (Holland 1986). Where a species or entire community reaches the northern or southern limit of its range, it is significant because it is a place where ecological and evolutionary change can occur.

One habitat of concern was identified in the CNDDB for the nine-quad area, which was Southern coastal salt marsh. The Southern coastal salt marsh does not occur in the BSA.

Other habitats in the BSA that might be considered to be of concern are California sycamore riparian woodland. In addition, the riparian habitat represented by this habitat type that occurs in the BSA will come under CDFW jurisdiction for a Section 1602 streambed alteration agreement. This habitat provides potential habitat for plant and wildlife species of concern. For example, riparian habitats provide nesting habitat for birds, including special status species such as Cooper's hawk (*Accipiter cooperii*).

Special Status Plant Species

Special status plant species are either listed as endangered or threatened under the Federal or California Endangered Species Act, or rare under the California Native Plant Protection Act, or considered to be rare or of scientific interest (but not formally listed) by resource agencies, professional organizations (e.g. Audubon Society, California Native Plant Society) and the scientific community.

Five federally- and/or state-listed species potentially occur in the region. Gambel's watercress (*Nasturtium gambelii*), Ventura marsh milk-vetch, salt marsh bird's-beak, marsh sandwort (*Arenaria paludicola*), and Santa Ynez false lupine (*Thermopsis macrophylla*). In addition, San Joaquin woolly-threads (*Monolopia congdonii*) also appeared in the nine-quad CNDDB search, but this species is an interior valley species that does not occur in the region of this project. None of the five species was found during the surveys by Mark Bibbo when he conducted Flora surveys for special-status plant species on April 23, 2012. All would have been identifiable at the time of the surveys. The PIA generally lacks suitable habitat for Gambel's watercress (lack of marsh habitat), Santa Ynez false lupine (lack of chaparral and sandy soils), Ventura marsh milk vetch (lack of salt marsh), salt marsh bird's-beak (lack of coastal marsh, swamp, or dunes), and marsh sandwort (lack of marsh habitat). Suitable habitat was also absent in the BSA for the following non-listed special-status plants, including:

- Late-flowered mariposa lily (*Calochortus fimbriatus*)
- Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*
- Santa Barbara morning glory *(Calystegia sepium* ssp. *binghamiae*)
- Umbrella larkspur (*Delphinium umbraculorum*)
- Ojai fritillary (*Fritillaria ojaiensis*)
- Mesa horkelia (*Horkelia cuneata* ssp. p*uberula*)
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)
- Carmel valley malacothrix (*Malacothrix saxatilis* var. *arachnoidea*
- Chaparral nolina (*Nolina cismontane*)
- Southern jewel-flower (*Streptanthus campestris*)
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*

The California Natural Diversity Database (CNDDB) and the California Native Plant Society's online 8th edition of the Inventory of Rare and Endangered Plants were queried for results on seven quadrangles including and surrounding the Carpinteria quadrangle, where the project is located.

Gambel's Watercress

Gambel's watercress (also known as swamp cress) is an aquatic perennial that ranges from the south Central Coast through the South Coast and into Baja California in below 350 m (1148 ft.) elevation. It is listed as Endangered by both the USFWS and as Threatened by the CDFW. A related species, common watercress (Nasturtium officinale) is widely distributed and cultivated. Common watercress is found in most areas with open water. There are a few reports of intermediates between the two species (Al-Shehbaz, Ihsan A. 2012). Gambel's watercress usually is hairy, and has both narrower leaves and fruit than common watercress. The fruit width is affected by the seed arrangement: one row for Gambel's watercress and two rows for common watercress (Al-Shehbaz, Ihsan A. 2012).
Although there was a small trickle of water and a limited amount of surface water in this narrow reach of Toro Canyon creek at the time of the surveys, no Gambel's watercress was found. The surveys were conducted at several times, by Mark Bibbo on April 23, 2012, and on May 25, and July 7, 2012, by Tom Oslon and Kathy Rindlaub when common watercress was in both flower and fruit. The nearest population of Gambel's watercress is in the North County on Vandenberg Air Force Base, on a fen-like tributary to San Antonio Creek.

No Gambel's watercress plants were found and none are expected due to the presence of only limited, marginally suitable habitat.

Coulter's Saltbush

Coulter's saltbush is a perennial herb that is native to California and to Baja California. It is included in the CNPS Inventory of Rare and Endangered Plants on list 1B.2 (rare, threatened, or endangered in CA and elsewhere and fairly endangered in California). It grows in areas of saline and alkaline soils, such as ocean bluffs.

Coulter's saltbush has only one reported occurrence in the Carpinteria quad from an observance in 1927. The location is vague, mentioning only a "bluff in Carpinteria." It blooms from March to October so, if present, it would have been identifiable at the time of the survey. No Coulter's saltbush individuals were observed during the field surveys. by Mark Bibbo on April 23, 2012, and on May 25, and July 7, 2012, by Tom Oslon and Kathy Rindlaub.

Because this species was not found, and suitable habitat (coastal bluff, dunes, and scrub) is generally lacking from the BSA, no impacts are expected.

Davidson's Saltscale

Davidson's saltscale has a California Rare Plant Rank of 1B.2. It is native to California and Baja California, where it grows in saline and alkaline soils such as those on alkali flats and beach bluffs.

This species was not found during the surveys of the PIA by Mark Bibbo on April 23, 2012, and on May 25, and July 7, 2012, by Tom Oslon and Kathy Rindlaub. Davidson's saltscale blooms from April through October and would have been identifiable at the time of the surveys if it was present.

Southern Tarplant

Southern tarplant is an annual herb that is native to California and Baja California. It is included in the CNPS Inventory of Rare and Endangered Plants on list 1B.1 (rare, threatened, or endangered in CA and elsewhere and seriously endangered in California). It is distributed in marsh and swamp margins, vernally mesic valley and foothill grasslands, and vernal pools. Southern tarplant occurs in San Diego, Orange,

Ventura, Los Angeles, and Santa Barbara counties, although many of the Orange County populations have been recently extirpated. Population fragmentation is a serious problem, and this species continues to be threatened by urbanization, vehicles, development, foot traffic, grazing, habitat disturbance, and competition from non-native plants.

This species was not found during the surveys by Mark Bibbo on April 23, 2012, and on May 25, and July 7, 2012, by Tom Oslon and Kathy Rindlau. It blooms from May to November and would have been identifiable at the time of the surveys. Southern tarplant was not observed during the surveys and none have been documented within the Carpinteria quad.

Black-flowered Figwort

Black-flowered figwort has a California Rare Plant Rank of 1B.2. It is endemic to California, where it is known only from a section of the Central Coast Ranges in San Luis Obispo and Santa Barbara counties. It grows primarily in the calcareous and diatomaceous soils of the coastal canyons. This species is found in a number of plant communities, such as riparian scrub, and coastal scrub.

Black-flowered figwort was not found during the surveys of the PIA and BSA. This is a perennial herb that blooms from March through July. Thus, it would have been identifiable during the surveys, which were conducted by Mark Bibbo on April 23, 2012, and on May 25, and July 7, 2012, by Tom Oslon and Kathy Rindlau. This species is not expected to be in the PIA based on survey results.

Santa Barbara Honeysuckle

Santa Barbara honeysuckle is a perennial evergreen shrub and has a California Rare Plant Rank of 1B.1: "rare, threatened or endangered in California, and fairly endangered in California." The habitats in which it is found include chaparral, cismontane woodlands, and coastal sage scrub at elevations from sea level to 3,300 feet. The closest occurrence is over a mile northeast of the site near Toro Canyon Reservoir.

This species was not found during the survey of the BSA by Mark Bibbo on April 23, 2012, and on May 25, and July 7, 2012, by Tom Oslon and Kathy Rindlaub. Santa Barbara honeysuckle is a perennial evergreen shrub and would have been identifiable at the time of the surveys if it was present.

Nuttall's Scrub Oak

Nuttall's scrub oak is a perennial evergreen shrub and has a California Rare Plant Rank of 1B.1: "rare, threatened or endangered in California, and seriously endangered in California." The habitats in which it is found include closed-cone coniferous forest, chaparral, and coastal scrub on sandy or clay loam soils near the coast at elevations of 50 – 1312 feet. The closest occurrence is west of Toro Canyon Road, approximately one mile north of Highway 101.

This species was not found during the survey of the BSA. Due to its evergreen nature, Nuttall's scrub oak would have been identifiable at the time of the surveys.

Wetlands

No wetlands were identified in the PIA. Impacts to Waters of the U.S. will include a small amount of permanent impact and temporary impact to Toro Canyon creek due to the proposed project.

Wetlands and other waters delineated in this report are potentially subject to a variety of state and federal regulations. Included in this project are Waters of the U.S. subject to the federal Clean Water Act (CWA), waters of the state as defined by the Porter-Cologne Water Quality Act, riparian vegetation and streambeds as defined by CFG Code 1602(a), and California Coastal Commission jurisdiction.

Wetlands are driven by hydrology and occur where water is present near the soil surface resulting in soil and plant characteristics that are not found in upland (mostly dry) or aquatic (almost always wet and un-vegetated) habitats. Wetlands are generally found in transition zones between upland and aquatic habitats.

The wetland delineation done for the project followed the routine wetland delineation method described in the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), with supplemental guidance as directed by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a) and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (USACE 2008b) to identify Waters of the U.S. The BSA lies within the arid west Mediterranean California (LRR-C) region.

Field surveys were conducted to delineate the location and extent of wetlands and water features within the BSA. A field survey was conducted by GANDA botanist Mark Bibboon April 23, 2012. Waters of the U.S. were identified based on the presence of an ordinary high water mark (OHWM).

The extent of waters observed in the BSA during the April 2012 and May 2013 field surveys by Mark Bibbo and Brett Hartman. Toro Canyon creek is hydrologically connected to 'traditional navigable waters' (the Pacific Ocean), and is determined to be both Waters of the U.S. and waters of the State. A total of 185 linear feet and 0.14 acre of Waters of the U.S. and Streambeds of the State were detected within the BSA and 60 linear feet and 0.07 acre within the PIA. A total of 0.86 acre of CDFW riparian jurisdiction is present within the
BSA and 0.19 acre in the PIA, including the bank-to-bank area.

The PIA for this project occurs within of the bed and banks Toro Creek. As such, there will be impacts to Waters of the U.S. that occur in the PIA. A wetland delineation for this project is contained in Appendix C. Project activities in these areas require permitting with the CDFW, USACE and RWQCB. It should be noted that the disturbance within Waters of the U.S. will be associated with scour protection, which will have a long-term beneficial impact on wetland resources and wildlife habitat. Moreover, mitigation measures described in Water Resources/Flooding will reduce impacts to Waters of the U.S. and provide protection by stabilizing soils in the area. The areas of channel that corresponds to USACE and RWQCB jurisdiction are 0.14 acre along 185 feet in the BSA and 0.07 acre along 60 feet in the PIA

Summary of Jurisdictional Areas

Feature	Area in BSA (acres)	Area in PIA		
		Temporary (linear feet/acres)	Permanent (linear feet/acres)	Total (linear feet/acres)
USACE/RWQCB Jurisdiction				
Toro Canyon Creek (Waters of the U.S.)	0.170	53/0.064	7/0.006	60/0.070
CDFW Jurisdiction				
Toro Canyon Creek (streambed)	0.170	53/0.064	7/0.006	60/0.070
Riparian vegetation	0.630	60/0.080	0/0.000	60/0.080
Total CDFW Jurisdiction	0.800	60/0.144	7/0.006	60/0.150

Impact Discussion:

(a) The proposed bridge scour repair project would not result in the loss of any native vegetation. The removal of vegetation only affects an invasive species and creates temporary soil disturbance. Invasive species removal will increase habitat area for the riparian plant community. Mitigation measure **Bio-1. Riparian Vegetation** and **Bio-4. Control of Invasive Plant Species** would mitigate disturbance impacts to less than significant.

(b) The proposed project would not result in the loss of any numbers or range of unique, rare or threatened plants or plant communities such as annual native grassland. The project impact area contains mostly ruderal plants that are composed primarily of non-native species. This habitat does not provide significant habitat essential to the conservation of endangered or threatened plant species and the habitat value of existing plant species is low because is not utilized by raptors or other wildlife species, etc.

(c) There will be no reduction in the exteant, diversity or quality of native vegetation. The areas of riparian habitat subject to disturbance will be restored with a focus on removal of non-native and invasive plant species from the creek bed and banks when the project is completed. Mitigation measure **Bio-6. Restoration and Mitigation Plan** would mitigate impacts to less than significant.

(d) The project would not result in other factors that would change the habitat. No chemicals, lighting, animals or invasive species would be associated with the project implementation. Therefore, impacts to the habitat value of the location are considered to be less than significant.

(e) The project will not require the removal of any trees. Some minor tree limbing will be required to allow for a crane to lower and raise equipment and material from the bridge to the creek bed. Therefore, impacts to trees are considered to be less than significant.

(f) The project will not result in the introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat

(g) The project will not create a reduction in the number, a restriction in the range or an impact to the critical habitat of any unique, rare, threatened or endangered species of animal. No threatened or endangered species were located during the project surveys. A County qualified biologist will conduct a pre-construction survey of the work, parking, and staging areas and vicinity prior to the start of construction. The survey will focus on sensitive wildlife species and nesting birds. The biologist will survey the creek channel in and near the PIA for wildlife species and will search for active nests of birds. Mitigation measure **Bio-2. Preconstruction Survey** would mitigate impacts to less than significant.

(h) The project will not result in a reduction in the diversity or numbers of animals onsite. A County qualified biologist will conduct a pre-construction survey of the work, parking, and staging areas and vicinity prior to the start of construction. The survey will focus on sensitive wildlife species and nesting birds. The biologist will survey the creek channel in and near the PIA for wildlife species and will search for active nests of birds. Mitigation measure **Bio-2 Preconstruction Survey and Nesting birds** and **Bio-3 Biological Monitoring** would mitigate impacts to less than significant.

(i) The project will not result in a deterioration of existing fish or wildlife habitat. The dominant invasive species within the BSA are English ivy, cape ivy, and periwinkle. These species occur mostly within the vegetation community identified as California sycamore riparian woodland and understory. Downstream, Toro Creek has a natural streambed substrate comprised mostly of boulders. Trash and debris are present at the project location, the substructure of the bridge is subjected to large occurrences of graffiti and rock climbers frequently use the arch bridge just

upstream from the project site. Mitigation measure **Bio-3. Removal of Trash and Debris** would mitigate impacts to less than significant.

(i) Toro Creek is most likely used as a corridor by wildlife moving through the area as it provides habitat and cover from the nearby State Highway 101. No barriers to fish or wildlife would be involved and no work would occur at night, when most wildlife movement occurs. The project will not create noise and vibration that interfere with ability of reptiles, birds, and mammals to communicate, detect prey, or avoid predators. Therefore, impacts to wildlife movement are considered less than significant.

(j) Project implementation would not involve fencing. The project site is located within an existing roadway in a residential development, such that existing sources of lighting, noise, vehicle traffic and human presence are commonly present. The project would not result in a substantial increase in factors which may hinder normal activities of wildlife. There will be a short term introduction of human and mechanical equipment during construction. Also some minor tree limbing will be required to allow a crane to supply material and equipment to the work site. Mitigation measure **Bio-2. Preconstruction Survey and Nesting birds** would mitigate impacts to less than significant.

Cumulative Impacts:

Since the project would not significantly impact biological resources onsite, it would not have a cumulatively considerable effect on the County's biological resources.

Mitigation and Residual Impact:

1. **Bio-1. Riparian Vegetation.** Native riparian plants such as willow and cottonwood cuttings shall be planted to stabilize the toe of slope and restore disturbed areas under the bridge to enhance the riparian habitat of the stream channel as directed by a County approved biologist familiar habitat restoration.

Plan Requirements and Timing: Mitigation measures shall be included in the project plans and specifications. **MONITORING:** A qualified native plant specialist shall conduct the native planting and biological monitoring. The County senior environmental planner shall ensure compliance with this measure.

2. **Bio-2. Preconstruction Survey and Nesting birds.** A County qualified biologist will conduct a pre-construction survey of the work, parking, and staging areas and vicinity prior to the start of construction. The survey will focus on sensitive wildlife species and nesting birds. The biologist will survey the creek channel in and near the PIA for wildlife species. If active bird nests are found, the County approved biologist will develop an avoidance plan that will protect the resources while still accommodating construction. Work shall be planned to occur after August 15 to avoid any nesting birds.

Plan Requirements and Timing: Mitigation measures shall be included in the project plans and specifications. **MONITORING:** A qualified biologist shall conduct the pre-construction survey and any biological monitoring. The County senior environmental planner shall ensure compliance with this measure

3**. Bio-3. Biological Monitoring**. A qualified biologist will monitor all scour protection installation activities. While monitoring, the monitor will review project compliance with terms, conditions, and measures, including those associated with a Section 1602 Lake and Streambed Alteration Agreement (LSSA); search for sensitive wildlife species; and move non-listed wildlife species out of harm's way, as necessary.

Plan Requirements and Timing: Mitigation measures shall be included in the project plans and specifications. **MONITORING:** A qualified biologist shall conduct the pre-construction survey and any biological monitoring. The County senior environmental planner shall ensure compliance with this measure.

4. **Bio-4. Control of Invasive Plant Species**. All equipment will be washed prior to the start of construction. Workers will stay out of natural communities (riparian woodland) except along a designated pathway to be used by workers to access the creek channel.

Plan Requirements and Timing: Mitigation measures shall be included in the project plans and specifications. **MONITORING:** A qualified biologist shall conduct the pre-construction survey and any biological monitoring. The County senior environmental planner shall ensure compliance with this measure.

5. **Bio-5. Removal of Trash and Debris.** All trash items will be placed in containers with tight-fitting lids and will be removed from the project site each day. All debris from scour protection installation will be removed

Plan Requirements and Timing: Mitigation measures shall be included in the project plans and specifications. **MONITORING:** A qualified biologist shall conduct the pre-construction survey and any biological monitoring. The County senior environmental planner shall ensure compliance with this measure.

6. **Bio-6. Restoration and Mitigation Plan.** A restoration plan has been prepared that focuses on removal of non-native and invasive plant species from the creek bed and banks. The plan shall include removal of invasive species and the use of a native seed mix on all areas subject to grading disturbance.

Plan Requirements and Timing: Mitigation measures shall be included in the project plans and specifications. **MONITORING:** A qualified biologist shall conduct the pre-construction survey and any biological monitoring. The County senior environmental planner shall ensure compliance with this measure.

With the incorporation of these measures, residual impacts would be less than significant.

4.5 CULTURAL RESOURCES

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
Archaeological Resources					
a. Disruption, alteration, destruction, or adverse effect on a recorded prehistoric or historic archaeological site (note site number below)?				X	
b. Disruption or removal of human remains?				X	
c. Increased potential for trespassing, vandalizing, or sabotaging archaeological resources?				X	
d. Ground disturbances in an area with potential cultural resource sensitivity based on the location of known historic or prehistoric sites?		X			
Ethnic Resources					
e. Disruption of or adverse effects upon a prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethnic group?				X	
f. Increased potential for trespassing, vandalizing, or sabotaging ethnic, sacred, or ceremonial places?				X	

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
g. The potential to conflict with or restrict existing religious, sacred, or educational use of the area?				X	

Setting: The entire area has been altered by more than a century of development; Padaro Lane is paved with asphalt and concrete and bordered by disturbed, imported sediments and a mixture of native and exotic vegetation. U.S. Highway 101 and the Union Pacific Railroad are just north of the Study Area and private residences (gated coastal estates) are immediately south. The creek has been modified extensively north of the bridge, being completely paved and channelized beneath the railroad and the highway. South of the bridge, the creek is deeply incised with vertical native clay banks approximately12 feet high and dense riparian vegetation dominated by sycamores, wild cucumber, and blackberry. Approximately 50 feet south of the bridge, a concrete check dam topped with an iron gate divides County property from private estates downstream.

Regional Prehistoric Overview. The following overview is part of the Archeological Study Report prepared for the project by Marc Linder of Applied Earth Works, Inc (Æ). The overview presents the prehistory of California.

Glassow et al. (2007) divide the prehistory of the region into six periods:

1. Paleo-Indian (pre-7000 B.C.)
2. Milling Stone (7000–4500 B.C.)
3. Foundations of a Maritime Lifeway (4500-2000 B.C.)
4. Marine and Terrestrial Transitions from the Middle to Late Holocene (2000 B.C.–A.D. 1)
5. Important Technological and Social Developments (A.D. 1–1000)
6. Complexity and Climatic Change (A.D. 1000-1542)

1) Paelo-Indian (Prior to 7000 B.C.)

Humans were present in the Santa Barbara Channel by 12,000 years ago, as indicated by human bones from Santa Rosa Island that are at least that old (Erlandson et al. 2007:57). The earliest human presence on the mainland is reflected by a basal corner of a Clovis point which may indicate a mainland occupation of a comparable age (Glassow et al. 2007: 192). These are some of the oldest archaeological finds from North America. Coastal sites of the California Bight dating earlier than 7000 B.C. have been included in the Paleo-Coastal Tradition. Following Davis et al. (1969), Moratto (1984:104) uses the term "Paleo-Coastal" to refer to the possible descendants of Paleoindians who inhabited the coast at estuaries and bay shores. Not many sites have been found from this period. Besides the sites described above, only two additional sites from the Channel Islands and one other site from the Santa Barbara Channel mainland date prior to 7000 B.C. Sites dating to this period contain artifact assemblages dominated by flaked stone tools; the people appear to have subsisted largely on plants, shellfish, and some vertebrate species. Fishing with gorge and line was practiced by about 7800 B.C., however, milling implements were not used during this period. Overall, this period has been described as a time of low population density, simple technology, and egalitarian social organization (Erlandson 1994; Erlandson et al. 2007:57; Glassow et al. 2007: 192).

2) Milling Stone Period (7000–4500 B.C.)

After 7000 B.C. the population began expanding and metates and manos become abundant. Approximately 40 sites have been dated to the Milling Stone Period and many sites contain substantial

deposits with hundreds of artifacts implying regular use and longer periods of residence. These ground stone implements have been interpreted as evidence for a subsistence focus on seeds and other plant materials, and may imply increased storage of food between seasons (Glassow 1996; Glassow et al 2007: 194). Hammerstones, fire affected rocks, and various flaked stone tools are also abundant in sites dating to this period; however, sites of this age contain few or no projectile points. Estuarine shell species are very common in sites of this age along the channel coast and appear to have been more important than other animal food sources. Additionally, artifacts made from exotic obsidian, imported from at least as far away as the southeastern Sierra Nevada, have been recovered from sites dating to the early phases of this era. *Olivella biplicata* shell beads make their first appearance during the Milling Stone Period, but they do not indicate social stratification as in later prehistory. The patterned distribution of artifact types interred with burials indicate that social status was determined by an individual's own accomplishments rather than on inherited or ascribed social standing (Erlandson 1991, 1993, 1994; Glassow 1996; Glassow et al. 2007: 194-195; King 1990; Warren 1968).

3) Foundations of a Maritime Lifeway (4500-2000 B.C.)

This period represents a time of technological advances, population growth, and greater social complexity. Metates and manos continued to be used during this period, and mortars and pestles were added indicating a reliance on a greater variety of plant foods, including acorns. There is also a significant increase in the quantity of projectile points (Glassow et al. 2007: 197-199). Population densities and reliance on marine fish and mammals appears to increase steadily from 3000 to 1000 B.C. Settlement became more complicated with both large sites and smaller, less dense sites existing at the same time. The larger sites may have served as primary residential bases where a variety of specialized activities took place, while the smaller sites would have been occupied for much shorter periods. There is also an increase in the number of shell beads and ornaments found with burials, indicating greater social complexity (Glassow 1996; Glassow et al. 2007: 197-199).

4) Marine and Terrestrial Transitions from the Middle to Late Holocene (2000 B.C.-A.D. 1)

Changes in technology, subsistence, and settlement during this period reflect an increasing maritime orientation with intensified fishing and regional exchange. Contracting stemmed points, notched stone sinkers or net weights, and circular shell fishhooks all make their first appearance during this period, all of which directly transformed hunting, fishing, and warfare. There is a broadening of diet to include a more diverse array of marine and terrestrial species. This resource diversification is associated with changes in social organization and ideology and greater political complexity in the region. Sites from this period have yielded ceremonial enclosures and formal cemeteries with a wide range and abundance of beads, ornaments, and ritual items. Evidence for increased sedentism is based on increased site size and/or high density of faunal remains and artifacts, floral assemblages indicative of year-round habitation, formal architecture, ceremonial structures, and formal cemeteries (Glassow et al. 2007: 200-202).

5) Important Technological and Social Developments (A.D. 1-1000)

This era is considered to be a time of steady intensification of resource use to support increasing populations, reflected by increasing diversity of food sources taken from a wider range of habitats. This was enabled by technological changes that supported fishing and hunting. The most significant technological change is the introduction of the plank canoe, or *tomol*. The *tomol* was important in fishing and commerce between the mainland coast and the Channel Islands. The bow and arrow was also introduced during this period which influenced methods of hunting and warfare. Population growth and increased sedentism is reflected by larger midden deposits and the presence of well-developed cemeteries (Erlandson 1993; Glassow et al. 2007: 203-204).

6) Complexity and Climatic Change (A.D. 1000-1542)

Late prehistory represents the height of Chumash population, craft specialization, and social complexity. Island populations manufactured millions of shell beads which would be exchanged for mainland products. This was supported by microlithic blade technology which emerged by circa A.D. 900, linked with production of standardized microdrills for perforating shell beads. During the next 250 years, these island chert microdrills are found at both island and mainland villages. A technologically superior microblade appeared around A.D. 1150, coinciding with increases in production scale, decreased failure rates, greater labor investment, and product standardization (Arnold 2001; Glassow et al. 2007: 207). The distribution of artifacts from mortuary contexts also underwent notable alterations circa A.D. 1150. King (1990:100–101, 153–154, 196–197) has interpreted the newly ubiquitous distribution of certain shell bead forms in all types of mortuary contexts as signaling a profound change in Chumash social and political organization—the final emergence of a secular economy no longer controlled and orchestrated by political leaders but accessible to the full population. This mortuary artifact-based interpretation stands in contrast with Arnold's model (based on data from habitation rather than mortuary contexts) of emerging chiefly status positions and sociopolitical complexity beginning circa A.D. 1150. Nevertheless, it appears clear that the period beginning at this time is marked by striking changes in Chumash society, economy, and political organization.

Evidence from the archaeological record clearly implicates changing environmental conditions in addition to growing populations and the resulting increased pressure on subsistence and other resources as notable influences on changing Chumash social and cultural practices. Both shorter- and longer-term variations in overall health have been observed. Early prehistoric populations exhibit generally better overall health and lower rates of infectious disease and violent injuries than later populations (Walker 1989, 1992; Walker and Johnson 1992). Frequencies of dental hypoplasia (linked with malnutrition and systemic infections) increase steadily through prehistory; additional variation exists among villages. Traumatic injuries increase through time, a trend believed related to increased population-resource pressures and resultant increased violent conflicts (Lambert 1993, 1994; Walker 1989, 1992; Walker et al. 1989). Shorter-term periods of environmental perturbation appear to correlate with higher incidence of infectious disease and traumatic injuries indicative of violent conflict (Lambert 1994; Walker and Lambert 1989). Unfavorable climate conditions and introduction of the bow and arrow, both beginning circa A.D. 500, are associated with increased signs of interpersonal violence in channel populations (Walker et al. 1989).

Record Search Prior to the field survey, a records search was conducted at the Central Coast Information Center (CCIC) of the California Historical Resources Information System. CCIC staff performed the records search on 30 November 2012. The records search encompassed the Study Area described above and a 0.5 mile buffer surrounding the Study Area. The CCIC reviewed base maps to obtain information about known archaeological and historical sites and prior cultural resources studies that can be used to assess the cultural sensitivity of the Study Area. Additional data sources include the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, California Inventory of Historical Resources, and the Caltrans Historic Bridge Inventory.

The CCIC records search identified 29 previous surveys within 0.5 mile of the Study Area. These include several studies for underground utilities (fiber optic lines and oil pipelines), a number of private parcel assessments, road/highway improvement projects, stream/drainage system inventories, and a proposed school site survey. Other studies were focused on individual sites: SBA-13, -1566, and -1856.

Previous Cultural Resources Studies within 0.5 mile of the Padaro Lane Bridge (51C-163) Scour Repair Project.

Report No.[a]	Date	Author(s)	Title	Results
E-6	1978	Craig, S.; Horne S.	*Archaeological Assessment of a Parcel of Land at Loon Point, Santa Barbara County, California.*	SBA-13, -1566
E-10	1974	Glassow, M.	*Misc. Correspondence Pertaining to Development at SBA-13, Carpinteria, California*	SBA-13
E-21	1981	Stone, D.	*Phase 1 Archaeological Investigation at Toro Creek, Santa Barbara County.*	Negative
E-22	1983	Stone, D.; Erlandson, J.	*Results of Phase II and III Archaeological Investigations at SBA-13.*	SBA-13
E-23	1977	Wilcoxon, L.	*An Archaeological Field Reconnaissance of Rancho Robles, Carpinteria, California.*	SBA-1513
E-28	1981	Wilcoxon, L.	*Letter Report: Subsurface Archaeological Investigation Edgewood Ranch, Summerland, California.*	SBA-1202
E-30	1982	Stone, D.	*A Sub-Surface Testing Program at the Duca Property 3003 Padaro Lane, Carpinteria, CA.*	SBA-13
E-502	1987	Berry, S.	*Phase 1 Archaeological Assessment, APN5-351-11/5-351-12.*	Negative
E-1011a	1988	Dames & Moore	*Phase 1 Cultural Resources Survey, Fiber Optic Cable Project, Burbank to Santa Barbara, California for US Sprint Communications Company*	SBA-1,-6,-7,-12,-13,-17, -18, -19, -1167, -1168, -1213, -1670/H, -2177, -2178/H
E-1011b	1988	Dames & Moore	*Confidential Appendices: Phase 1 Cultural Resources Survey, Fiber Optic Cable Project, Burbank to Santa Barbara, California for US Sprint Communications Company*	SBA-1,-6,-7,-12,-13,-17, -18, -19, -1167, -1168, -1213, -1670/H, -2177, -2178/H
E-1032	1991	Tordoff, J.	*Archaeological Survey Report for the Proposed Road Widening along Highway 101.*	SBA-16, -18, -2178/H, -2179
E-1082	1993	Peak and Associates	*Class 1 Inventory for a Proposed Fiber Optic Communication Route, San Francisco to Los Angeles.*	SLO-65, -122, -593,-596, -834, -1075, -1076, -1077
E-1392	1986	Macko, M.	*Timloqin: Final Report-Phase II Archaeological Studies at CA-SBA-1856, Summerland, California.*	SBA-1856
E-1419	1992	Peak and Associates; L.W. Reed	*Consolidated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project*	SBA-38, -39, -54, -57, -60, -70, -100, -142, -1093, -1539, -1653, -1655, -1717, -1750
E-1445	1988	Peak and Associates	*Class I Inventory for a Proposed Fiber Optic Communication Route, San Francisco to Los Angeles*	Over 250 sites in Santa Barbara County
E-1446	1988	Peak and Associates	*Class I Inventory for the Proposed American Telephone and Telegraph Salinas to Los Angeles Fiber Optics Communication Route*	About 100 sites in Santa Barbara mentioned in report
E-1447	1992	Peak and Associates	*Report on the Shovel Testing of 24 Prehistoric Period Cultural Resources and the Class 3 Reassessment-Pacific Coast Pipeline Santa Barbara, Ventura, and Los Angeles Counties.*	SBA-86, -87, -88, -131, -1151, -1204, -1506, -1676, -1731, -1870, -1900, -1915, -1921, -2190

Report No.[a]	Date	Author(s)	Title	Results
E-1449	1993	Peak and Associates	*Report on the Backhoe Trenching of Potential Cultural Resource Sites for the Pacific Pipeline Project Santa Barbara and Ventura Counties.*	Numerous sites in Santa Barbara and Ventura Counties
E-1811	1993	King, C.	*Native American Placenames in the Vicinity of the Pacific Pipeline: Part 2: Gaviota to the San Fernando Valley*	SBA-88, -90, -91, - Numerous sites
E-2014	1996	Wilcoxon, Larry R.	*A Phase 1 Cultural Resource Evaluation for Carpinteria Unified School District's Proposed School Campus Site at 225 Toro Canyon Road, Summerland, California.*	Negative
E-2619	2000	Joslin, T.	*Negative Historic Property Report for Proposed Minor Road Maintenance Improvements Between Carpinteria and Santa Barbara, State Route 101, Santa Barbara County.*	Negative
E-2667	2001	Santa Barbara Flood Control	*Draft Program Environmental Impact Report: Updated Routine Maintenance Program.*	N/A
E-2870	2002	Stone, D.	*Archaeological Assessment of 2825 and 2937 Padaro Lane, Carpinteria, CA, APN 005-260-010.*	N/A
E-2938	1992	Caltrans	*Historic Properties Survey Report, Request for Determination of Eligibility for the Route 101 Six-Lane Project from Milpas Street in the City of Santa Barbara to Bailard Avenue in the City of Carpinteria; OHP No. FHWA921006A.*	SBA-1, -12, -13, -16, -17, -18, -19, -2178, -2179
E-4058	2006	SWCA Environmental Consultants	*Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California – See Also CA-SLO-6082.*	Negative
E-4111	2002	Various	*Final Report on Cultural Resource Monitoring Level (3) Long Haul Fiber Optic Running Line, San Luis Obispo to Burbank, California, San Luis Obispo, Santa Barbara, Ventura, and Los Angeles Counties.*	SBA-88, -90, -91, -93, -1017, -1018, -1151, -1204, -1707, -1708, -1969
E-4276	2008	Stone, D.; Victorino, K.	*Phase 1 Cultural Resources Survey, 3001 Padaro Lane, Carpinteria.*	Negative
E-4253	2007	Romani, J.; Romani G.	*Archaeological Phase I Survey Report and Site Surface Evaluation of CA-SBA-1566, Located at 2825 Padaro Lane, Carpinteria, California APN: 005-260-009.*	SBA-13, -1182, -1856
E-4580	2008	Romani, G.; Larson, D; Girod, C.	*Preliminary Report on the Extended Phase I / Limited Phase II Archaeological Investigation at CA-SBA-1566, Carpinteria, Santa Barbara County, California.*	SBA-13, -1566

Field Investigation: Æ archaeologist Marc Linder conducted a pedestrian survey of the Study Area on December 3, 2012. Linder surveyed areas proposed for construction including and the banks and base of Toro Canyon creek beneath Bridge 51C-163 and both sides of Padaro Lane up to 200 feet from the bridge. He carefully examined sediments along both sides of the creek, noting geology, soil structure, gravel, vegetation, disturbances, and any cultural materials. He also studied sediments exposed in landscaping and bare areas along the road and within the nearby parking lot for the Loon Point Beach trail, which may be used as a staging area.

The pedestrian survey included approximately 50 by 130 feet of accessible creek area below the bridge plus a 50 by 335 foot area encompassing the existing 135 foot bridge and two adjacent150 foot sections of Padaro Lane. Overall ground surface visibility was 15-20 percent, limited by pavement, landscaping, and duff/ leaf litter. Good soil profiles could be observed under the bridge itself and in the vertical creek

banks to the south. The creek bed contained scattered modern debris; however, no archaeological or historical materials were observed in the course of this study. The Toro Canyon creek Bridge was not recorded due to its recent age and evaluation by Caltrans as not eligible for listing on the National Register of Historic Places.

Native American Consultation Æ contacted the Native American Heritage Commission (NAHC) on 11 October 2012 to request pertinent cultural resources information available for the project study area. On 18 October 2012 the NAHC replied that a search of their Sacred Lands Inventory failed to indicate the presence of Native American cultural resources in the immediate project area. The NAHC also provided contact information for individuals/organizations that may have knowledge of cultural resources in the project area. Æ mailed a letter to each individual identified by the NAHC and followed up by attempting to contact each person by phone (Table 3 below).

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Table 3
Native American Consultation Results for the Padaro Lane Bridge (51C-163) Scour Repair Project

Name	Affiliation	Letter Mailed	Phone Contact	Results
Adelina Alva-Padilla	Chumash	11/13/12	11/26/12	The number listed is linked to a voicemail box for Karen Keever with the Santa Ynez Tribal Elders Council, Left message; no response to date.
Vincent Armenta	Chumash	11/13/12	11/26/12	Spoke with his secretary who said he would call if he had concerns for the project.
Santa Ynez Band of Mission Indians Tribal Administrator	Chumash	11/13/12	11/26/12	Spoke with the Santa Ynez Band of Mission Indians Secretary who said the Tribal Administrator received the letters and would call if he saw concerns with the projects.
Freddie Romero	Chumash	11/13/12	11/26/12	This project is out of his area. He advises to listen to the feedback of the tribes in Santa Barbara.
Randy Guzman-Folkes	Chumash, Tataviam, Fernandeño, Yaqui, Shoshone Paiute	11/13/12	11/26/12	Said he is only interested in projects in the Ventura area, but to pursue with caution.
Beverly Salazar Folkes	Chumash, Tataviam, Fernandeño	11/13/12	11/26/12	Left a message with her husband 11/26/12. He said she would call if she had any concerns.

Julie Tumamait-Stennslie	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Patrick Tumamait	Chumash	11/13/12	11/29/12	He regards project area as a sensitive location (human remains nearby) and recommended an archaeological monitor and NA monitor be present during ground disturbing activities.
Frank Arredondo	Chumash	11/13/12	11/26/12	Number went straight to a recorded message; however, there was no answering machine to leave a message on.
Janet Darlene Garcia	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Charles S. Parra	Chumash	11/13/12	11/26/12, 12/19/12	Mrs. Parra mentioned her husband has worked in the Padaro Lane area in the past and is concerned with the number of sites in the area; requesting presence of a monitor during any earth moving. Mr. Parra volunteered to monitor since he is familiar with the area. In a letter mailed December 19 he detailed his concerns about the level of ground disturbance and potential for unknown resources.
Mark Vigil	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Melissa Para-Hernandez	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Carol A. Pulido	Chumash	11/13/12	11/26/12	Left a message; no response to date.
John Ruiz	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Gilbert Unzueta	Chumash	11/13/12	11/26/12	Called the listed number; it was a fax line.
Ernestine DeSoto	Chumash	11/13/12	11/26/12	Requested presence of a monitor during construction monitoring. Emailed another copy of the letter per her request.
Crystal Baker	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Qun-tan Shup	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Toni Cordero	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Raudel Joe Banuelos, Jr.	Chumash	11/13/12	11/26/12	Left a message; no response to date.
Stephen William Miller	Chumash	11/13/12	11/26/12	Spoke with his wife who said he reads the letters and calls when he has concerns.
Kathleen Pappo	Chumash	11/13/12	11/26/12	She requested to be informed on the progress of the project especially if we end up doing any ground penetration.

Impact Discussion:

(a-g) The potential for undiscovered cultural resources to exist onsite is low. However, in the event that previously unidentified cultural resources are discovered during site development, the standard archaeological discovery conditions would apply. Mitigation Measures **ARC-1 & ARC-2** would mitigate impacts to cultural resources to less than significant levels.

Cumulative Impacts:

Since the project would not significantly impact archeological resources onsite, it would not have a cumulatively considerable effect on the County's archeological resources.

Mitigation and Residual Impact:

The following mitigation measure would reduce the project's cultural resource impacts to a less than significant level:

1. **ARC-1** In the event archaeological remains are encountered during grading, work in the vicinity of the find shall be stopped immediately or redirected until a County qualified archaeologist and Native American representative are retained to evaluate the significance of the find pursuant to Phase 2 investigations of the County Archaeological Guidelines. If remains are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with County Archaeological Guidelines and funded by the applicant.

Plan Requirements/Timing: This condition shall be printed in the project specifics and included with the plans. **MONITORING:** A County qualified archeologist shall evaluate the significance of any archaeological remains and conduct the required investigation. The County senior environmental planner shall ensure compliance with this measure.

2. **ARC-2** If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resource Code Section 5097.98. If the remains are determined to be of Native American decent, the coroner has 24 hours to notify the Native American Heritage Commission.

Plan Requirements/Timing: This condition shall be printed in the project specifics and included with the plans. **MONITORING:** A County qualified archeologist shall evaluate the significance of any archaeological remains and conduct the required investigation. The County senior environmental planner shall ensure compliance with this measure.

With the incorporation of this measure, residual impacts would be less than significant.

4.6 ENERGY

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Substantial increase in demand, especially during peak periods, upon existing sources of energy?				X	
b. Requirement for the development or extension of new sources of energy?				X	

Impact Discussion:

a. The project consists of scour repair under a bridge and would not consume energy, with the exception of the fossil fuels used in the construction equipment to build the structure. Overall, no increase in demand for energy would occur.
b. The project would not require or induce new development or extension of existing sources of energy.

Cumulative Impacts:

Since the project would not impact County energy resources it would not have a cumulatively considerable effect on the County's energy resources.

Mitigation and Residual Impact:

No significant impacts were identified; therefore, mitigation is not required. Residual impacts would be less than significant.

4.7 FIRE PROTECTION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Introduction of development into an existing high fire hazard area?				X	
b. Project-caused high fire hazard?		X			
c. Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for fire fighting?				X	
d. Introduction of development that will hamper fire prevention techniques such as controlled burns or backfiring in high fire hazard areas?				X	
e. Development of structures beyond safe Fire Dept. response time?				X	

Setting:

The project site consists of the existing bridge footprint and portions of Padaro Lane. The Padaro Lane area has been mapped as a Non-Very High Fire Hazard Severity Zones on the State Fire Hazard Severity Zone map for Santa Barbara County. The project location lies entirely within the unincorporated County Coastal area.

Summerland Fire Protection District Station #2 is the closest fire station to serve the project area and is located at 2375 Lillie Avenue in Summerland, approximately 1.39 miles west of the project site**.**

The Carpinteria Summerland Fire Protection District Station #1 is located at 911 Walnut Avenue in Carpinteria to the 5.14 miles east and is also able to respond to the project location.

Predictions about the long-term effects of global climate change in California include increased incidence of wildfires and a longer fire season, due to drier conditions and warmer temperatures. Any increase in the number or severity of wildfires has the potential to impact resources to fight fires when they occur, particularly when the state experiences several wildfires simultaneously. Such circumstances place greater risk on development in high fire hazard areas.

Impact Discussion:

a. The proposed project does not involve the construction of habitable structures, and would not directly or indirectly lead to any such structures that may increase the exposure of the public to increased fire hazard.

b. Construction activities would occur in areas supporting potentially flammable vegetation and have the potential to increase fire hazard to adjacent residential areas. Mitigation measures **Fire 1 & Fire 2** would mitigate impacts to less than significant.
c. The proposed project does not include any development.
d. The proposed project does not include any development and would not hamper fire prevention activities.
e. The proposed scour repair for the bridge would be constructed of non-flammable materials such as Portland cement A-jacks and steel cable and would not require fire protection.

Cumulative Impacts:

Since the project would not add new development into an existing high fire hazard area and would not significantly impact fire protection resources, it would not have a cumulatively considerable effect on the County's fire resources.

Mitigation and Residual Impact:

The following mitigation measures would reduce the project's fire hazard impacts to a less than significant level:

1. **FIRE-1.** To minimize potential construction related fire hazards, a Fire Awareness and Avoidance Plan shall be prepared. The Plan shall include the following:

- Fire preventative measures addressing cutting, grinding and welding;
- Maintaining fire extinguishers in every vehicle on site;
- Maintaining a water truck on site if working during fire season;
- Communication with emergency response agencies.

2. **FIRE-2.** The contractor shall ensure adequate access to the driveways of immediately adjacent properties for emergency vehicles at all times.

Plan Requirements/Timing: This condition shall be printed in the project specifics and included with the plans. **MONITORING:** The County on site resident engineer (RE) shall ensure compliance with this measure.

With the incorporation of these measures, residual impacts would be less than significant.

1.8 GEOLOGIC PROCESSES

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?			X		

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
b. Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?				X	
c. Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise?				X	
d. The destruction, covering or modification of any unique geologic, paleontologic or physical features?				X	
e. Any increase in wind or water erosion of soils, either on or off the site?				X	
f. Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake?			X		
g. The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent?				X	
h. Extraction of mineral or ore?				X	
i. Excessive grading on slopes of over 20%?				X	
j. Sand or gravel removal or loss of topsoil?				X	
k. Vibrations, from short-term construction or long-term operation, which may affect adjoining areas?			X		
l. Excessive spoils, tailings or over-burden?				X	

Setting: The study area is on a low-lying coastal terrace/peninsula less than 50 feet above mean sea level. Native alluvial sediments within the creek banks consist of highly compact light brown silty clay with water worn sandstone cobbles and gravels; larger rocks and boulders of sandstone are found in the creek bed. Roadside sediments consisted of disturbed medium to dark brown loam with abundant imported road base gravels of igneous, sedimentary and metamorphic rock.

Based on the Geologic Map of the Capinteria Quadrangle (Dibble 1987), the project site in underlain by Superficial Sediments (Qg). This formation is described as stream channel deposits, mostly gravel and sand. The surrounding area is classified as Superficial Sediments (Qa), alluvium; unconsolidated flood plain deposits of silt, sand and gravel.

The nearest mapped faults are approximately five miles to the east, the Arroyo Parida Fault is potentially active with an estimated Magnitute of maximum credible earthquake 6.6+. The Arroyo Parida fault trends east-west along the south slope of the Santa Ynez Mountains from near Toro Canyon for 7 miles to the eastern boundary of Santa Barbara County. The presumed continuation of the Arroyo Parida fault further east has been named the Santa Ana fault. The east end of the Santa Ana fault is overridden by the San Cayetano thrust fault 17 miles east of Santa Barbara County. The west end of the Arroyo Parida fault is aligned with the Mission Ridge fault; the 6 mile gap in between is obscured by alluvium and Pleistocene fanglomerate. According to Lian (1952), a branch of the Arroyo Parida fault at its west end trends southwest down Picay Creek and meets the coast west of Ortega Hill. The existence of this branch fault is based on truncated rock units and a turn in the scarp eroded along the fault (lian, 1952). Willis (1925), Batley (1954) and Muir (1968) also show a south branch of the fault, at its west end. The maximum vertical displacement along the Arroyo Parida fault noted by Chauvel (1958) amounts to 2700 fee t (the north side down). Chauvel (1958) suggests a major component of horizontal displacement on the basis of striae in the fault plane and offset structural highs. Lian (1952) found no evidence for horizontal movement and estimates 2000-4000 feet of vertical displacement of Oligocne sediments.

The Mission Ridge is potentially active with an estimated Magnitute of maximum credible earthquake 5.2+. The Mission Ridge fault trends east-west for 5 miles directly north of Santa Barbara. The eastern continuation is covered by alluvium; however, the east end is aligned with the Arroyo Parida fault. Pleistocene fanglomerates on Mission Ridge have been elevated as much as 820 feet (250 meters) in the south block of the fault; the steep scarp north of Mission Ridge is assumed to mark the position of the fault trace (Olsen, 1972). Locally the Pleistocene fanglomerate on Mission Ridge is tilted as much as 35 degrees, probably as a result of movement on the Mission Ridge fault (Dibblee, 1966), and cross sections in Muir (1968) show displacement of late Pliocene to lower Pleistocene water bearing sediments and Pleistocene alluvium.

The Montecito fault in inactive with an estimated Magnitude of maximum credible earthquake 5.0 and Fernald Point Faults to the west. The Montecito fault was a previously unmapped fault and its presence in the Montecito area was postulated on the basis of drilling records obtained in an investigation by Geo Technical Consultants, Inc. (1974). They indicate the fault is vertical with the north side up and displacement on the order of several hundred feet. On the basis of their statement "Recent activity of this fault can be seen in offset terrace deposits and alluvium west of Montecito", the fault should be regarded with suspicion and considered as possibly or potentially active, similar to other related faults in the South Coast region.

The Mission Ridge and Arroyo Parida faults form a persistent and probably continuous structure extending into Ventura County to the east. These faults may owe their origin to the same stresses that produced the Santa Ynez fault to the north, though positive evidence of this direct relationship is lacking. The major Mission Ridge and Arroyo Parida fault zone forms the boundary of the coastal plain and the Santa Ynez block north of Montecito and is responsible, to some extent, for the sharp relief of the Santa Ynez mountain front. (Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan, pg. 37).

The low coast from Loon Point to near Carpinteria State Beach is chiefly a wave deposited sandy beach with a low-lying alluvial plain to landward.

Impact Discussion:

a. Based on the Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan, the project site is located in an area assigned low problem ratings for liquefaction, tsunami, expansive soils, soil creep, and compressible-collapsible soils and moderate problem ratings for slope stability and seismic-tectonic. The area around the bridge site does not include slopes aside from the creek banks, such that landslides and slope stability are not issues. The immediate project area has been assigned a low-moderate overall geologic problems index. The proposed scour repair project would be designed to withstand anticipated seismic stresses according to established engineering practices. The proposed project would not include any habitable structures; therefore, no persons would be exposed to geologic hazards.

b. Earthwork associated with the proposed project would include placement of engineered material around the bridge piles. Cut and fill slopes would only be approximately two feet high and not subject to substantial soil displacement or disruption.

c. The ground surface would be restored following scour repair installation, with only minor, localized changes in topography associated to restore the toe of the slope to its configuration.

d. Based on the Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan, no Areas of Special Geologic Interest occur in the project area. A search of the University of California Museum of Paleontology data base did not identify any fossils from the project area. Project-related ground disturbance would occur in the previously disturbed area, such that intact

paleontological resources would not be present. Overall, no impacts to unique geologic, paleontological, or physical features would occur.

e. The project does not involve extensive hillside grading or other components that would increase soil erosion. Potential erosion associated with storm water flows during the construction period is addressed in Section 4.16 Water Resources. Mitigation measures proposed would avoid water quality impacts to Toro Creek, such that increased water-related erosion is not anticipated.

f. Scour repair activities could involve stream diversion and excavation within Toro Creek. A water pollution control plan would be implemented during construction to minimize discharge of silt-laden storm water to Toro Creek if there is water flow. Therefore, increases in erosion or siltation are not anticipated.

g. The proposed project would not involve the placement of septic systems.

h. The proposed project does not involve the extraction or processing of minerals or ore.

i. No excessive grading of slopes is proposed. Minor grading of the bank on the western side of Toro creek is required for the scour repair measures. No access ramp or roads are proposed, a crane would be used to lower and retrieve material and equipment from the creek bed.

j. Excavation associated with scour repair would occur within previously disturbed areas from the original bridge construction and would not result in the loss of topsoil.

k. Vibration would be generated by heavy equipment during bridge replacement activities, but will not be detected at nearest residence (which is approximately 318 feet away) during periods of high heavy equipment activity. However, due to the distance to the nearest residence, and the small number of persons affected, vibration impacts are considered less than significant.

l. No spoils would be generated and any material excavated would be used on-site.

Cumulative Impacts:
Since the project would not result in significant geologic impacts, it would not have a cumulatively considerable effect on geologic hazards within the County.

Mitigation and Residual Impact:

Mitigation for potentially significant erosion and siltation impacts are addressed under Water Resources (**Section 4.16**). Residual impacts would be less than significant.

With the incorporation of these measures, residual impacts would be less than significant.

4.9 HAZARDOUS MATERIALS/RISK OF UPSET

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?				X	
b. The use, storage or distribution of hazardous or toxic materials?			X		

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
c. A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?				X	
d. Possible interference with an emergency response plan or an emergency evacuation plan?				X	
e. The creation of a potential public health hazard?				X	
f. Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)?			X		
g. Exposure to hazards from oil or gas pipelines or oil well facilities?				X	
h. The contamination of a public water supply?				X	

Setting:

The project area supports residential and recreational land uses. No industrial land uses are located in the immediate area. Based on review of the GeoTracker (State Water Resources Control Board), ENVIROSTOR (California Department of Toxic Substances Control) and Enviromapper for Envirofacts (United States Environmental Protection Agency) data bases, no hazardous material sites or leaking underground storage tank cases are in the immediate area.

Impact Discussion:

a. The project site does not have a history of hazardous materials production, use or storage. Therefore, project implementation would not result in exposure of persons or the local environment to hazardous materials.

b. Excluding fuels used by construction equipment and vehicles, the project does not involve the use, storage or distribution of hazardous or toxic materials. Equipment and vehicles associated with the project would be fueled from a maintenance vehicle located away from drainages and residences. No storage of fuel is proposed at or near the project site.

c. No risk of explosion is expected as a result of project-related activities.

d. The proposed project would not interfere with any emergency response plan. Traffic across Toro Creek may be temporarily prohibited during construction while a crane is in operation. Residences on each side of the project location have vehicle access to and from their residences. Traffic control would be provided on Padaro Lane during construction, and would ensure emergency vehicles can safely transit traverse the work area.

e. The proposed project does not involve the creation, storage or handling of any hazardous materials, and would not create any potential health hazard.

f. The proposed project does not include any new development near hazardous materials.

g. No oil or gas wells or other oil production facilities, or oil or gas pipelines occur at the project site. ARC View GIS data map has identified two abandoned oil wells near the project location. The closest abandoned oil well is 192 feet to the west of project location and the second is located

313 feet to the east of the project location on Padaro Lane. Both abandoned oil well sites are on private property. Therefore, project implementation would not result in exposure of persons or property to these hazards.

h. The proposed project does not include any activities that would affect public water supplies.

Cumulative Impacts:
Since the project would not create significant impacts with respect to hazardous materials and/or risk of upset, it would not have a cumulatively considerable effect on safety within the County.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary. Residual impacts are less than significant.

4.10 HISTORIC RESOURCES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Adverse physical or aesthetic impacts on a structure or property at least 50 years old and/or of historic or cultural significance to the community, state or nation?				X	
b. Beneficial impacts to an historic resource by providing rehabilitation, protection in a conservation/open easement, etc.?				X	

Setting: Padaro Lane project site is with the Summerland Community Plan areas while portions of the road to the east are within the Toro Canyon Community Plan area. Santa Barbara County Public Work's flat files the contain original drawing for the current road configuration which date to August 1, 1961.

Historic Period Overview. The community of Summerland began as a portion of Rancho Ortega, purchased by Henry Lafayette Williams in 1885. As the Southern Pacific Railroad line was extended along the coast through the area in 1887, Williams decided to build a town next to it and sell lots. Established in 1889, the town was named "Summerland" after the heaven of Spiritualism, the faith followed by Williams and other early settlers. In 1890, a large deposit of natural gas was discovered in the area, followed by oil in 1894. Soon after, numerous wells were drilled and derricks were built on piers in the ocean, creating the first offshore oil field in the Western Hemisphere (Holzhaur 2001).
The economic boom of oil development brought more people to the community, along with hotels, rooming houses, saloons, and other businesses. Oil supplies began to dwindle after ten years, although drilling continued into the 1920's. The end of the oil, a lack of a dependable water supply, and the Great Depression took a toll on the town, and growth stagnated. Some new residences appeared following World War II, as properties were inexpensive and had scenic ocean views. The 1960's and 70's saw an influx of artists, hippies, surfers and other free spirits drawn by the beauty and inexpensive living found in Summerland. In the 1980's more available fresh water spurred another building boom which further expanded the community and its economy (2001).

Historic Records Search Applied Earthworks contacted several local historical societies and other groups to solicit pertinent information about historical resources in the Study Area. The table below lists the groups consulted and the comments provided by each.

Local Historical Interest Groups Contacted about Fernald Point Lane Bridge (51C-137) Scour Repair Project

Name/Organization	Letter Contact	Phone Contact	Comments/Concerns
Anita Hodosy, SBCO P&D Hearing Support • Santa Barbara County Historical Landmarks Advisory Commission	11-30-12	12-18-12	Joyce Gerber, Archaeologist with the County Department Planning and Development, expressed concerns with the project and was provided with clarification regarding the details of planned work.
• Santa Barbara Conservancy	11-30-12		
Mike Imwalle, Archaeologist Santa Barbara Trust for Historic Preservation	11-30-12		
David Griggs Carpinteria Valley Historical Society	11-30-12		
Michael Redmon, Director of Research Santa Barbara Historical Society	11-30-12		

Bridge Evaluation. The Caltrans Historic Bridge Inventory lists Bridge 51C-163, constructed in 1968, as a Category 5 structure not eligible for inclusion in the National Register of Historic Places.

Impact Discussion:

- **a.** The proposed development does not include the demolition or alteration of structures in excess of 50 years in age. The project would not alter the contextual nature of the site in a manner which would significantly degrade the historical significance of the existing area. As a result, no impacts to historic resources are anticipated.
- **b.** The project does not offer any opportunities for rehabilitation or protection of historic resources.

Cumulative Impacts:
Since the project would not result in any substantial change in the historic character of the site, it would not have any cumulatively considerable effect on the region's historic resources.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary. Residual impacts are less than significant.

4.11 LAND USE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Structures and/or land use incompatible with existing land use?				X	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X	
c. The induction of substantial growth or concentration of population?				X	
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				X	
e. Loss of existing affordable dwellings through demolition, conversion or removal?				X	
f. Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X	
g. Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	
h. The loss of a substantial amount of open space?				X	
i. An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)				X	
j. Conflicts with adopted airport safety zones?				X	

Existing Setting:
The project site is located in an existing developed rural neighborhood of the Summerland Community Plan area. Onsite resources and development are characterized by a rural road with a small bridge along a creek within a riparian corridor.

Impact Discussion:

a. The proposed project is a scour repair around the bridge piers, with the same number of traffic lanes and same basic configuration, and is entirely compatible with surrounding land uses.

b. The proposed project is consistent with all applicable plans and policies of the Santa Barbara General Plan to maintain road infrastructure.

c. The proposed project does not involve any new development, and would not result in population growth or spatial reconfiguration of the existing population.

d. The proposed project does not include the extension of sewer lines or roadways.

e. The proposed project would not displace any dwellings.

f. See e.

g. See e.

h. No loss of open space would occur as a result of the proposed project.

i. No social or economic effect would occur that would result in a physical change in the local community. Temporary lane closures on Padaro Lane may occur during construction and the road may be temporarily closed, short term for a few hours at the bridge location but it would not result in isolation of any land uses.

j. The project site is located approximately 15 miles south-west of the Santa Barbara Airport. The project would not conflict with any airport safety zones.

Cumulative Impacts:

The implementation of the project is not anticipated to result in any substantial change to the site's conformance with environmentally protective policies and standards. Thus, the project would not cause a cumulatively considerable effect on land use.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary. Residual impacts are less than significant.

4.12 NOISE

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?				X	
b. Short-term exposure of people to noise levels exceeding County thresholds?		X			
c. Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?		X			

Existing setting:

Noise sensitive receptors in the immediate of the project include rural residences; the closest of these residences are approximately 318 feet away on east side of the bridge. The project site is approximately 143 feet from south-bond State Highway 101 and 55 feet from the South Pacific Railway tracks which is the major ambient noise source in the vicinity.

Fifty feet from U.S. Highway 101, noise levels from individual trucks reach 85-90 dB(A). Maximum levels from automobiles at this distance are about 75-80 dB(A). LDN values represent a weighted average of noise levels experienced over an entire day and depend on total traffic volume, percent truck traffic, and other parameters

Along the Southern Pacific main line, maximum sound levels from passing trains at one hundred feet from the tracks reach 96 dB(A) to 100 dB(A). At the same location, CNEL values, representing the weighted average of all train noise for a 24-hour period, are between 70 and 75 dB(A). CNEL values will be reduced to 60 dB(A) or less, beyond about 800 feet from the tracks.

Combining the influence of the freeway with the railroad along the South Coast, LDN values of 60 dB(A) or more exist within 1,000 feet of the freeway/railroad corridor (Santa Barbra County Noise Element, Republished May 2009).

The proposed project site is located inside of 65 dB (A) noise contours for roadways, public facilities, and airport approach and take-off zones. No measurements have been taken of the ambient noise levels at the project location.

Impact Discussion:

a. The proposed project involves the repairs below existing Padaro Lane bridge 51C-163 at the same location and in the same configuration. The project would not affect traffic volumes or long term noise increases on Padaro Lane.
b. Heavy equipment activity would occur at various times at the site during the projected 21 day construction window. Short term construction noise is expected to be below 65dB (A) CNEL for exterior noise exposure at the nearest residences during peak construction due to the distance of the residences and the general topography. Santa Barbara County has not developed any short-term noise thresholds. However, since construction activities within 1600 feet of a residence are considered to generally result in a potentially significant impact, implementation of Mitigation Measure **Noise-1** would ensure short term noise impacts are reduced to less than significant levels.
c. Any project generated substantial increase in the ambient noise levels for adjoining areas would be mitigated with the implementation of Mitigation Measure **Noise-1**. No project construction activities will occur at night or on weekends. No pile driving is proposed therefore no project generated substantial increase in the ambient noise level for adjoining areas would occur.

Cumulative Impacts:
The implementation of the project is not anticipated to result in any substantial noise effects. Therefore, the project would not contribute in a cumulatively considerable manner to noise impacts.

Mitigation and Residual Impact: The following mitigation measures would reduce the project's noise effects to a less than significant level:

1. **Noise-1**. To minimize potentially significant construction-related noise impacts to adjacent residences the following measure shall be implemented.

- Construction activities involving heavy equipment or heavy-duty truck traffic shall be limited from 7:00 a.m. to 5:00 p.m., Monday through Friday. No construction shall occur on State holidays (e.g., Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities are not subject to these restrictions.

  Plan Requirements: Three signs stating these restrictions shall be provided by the contractor and posted on site. **Monitoring:** The County on site resident engineer (RE) shall ensure compliance with this measure.

With the incorporation of these measures, residual impacts would be less than significant.

4.13 PUBLIC FACILITIES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. A need for new or altered police protection and/or health care services?				X	
b. Student generation exceeding school capacity?				X	
c. Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)?				X	
d. A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)?				X	
e. The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X	

Impact Discussion:

The proposed project would not result in the increase of new homes within the area. The proposed bridge scour repair would not have a significant impact on existing police protection or health care services. Existing service levels would be maintained by the proposed project. The proposed project would not generate solid waste in excess of County thresholds. The project would not cause the need for new or altered sewer system facilities. No additional drainages or water quality control facilities would be necessary to serve the proposed bridge project. Therefore, the project would have no impact to public facilities.

a. The proposed project does not include any new development or any facilities that would require police protection or health care services.

b. The project does not include any residential land uses, and would not generate demand for school capacity.

c. Only existing concrete ruble would be removed, and the project is not anticipated to exceed the 350 ton County solid waste CEQA threshold for construction and demolition. Concrete removed from the project location will be recycled.

d. The proposed project does not include any residential or commercial development, and would not generate demand for sewage collection or related facilities.

e. The proposed project would not require the construction of any storm drain or water quality control facilities.

Mitigation and Residual Impact: No impacts are identified. No mitigation is necessary. Residual impacts are less than significant.

4.14 RECREATION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Conflict with established recreational uses of the area?				X	
b. Conflict with biking, equestrian and hiking trails?				X	
c. Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)?				X	

Setting:

Public recreation facilities in the vicinity are located in the Loon Point Beach Parking and Coastal Access location recreation area approximately .20 miles to the east. The public can walk down from the parking area that leads along the railroad tracks then under the freeway off ramp and down a short path to the beach. The parking lot and trail are open from dawn until dusk. No public trails or adjudicated prescriptive trail rights exist through or the adjacent property.

However, there is a history of public beach access under the bridge and through the project site. This is documented by signed surveys from 15 different members of the public clarifying their historic access through the project site and submitted to the County by the Summerland Citizens Association. Based on statements from several members of the public and the signed surveys, the riparian corridor has not received significant use in approximately 15-20 years. This likely corresponds with the placement of a legal nonconforming gate structure across the creek corridor immediately south of Padaro Lane, by a previous property owner during the late 1980s (14EIR-00000-00006, page 45).

A possible future public beach access trail, adopted in the Summerland Community Plan, is located within the creek corridor at the southern boundary of the project site. There are no established public prescriptive rights through the private property or along the Toro Creek corridor to the Pacific Ocean. Currently there is no public access and no legal trail access through Toro Creek to the Pacific ocean.

It has also been observed that rock climbers frequent the area and are known to climb on the railroad arch rock bridge under the railroad tracks.

Impact Discussion:

- **a.** Project implementation would not limit access or otherwise conflict with existing recreational uses. No adverse impacts would result.
- **b.** The project site is not located in the immediate vicinity of any trails; use of Padaro Lane may be temporarily hampered during bridge construction but residents on each side of the proposed will still have access to their residences. Bicycle riders will have a viable detour along when the road is closed. Detour routes will be posted with signs throughout construction.
- **c.** The project does not include residential land uses; therefore, it would not generate demand for recreational facilities or result in associated overuse.

Mitigation and Residual Impact: No mitigation is required. No cumulatively considerable or residual impacts are anticipated.

4.15 TRANSPORTATION/CIRCULATION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system?				X	
b. A need for private or public road maintenance, or need for new road(s)?				X	
c. Effects on existing parking facilities, or demand for new parking?				X	
d. Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods?				X	
e. Alteration to waterborne, rail or air traffic?				X	
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)?		X			
g. Inadequate sight distance?				X	
h. ingress/egress?				X	
i. general road capacity?				X	
j. emergency access?				X	
kh. Impacts to Congestion Management Plan system?				X	

Setting:

The proposed project is limited to scour repairs under Padaro Lane bridge 51C-163 and, as such, would not neither increase vehicular traffic to or from the site nor would it affect roadways; parking facilities; pedestrian, bicycle, or transit access; or any other type of transportation facility.

The bridge location has a moderate design speed and average daily traffic (ADT) count of 1016.

Impact Discussion:

- **a.** Project short-term construction related traffic on Padaro Lane would not substantially increase additional vehicular movement. Padaro lane will be remain open, however local traffic may be temporarily delayed while a crane lowers and removes equipment and materials from the creek bed.
- **b.** The proposed project involves roadway improvements and would not result in a need for new roads or maintenance toof existing roads.
- **c.** Parking facilities do not occur in the project area. Construction equipment and worker vehicles will park in the closed sections of Padaro Lane. Four spaces of the 60 available at Loon Pont Parking area may be used to park vehicles for construction workers.
- **d.** The proposed project would not create a demand for transit or interfere with the exiting transit system or circulation of people and goods. Santa Barbara MTD bus service does not service Padaro Lane
- **e.** The proposed project would not affect waterborne or rail traffic and is not located in either clear zones or approaches of any airport.

f. Padaro Lane will be open however there will be temporary closures for crane use on the bridge. Local traffic will need to be detoured eliminating any potential hazards to motor vehicles, bicyclists or pedestrians. Mitigation measure **Trans-1** would mitigate impacts to less than significant.

g. The proposed project would not affect sight distance.

h. Padaro Lane will be open and local traffic may only be temporarily delayed or detoured. The proposed project would not significantly affect ingress/egress to and from Highway 101.

i. The proposed project would not affect roadway capacity.

j. The proposed project would not affect emergency access.

k. Roadways and intersections in the project area operate at acceptable levels of service and are not subject to Congestion Management Plan requirements.

Mitigation Measures and Residual Impacts:

1. **Trans-01 Roadway and Traffic Control: Plan for bridge closure and flagging.** The contractor shall submit to PW the expected project construction schedule for the required roadway traffic controls and detour plan for crane usage on the bridge. The County shall not allow construction of the project to commence until the traffic control plans have been approved.

Plan Requirements/Timing: The contractor shall submit the schedule and traffic control to the Public Works (PW) construction Resident Engineer (RE) for approval. The schedule and traffic detour plan must approved by the PW construction RE two weeks prior to construction activities. **MONITORING**: PW resident engineer shall verify implementation of the traffic control plan in the field.

Mitigation and Residual Impact: With the incorporation of this measure, residual impacts of construction-related traffic impacts will be reduced to a level of less than significant. No cumulatively considerable or residual impacts are anticipated.

4.16 WATER RESOURCES/FLOODING

Will the proposal result in:	**Poten. Signif.**	**Less than Signif. with Mitigation**	**Less Than Signif.**	**No Impact**	**Reviewed Under Previous Document**
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?		X			
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?			X		
c. Change in the amount of surface water in any water body?			X		
d. Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc.) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?		X			
e. Alterations to the course or flow of flood water or need for private or public flood control projects?		X			

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
f. Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion?			X	X	
g. Alteration of the direction or rate of flow of groundwater?				X	
h. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?				X	
i. Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?				X	
j. The substantial degradation of groundwater quality including saltwater intrusion?				X	
k. Substantial reduction in the amount of water otherwise available for public water supplies?				X	
l. Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?		X			

Setting:

Toro Canyon creek has some natural substrate but also includes concrete scour protection slabs around three of the five columns in the channel. The channel substrate includes a concrete apron, boulders, cobble, and soil with vegetation. The railroad bridge is about 60 feet upstream. The channel is approximately 15 to 30 feet wide in most locations. The large concrete apron slopes from just upstream of the bridge. A four-foot concrete drop structure is present on the upstream side of the rail road bridge. The downstream side of the bridge is narrow with a natural substrate streambed comprised mostly of boulders and cobbles. Trash and debris have accumulated under the bridge and in the downstream bed that appears to have migrated during high water flows. The lateral extent of the creek downstream of the bridge is constrained by residential development before entering the Pacific Ocean at Loon Point.

This project will require work within the banks of Toro Canyon creek, including installation of scour protection blocks around bridge piers. The work will be done primarily by workers on foot, with some assistance by a small piece of equipment, such as a bobcat bulldozer/loader. Implementation of mitigation measures and a restoration plan will reduce the impacts to the floodplain area.

Surface waters:

Toro Canyon creek is an intermittent stream that flows west through the project area. Toro Canyon creek flows into the Pacific Ocean, and is therefore hydrologically connected to 'traditional navigable waters'. The portion of Toro Canyon creek within the BSA is situated within a marine terrace and is bounded by steeply sloping bank terraces on both the eastern and western banks. The total linear length of Toro Canyon creek within the BSA is approximately 185 feet and

approximately 60 feet in the PIA. Stream width based on field observations of Ordinary High Water Mark (OHWM) varies from 12 to 30 feet, with 2 inches to 24 inches of water at the time of survey. The channel bed is comprised of washed gravel and cobbles, with washed coarse sand and silt in sandbars and on the channel banks. Evidence of water flows include a line impressed on the bank, vegetation scour, sediment deposition, and drift lines on vegetation.

Vegetation within the central channel is generally sparse due to active scour and deposition. However, vegetation within the channel corresponds to two wetland types, aquatic bed and palustrine emergent wetland. Aquatic bed occurs within the perimeter of the active channel and is characterized by water cress (*Nasturtium officinale*). Palustrine emergent wetland occurs along creek banks. Vegetation is comprised of rooted emergent vegetation, such as horsetail (*Equisetum palustre*), small-fruited sedge (*Scirpus microcarpus*), and crofton weed (*Ageratina adenophora*).

A total of 185 linear feet and 0.14 acre of Waters of the U.S. were detected within the BSA, with CDFW defined Streambeds of the State corresponding to Waters of the U.S. Approximately 60 linear feet and 0.07 acre of Waters of the U.S. are located within the PIA.

The disturbance within Waters of the U.S. will be associated with scour protection, which will have a long-term beneficial impact on wetland resources and wildlife habitat. Direct impacts to this community will be both adverse and beneficial and will include the disturbance to vegetation, the potential disturbance to wildlife, and the possible introduction of invasive plant species. Direct impacts are expected to include disturbances to 0.150 acre of riparian habitat, including a short reach of creek channel. The disturbance will include 0.144 acre of temporary impacts and 245 square feet (0.006 acre) of permanent impacts. The temporary impacts will include minor grading for the placement of scour protection blocks and removal of existing grouted rock. The removal of grouted rock will be a beneficial impact.

Floodplain and Protection of Floodplains (Executive Order 11988)

Other riparian vegetation types along the banks and floodplain terraces of Toro Canyon creek are described in Biological Resources, Section 4.4. This project will require work within the banks of Toro Canyon creek, including installation of scour protection blocks around bridge piers. The work will be done primarily by workers on foot, with some assistance by a small piece of equipment, such as a bobcat bulldozer/loader. Implementation of the mitigation and restoration plan will reduce the impacts to the floodplain area.

Groundwater: Toro Canyon is primarily within the Carpinteria Groundwater Basin and the Basin's foothill watershed. Within Toro Canyon, supply of water exceeds demand for water. However, in terms of water shortage issues in general, and the environmental effects of excessive water usage (e.g., stream/spring dewatering), water conservation measures are appropriate for new development in Toro Canyon.

Impact Discussion:

a) Proposed bridge scour repair would involve placement of fill or other materials in the creek. Grading activities will disturb the Toro creek channel. Flow diversion during construction may be required. Therefore, the project would affect water movement. Mitigation measure **Water Quality-1** would mitigate impacts to less than significant.

b) No changes in creek or storm drain locations, dimensions or hydraulic characteristics would occur. The scour repair would be constructed in the Toro creek and the channel will be subject to temporary disturbance. However, no change in percolation rates or surface runoff would occur.
c) As discussed in a. and b. above, temporary stream diversion may be required and no change in run-off patterns would occur. Therefore, no change in the amount of surface water present in any water body would occur as a result of the project.
d) Storm run-off from the project site during construction may cause increased turbidity and siltation, and discharge of hydrocarbons and other pollutants. This impact is considered potentially significant. Any groundwater discharged to Toro creek (see h. below) would meet water quality standards, and would not result in significant impacts to surface water quality. Mitigation measure **Water Quality-1** would mitigate impacts to less than significant.
e) Temporary stream diversion may be required, and no changes to storm drains would occur. The scour repair would be constructed below existing grade under the existing bridge; therefore, the new scour repairs would not impede floodwaters. Overall, no changes in the course or flow of flood waters would occur, and no new flood control facilities would be required. Mitigation measure **Water Quality-2 & 3** would mitigate water quality impacts to less than significant.
f) The existing bridge soffit is above the predicted 100-year peak flow water surface elevation. Therefore, the existing bridge meets Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) criterion of passing the 100-year and 50-year design discharge with 2 feet of freeboard to allow passage of drift and debris that could be carried to the site during an extreme storm event. The scour repairs under the bridge will not increase the existing exposure of persons or property to flooding hazards.
g) The project site is not located within an identified groundwater basin area. The proposed project would not affect groundwater flow as project-related groundwater pumping would not occur, and recharge from Toro creek would not be affected.
h) Groundwater may be encountered during excavation of holes for installation of A-Jacks around the piles. A very small amount of this groundwater may be pumped from the hole, clarified with a BMP and discharged to Toro creek. The project does not involve substantial or long-term extraction of groundwater, excavation of aquifers or interference with recharge.
i) The project would not involve groundwater pumping. Therefore, the proposed project would not contribute to overdraft of any groundwater basin.
j) The proposed project would not contribute to seawater intrusion.
k) The project would not require water and would not affect public water supplies.
l) Storm run-off from Padaro Lane and adjacent land uses likely contributes pollutants in Toro creek. The proposed scour repair would not affect the type or volume of these pollutants generated, or substantially increase the discharge of these pollutants to Toro Creek. Mitigation measure **Water Quality-2** would mitigate impacts to less than significant.

Mitigation Measures and Residual Impacts:

1. **Water Quality-1**. The project would require a Water Pollution Control Plan (WPCP) be prepared, which would include best management practices to be implemented and a monitoring program. The following Best Management Practices shall be incorporated into the WPCP to minimize potential water quality impacts. Impacts to water quality would be mitigated to a less than significant level with the implementation of these measures.

a) All ground disturbance shall be limited to the dry season or periods when rainfall is not predicted, to minimize erosion and sediment transport to surface waters;

b) Disturbed areas shall be stabilized or re-vegetated prior to the start of the rainy season;

c) Impacts to vegetation within and adjacent to creeks and storm drains shall be minimized. The work area shall be flagged to identify its limits. Vegetation shall not be removed or intentionally damaged beyond these limits.

d) Construction materials and soil piles shall be placed in designated areas where they could not enter creeks or storm drains due to spillage or erosion.

e) Waste and debris generated during construction shall be stored in designated waste collection areas and containers away from watercourses, and shall be disposed of regularly.

f) During construction, washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands. Concrete washout area shall be isolated from the creek, wash water and waste shall be removed from project site. The location of the washout area shall be clearly noted at the construction site with signs.

g) All fueling of heavy equipment shall occur in a designated area removed from Toro Creek and other drainages, such that any spillage would not enter surface waters. The designated refueling area shall include a drain pan or drop cloth and absorbent materials to clean up spills.

h) Vehicles and equipment shall be maintained properly to prevent leakage of hydrocarbons and coolant, and shall be examined for leaks on a daily basis. All maintenance shall occur in a designated offsite area. The designated area shall include a drain pan or drop cloth and absorbent materials to clean up spills.

i) Any accidental spill of hydrocarbons or coolant that may occur on the construction site shall be cleaned immediately. Absorbent materials shall be maintained on the construction site for this purpose.

Plan Requirements/Timing: These measures shall be included in the project specifications and WPCP. **MONITORING**: The County resident engineer (RE) shall ensure the measures are fully implemented.

Mitigation measures are provided in letter sequence above.

Plan Requirements/Timing: These measures shall be included in the project specifications. **MONITORING**: The County resident engineer (RE) shall ensure the measures are fully implemented.

2. **Water Quality-2**. Restriction of Work, Staging and Parking Areas:

1. All work activities to install scour protection around the Toro Canyon creek bridge piers are scheduled to take place from the road, bridge deck, and creek channel directly under and just to the upstream side of the bridge. Restricting work locations will minimize potential disturbance to riparian habitat, the creek, and the riparian corridor.

2. The articulated concrete blocks for the scour protection will be lowered from the bridge deck, as well as any small mechanical equipment that may be required. All other construction vehicles will be staged and operated from the road or the dirt edges on the side of Padaro Lane.
3. No off-road vehicle/equipment access through the riparian corridor is allowed. A small piece of equipment may be lowered into the creek channel and be driven in the dry channel. Disturbance to riparian habitat on the creek banks will be limited to workers walking from Padaro Lane down into the work site.

Plan Requirements/Timing: These measures shall be included in the project specifications and WPCP. **MONITORING**: The County resident engineer (RE) shall ensure the measures are fully implemented.

3**. Water Quality-3**. Limiting Impacts to Water Quality.

1. Monitor Turbidity: If water is flowing in Toro Canyon creek during the dry season construction, monitor turbidity levels in the stream according to the terms of permits;
2. No Work in the Wetted Channel and Water Diversion Plan: There will be no work in the wetted channel of the creek. If water is present, a dewatering and water diversion plan will be prepared prior to the start of work in the area. The plan will be submitted, if it is needed, to the CDFW and RWQCB.
3. Debris Removal: Remove all debris that has fallen during removal of old grouted rock and installation of new scour protection.
4. Construction will be scheduled to occur during May 1 through November 30. At that time, water levels in Toro Canyon creek will be low or dry, thus further reducing the potential for impacts to wildlife and water quality.

Plan Requirements/Timing: These measures shall be included in the project specifications and WPCP prepared by the contractor. **MONITORING**: The County resident engineer (RE) shall ensure the measures are fully implemented.

With the incorporation of these measures, residual impacts of construction-related water quality impacts will be reduced to a level of less than significant.

5.0 INFORMATION SOURCES

5.1 County Departments Consulted

Police, Fire, **Public Works**, Flood Control, Parks, Environmental Health, Special Districts, Regional Programs, Other : _____

5.2 Comprehensive Plan

X	Seismic Safety/Safety Element	X	Conservation Element
X	Open Space Element	X	Noise Element
	Coastal Plan and Maps	X	Circulation Element
	ERME		Agricultural Element

5.3 Other Sources

X	Field work		Ag Preserve maps
	Calculations	X	Flood Control maps
X	Project plans	X	Other technical references (reports, survey, etc.)
	Traffic studies		Planning files, maps, reports
	Records	X	Zoning maps
	Grading plans	X	Soils maps/reports
	Elevation, architectural renderings	X	Plant maps
X	Published geological map/reports	X	Archaeological maps and reports
X	Topographical maps	X	Other
			FEMA Floodplain maps

5.4 References

Al-Shehbaz, Ihsan A. 2012. *Nasturtium*. In Jepson Flora Project (editors) *Jepson eFlora*, at http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=34432.

Arnold, Jeanne E.
2001 The Chumash in World and Regional Perspectives. In *The Origins of a Pacific Coast Chiefdom: The Chumash of the Channel Islands*, edited by Jeanne E. Arnold, pp. 1–19. University of Utah Press, Salt Lake City.

California Department of Conservation farm land maps. Accessed November 15, 2015 http://www.conservation.ca.gov/dlrp/fmmp/Pages/SantaBarbara.aspx

California Department of Food and Agriculture (CDFA). 2015. Introduced, invasive, and noxious plants. Natural Resources Conservation Service invasive plant policy. California state-listed noxious weeds.

California Fire Hazard Severity Zone Maps. Accessed December 1, 2015 http://www.fire.ca.gov/fire_prevention/fhsz_maps_santabarbara

California Department of Fish and Wildlife (CDFW). 2015a. California Natural Diversity Data Base (CNDDB) results for the following 7.5-minute U.S. Geological Survey quadrangles: Carpinteria, Hildreth Peak, Little Pine Mountain, Pitas Point, Santa Barbara, Old Man Mountain, and White Ledge Peak.

CDFW. 2015b. Special animals list. S-State and federal animals of special concern in California. List of July.

CDFW. 2015c. Special vascular plant, bryophytes, and lichens list. State and federal plants of special concern in California. List of July.

California Department of Transportation (Caltrans). 2013. South Coast 101 High Occupancy Vehicle (HOV) Project. Biological assessment for southern California steelhead. February.

California Native Plant Society (CNPS). 2015. Inventory of Rare and Endangered Plants, Online Edition Vol 8-01a. California Native Plant Society, Sacramento, California. Nine-quadrangle search including on and around San Marcos Pass Quadrangle #168D.

Craig and Horne 1978 Archaeological Site Record for CA-SBA-1566. On file, Central Coast Information Center, University of California, Santa Barbara.

Davis, Emma Lou, Clark Brott, and David Weide.1969 *The Western Lithic Co-Tradition.* San Diego Museum Papers 6.

DiTomaso, Joseph M. 2008. Weeds of California and Other Western States. University of California, Department of Agriculture and Natural Resources.

Erlandson, Jon M., Torben C. Rick, Terry L. Jones, and Judith F. Porcasi
One If by Land, Two If by Sea: Who Were the First Californians? In *California Prehistory: Colonization, Culture, and Complexity,* edited by Terry L. Jones and Kathryn A. Klar, pp. 53–62. AltaMira Press, Lanham, Maryland.

Glassow, Michael A
1972 Archaeological Site Record for CA-SBA-13. On file, Central Coast Information Center, University of California, Santa Barbara.

1996 *Purisimeño Chumash Prehistory: Maritime Adaptations along the Southern California Coast*. Case Studies in Archaeology. Jeffrey Quilter, series editor. Harcourt Brace College Publishers, San Diego.

Glassow, Michael A., Lynn H. Gamble, Jennifer E. Perry, and Glenn S. Russell
2007 Prehistory of the Northern California Bight and the Adjacent Transverse Ranges. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 191–215. AltaMira Press, Lanham, Maryland.

Grant, Campbell
1978a Chumash: Introduction. In *California*, edited by Robert F. Heizer, pp. 520–523. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

1978b Eastern Coastal Chumash. In *California*, edited by Robert F. Heizer, pp. 520–523. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Greenberg, Gregory
2012 *Archaeological Survey Report, Rincon Hill Road Bridge 51C0039 Seismic Safety Gate Project near Carpinteria, Santa Barbara and Ventura Counties California.* Applied EarthWorks, Inc., San Luis Obispo, California. Prepared for Santa Barbara County Department of Public Works. Submitted to California Department of Transportation, District 5, San Luis Obispo, California.

Holzauer, Mary
2001 Local History, 1889–2001: The Many Auras of Summerland, http://www.summarlandsite.com/history.htm. Electronic document, accessed 30 November 2012.

Johnson, John R.
1988 *Chumash Social Organization: An Ethnohistoric Perspective*. Ph.D. dissertation, Department of Anthropology, University of California, Santa Barbara.

Johnson, John R., and Sally McLendon
1999 The Nature of Chumash Social-Political Groups. In *Cultural Affiliation and Lineal Descent of Chumash Peoples in the Channel Islands and the Santa Monica Mountains*, vol. 1, pp. 29–39. Submitted to National Park Service Archeology and Ethnography Program, Washington, D.C.

Johnson, John R., Claude N. Warren, and Susan E. Warren
1982 Ethnohistoric Overview of Native American Culture in the Goleta Valley (1542–1835). In *Final Report: Intensive Cultural Resources Survey for the Goleta Flood Protection Program, Santa Barbara County, California*, by Larry R. Wilcoxon, Jon M. Erlandson, and David F.

Stone, pp. 12–48. Archaeological Systems Management, Inc., San Diego, California. Prepared for U.S. Army Corps of Engineers, Los Angeles District.

Kampion, Drew
2010 Rincon, http://www.surfline.com/surfing-a-to-z/rincon-history_899/. Electronic document, accessed 8 March 2012.

King, Chester D.
1990 *Evolution of Chumash Society: A Comparative Study of Artifacts Used for Social System Maintenance in the Santa Barbara Channel Region before A.D. 1804.* Garland, New York.

Lambert, Patricia M.
1993 Health in Prehistoric Populations of the Santa Barbara Channel Islands. *American Antiquity* 58:509–522.

1994 *War and Peace on the Western Front: A Study of Violent Conflict and Its Correlates in Prehistoric Hunter-Gatherer Societies of Coastal Southern California.* Ph.D. dissertation, Department of Anthropology, University of California, Santa Barbara.

Landberg, Leif
1965 *The Chumash Indians of Southern California*. Southwest Museum Papers No. 19. Los Angeles.

Lehman, P.E. 1994. Birds of Santa Barbara County, CA. University of California Santa Barbara Vertebrate Museum publication.

Mason, Jesse D.
1883 *History of Santa Barbara and Ventura Counties*. Thompson and West, Oakland, California.

McGoogan, M. 2011. Personal communication. Biologist, National Marine Fisheries Service, Long Beach, California. July 14 and August 22.

Milliken, Randall, and John R. Johnson
2003 *Salinan and Northern Chumash Communities of the Early Mission Period.* Far Western Anthropological Research Group, Inc., Davis, California. Prepared for California Department of Transportation.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, Orlando and London.

O'Neill, Owen H.
1939 *History of Santa Barbara County, California, Its People and Its Resources*. Harold McLean Meier, Santa Barbara, California.

Rogers, David Banks
1929 *Prehistoric Man of the Santa Barbara Coast*. Santa Barbara Museum of Natural History, Santa Barbara, California.

Santa Barbara County Comprehensive Plan. Open Space Element & Seismic Safety and Safety Element.

Storke, Yda A.
1891 *A Memorial and Biographical History of the Counties of Santa Barbara, San Luis Obispo, and Ventura, California.* Lewis Publishing Company, Chicago, Illinois.

Walker, Phillip L.
1989 Cranial Injuries as Evidence of Violence in Prehistoric Southern California *American Journal of Physical Anthropology* 80:313–323.

1992 *Enamel Hypoplasia during 5000 Years of Southern California Prehistory*. Health and Disease in the Prehistoric Southwest II. Maxwell Museum of Anthropology Papers.

Walker, Phillip L., and Travis Hudson
1989 *Chumash Healing: Changing Health and Medical Practices in an American Indian Society.* Malki Museum Press, Banning, California.

Walker, Phillip L., and John R. Johnson
1992 Effects of Contact on the Chumash Indians. In *Disease and Demography in the Americas: Changing Patterns Before and After 1492*, edited by John W. Verano and Douglas H. Ubelaker, pp. 127–139. Smithsonian Institution Press, Washington, D.C.

Walker, Phillip L., and Patricia Lambert
1989 Skeletal Evidence for Stress during a Period of Cultural Change in Prehistoric California. In *Advances in Paleopathology*, edited by L. Capasso, pp. 207–212. Journal of Paleopathology Monographic Publication 1. Chieti, Italy.

Walker, Phillip L., Patricia Lambert, and Michael J. DeNiro
1989 The Effects of European Contact on the Health of Alta California Indians. In *Columbian Consequences*, edited by David Hurst Thomas, pp. 349–364. Archaeological and Historical Perspectives on the Spanish Borderlands West, vol. 1. Smithsonian Institution Press, Washington, D.C.

Warren, Claude N.
1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams, pp. 1–14. Eastern New Mexico University Contributions in Anthropology 1(3).

6.0 PROJECT SPECIFIC *(short- and long-term)* AND CUMULATIVE IMPACT SUMMARY

6.1 Significant Unavoidable Impacts

None Identified.

6.2 Significant but Mitigable Impacts.

Biological Resources. The project may result in:

- Construction related impacts to habitat of Species of Special Concern.

Cultural Resources. The project may result in:

- Potential disturbance of unanticipated buried cultural resources in the area.

Fire Protection. The project may result in:

- Increased fire hazard to adjacent rural residential development associated with construction activities in an area with potentially flammable vegetation.

Noise. The project may result in:

- Exposure of adjacent residences to temporary noise generated by heavy equipment and heavy duty truck traffic.

Traffic.

- Exposure of the traveling public to temporary delays on the roadway

Water Resource/Flooding. The project may result in:

- Temporary degradation of surface water quality associated with discharge of storm water from the project construction area.

6.3 Cumulative Impacts

Cumulative impacts are defined as two or more individual effects which, when considered together are considerable, or which compound or increase other environmental impacts. Under Section 15064 of the State CEQA Guidelines, the lead agency (Santa Barbara County Public Works Department) must identify cumulative impacts, determine their significance and determine if the effects of the project are cumulatively considerable.

This assessment is focused on potential impacts of the project that may be less than significant on a project-specific basis, but potentially significant when viewed in combination with other project in the region. Section 3.4 summarizes other project under review by the County with the project Region (Summerland and Montecito areas).

6.3.1 Air Quality

The incremental air quality impact associated with project construction would not be cumulatively considerable.

6.3.2 Water Resources

The project's contribution to groundwater impacts would not be considerable.

6.3.3 Biological Resources

Protected Trees.

Coast live oak trees are common in the project area, and other projects may result in removal of these trees. Therefore, the proposed project would not contribute to a cumulative impact to this species.

Nuttall's Scrub Oak

The proposed project would not contribute to a cumulative impact to this species.

Southern California Steelhead

The proposed project is not anticipated to substantially contribute to a cumulative impact to the Southern California Steelhead.

Least Bell's vireo and Southwestern willow flycatcher – migratory habitat.

The proposed project is not anticipated to substantially contribute to a cumulative impact the Least Bell's vireo and Southwestern willow flycatcher.

California Red-Legged frog.

The proposed project is not anticipated to substantially contribute to cumulative impacts to this species.

Tidewater Goby

The proposed project is not anticipated to substantially contribute to cumulative impacts to this species.

Monarch Butterfly

The proposed project is not anticipated to substantially contribute to cumulative impacts to this species.

Two-Striped Garter Snake

The proposed project is not anticipated to substantially contribute to a cumulative impact to **s**outhwestern pond turtle and two-striped garter snake or the South Coast newt.

Townsend's Big-eared Bat, Yuma Myotis, Pallid Bat, Big Free-tailed Bat and Western Mastiff Bat – foraging habitat.

The proposed project is not anticipated to substantially contribute to a cumulative impact to the foraging habitat of these five bat species.

Cooper's Hawk

The proposed project is not anticipated to substantially contribute to a cumulative impact to Cooper's hawk.

Santa Barbara Honeysuckle

The proposed project would not contribute to a cumulative impact to this species.

Black-flowered Figwort

The proposed project would not contribute to a cumulative impact to this species.

Southern Tarplant

The proposed project would not contribute to a cumulative impact to this species.

Coulter's Saltbush

The proposed project would not contribute to a cumulative impact to this species.

Davidson's Saltscale

The proposed project would not contribute to a cumulative impact to this species.

Gambel's Watercress

The proposed project would not contribute to a cumulative impact to this species.

6.3.4 Cultural Resources

The project's contribution to cumulative cultural resources impacts would not be considerable.

6.3.5 Noise

The proposed project is not located in close proximity to other projects and/or would not be implemented at the same time, and would not have a considerable contribution to cumulative impacts at noise sensitive receptors affected by the project.

6.3.6 Traffic

The proposed project is not located in close proximity to other projects and/or would not be implemented at the same time, and would not have a considerable contribution to cumulative impacts to traffic levels affected by these projects.

7.0 MANDATORY FINDINGS OF SIGNIFICANCE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
1. Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory?		X			
2. Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals?				X	
3. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.)			X		
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X			
5. Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR ?				X	

Impact Discussion:

1. The proposed project does not have the potential to substantially degrade the quality of the environment. Implementation of the mitigation measures Bio-1 through Bio-7 will ensure there is no substantial reduction in the habitat of a fish or wildlife species, will not cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. The proposed project will not contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory.

2. The proposed project does not have the potential to achieve short-term to the disadvantage of long-term environmental goals. The proposed project is designed to achieve the goal of the Public Works Department to repair deficient bridges with the County owned roadway system.

3. The proposed project does have impacts that are individually limited to the project location, but are cumulatively considerable. There are no proposed bridge projects in the area or other projects in the

vicinity that may create cumulative impacts which when considered together would be considerable, or which compound or increase other environmental impacts.

4. The proposed project will not create environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Construction equipment will generate short term noise. Construction noise impacts will be minimized with the implementation of mitigation measure Noise-1.

5. Is there no disagreement supported by facts or any reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR.

8.0 PROJECT ALTERNATIVES

No significant, adverse unmitigable impacts were identified; therefore, no project alternatives were considered

9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS

An analysis of the consistency of the proposed project with applicable policies of the Comprehensive Plan is provided below. The proposed project, with incorporated mitigation measures is expected to be consistent with all land use and development policies.

HILLSIDE AND WATERSHED PROTECTION POLICIES

1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

   Consistency: The proposed scour repair under the bridge structure minimizes cut and fill in the creek bed and restores the natural grade of the creek bed and banks. The proposed scour repair method under bridge limits alteration of the natural terrain.

2. All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.

   Consistency: The proposed bridge scour repair fits the site topography and limits grading and impacts to the surrounding natural features.

7. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage,

harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Consistency: Mitigation measures for the proposed project protect the nearby stream from pollutants and prohibit discharge of fuels, lubricants and cement washout into Toro Creek.

COASTAL ACT POLICIES

30236. Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects; (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or; (3) developments where the primary function is the improvement of fish and wildlife habitat.

Consistency: The purpose of the repair to provide an environmentally feasible method for protecting an existing structure necessary for public safety.

30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored though, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Consistency: The proposed repair minimizes alteration of the natural creek channel and protects the biological productivity of the coastal stream by providing for the removal of invasive plant species and concrete waste from the stream bed.

30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize Coastal Land Use Plan the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

Consistency: The proposed project is designed to avoid the alteration of natural land forms and is visually compatible with the character of surrounding areas

SUMMERLAND COMMUNITY PLAN POLICIES

Monarch Butterfly trees

9-22: Butterfly trees shall not be removed except where they pose a serious threat to life or property, and shall not be pruned during roosting and nesting season.

Consistency: The proposed project avoids butterfly trees. Work is proposed outside the roosting and nesting season.

Oak trees

9-35: Oak trees, because they are particularly sensitive to environmental conditions, shall be protected. All land use activities, including cultivated agriculture and grazing, should be carried out in such a manner as to avoid damage to native oak trees. Regeneration of oak trees on grazing lands should be encouraged.

Consistency: The proposed project avoids oak trees by using paved roadway surfaces for staging and storage for materials. No a ramps or roads shall be cut to project site. A crane shall be used to avoid coastal oak tree critical root zone impacts from equipment in the riparian areas around the bridge location.

STREAMS AND CREEKS POLICIES

1. All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

   Consistency: Mitigation measures for the proposed project protect the nearby stream from sedimentation and erosion into Toro Creek.

FLOOD HAZARD AREA POLICIES

1. All development, including construction, excavation, and grading, except for flood control projects and non-structural agricultural uses, shall be prohibited in the floodway unless off-setting improvements in accordance with federal regulations are provided. If the proposed development falls within the floodway fringe, development may be permitted, provided creek setback requirements are met and finished floor elevations are two feet above the projected 100-year flood elevation, and the other requirements regarding materials and utilities as specified in the Flood Plain Management Ordinance are in compliance.

   Consistency: The scour repair under the bridge is proposed to be constructed within a portion the floodway that is supporting public transportation facilities. The proposed scour repair will be within the 100-year flood elevation of Toro Creek.

HISTORICAL AND ARCHAEOLOGICAL SITES POLICIES

1. All available measures, including purchase, tax relief, purchase of development rights, etc., shall be explored to avoid development on significant historic, prehistoric, archaeological, and other classes of cultural sites.

   Consistency: The proposed project location was thoroughly studied and documented with a Historic Property Survey Report and an Archaeology Survey report that determined no archaeological or historic resources would be impacted. Mitigation measures for the proposed project are in place in the unlikely event that cultural materials are found during excavation of the roadway.

5. Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.

   Consistency: Native Americans were notified and consulted during the drafting of the Historic Property Survey Report and an Archaeology Survey Reports.

10.0 RECOMMENDATION BY P&D STAFF

On the basis of the Initial Study, the staff of Planning and Development:

____ Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.

__X__ Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an MND. The MND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.

____ Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.

____ Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas:

_____ With Public Hearing ___X___ Without Public Hearing

PREVIOUS DOCUMENT: N/A

PROJECT EVALUATOR: Morgan M. Jones **DATE:** February 19, 2016

11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

__✓__ I agree with staff conclusions. Preparation of the appropriate document may proceed.
____ I DO NOT agree with staff conclusions. The following actions will be taken:
____ I require consultation and further information prior to making my determination.

SIGNATURE:_____ **INITIAL STUDY DATE:** _____

SIGNATURE:_____ **MITAGATED DECLARATION DATE:**_____

SIGNATURE:_____ **REVISION DATE:** _____

SIGNATURE:_____ **FINAL MITAGATED DECLARATION DATE:** 9/7/16

12.0 Appendices

12.1 Appendixces A list of all plant species observed during the surveys.

List of Plants Observed in the BSA

Scientific Name	**Common Name**
Ageratina adenophora	crofton weed
Artemisia douglasiana	mugwort
Carpobrotus edulis	sea fig
Delairea odorata	Cape ivy
Ehrharta erecta	panic veldt grass
Elymus condensatus	giant wild rye
Equisetum palustre	horsetail
Eucalyptus globulus	blue gum
Foeniculum vulgare	fennel
Hedera helix	English ivy
Heteromeles arbutifolia	toyon
Nasturtium officinale	watercress
Oxalis pes-caprae	sourgrass
Pennisetum villosum	feathertop
Pittosporum sp.	pittosporum
Platanus racemosa	California sycamore
Quercus agrifolia	coast live oak
Ricinus communis	Castor bean
Rubus ursinus	California blackberry
Rumex crispus	dock
Salix lasiolepis	arroyo willow
Scirpus microcarpus	panicled bulrush
Stachys rigida	rough hedgenettle
Stipa miliacea var. *miliacea*	smilo grass
Toxicodendron diversilobum	poison oak
Tropaeolum majus	garden nasturtium
Vinca major	blue periwinkle

12.2 Appendixces B List of all wildlife species observed during surveys

List of Vertebrate Wildlife Observed in the BSA

Common Name	**Scientific Name**	**Comments**
Baja California Treefrog	*Pseudacris hypochondriaca*	Larvae
Western Toad	*Anaxyrus boreas*	Larvae and adults
Western Fence Lizard	*Sceloporus occidentalis*	
American Kestrel	*Falco sparverius*	
Western Gull	*Larus occidentalis*	Fly over
Mourning Dove	*Zenaida macroura*	
Anna's Hummingbird	*Calypte anna*	Active nest found
Downy Woodpecker	*Picoides pubescens*	
Nuttall's Woodpecker	*Picoides nuttallii*	
Pacific-slope Flycatcher	*Empidonax difficilis*	
Black Phoebe	*Sayornis nigricans*	Old nest under bridge
Western Scrub jay	*Aphelocoma californica*	
American Crow	*Corvus brachyrhynchos*	
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	
Bushtit	*Psaltriparus minimus*	
Bewick's Wren	*Thryomanes bewickii*	
American Robin	*Turdus migratorius*	Active nest found
Northern Mockingbird	*Mimus polyglottos*	
Orange-crowned Warbler	*Oreothlypis celata*	
Common Yellowthroat	*Geothlypis trichas*	
Spotted Towhee	*Pipilo maculatus*	
Song Sparrow	*Melospiza melodia*	
Brown-headed Cowbird	*Molothrus ater*	
Hooded Oriole	*Icterus cucullatus*	
House Finch	*Haemorhous mexicanus*	
Lesser Goldfinch	*Spinus psaltria*	
Botta's pocket gopher	*Thomomys bottae*	Burrows
Coyote	*Canis latrans*	Scat

12.3 Appendixces C Preliminary Delineation of Jurisdictional Waters

PRELIMINARY DELINEATION OF JURISDICTIONAL WATERS

TORO CANYON CREEK BRIDGE ON PADARO LANE (BRIDGE 51C-063) BRIDGE SCOUR REPAIR PROJECT SANTA BARBARA COUNTY

June 3, 2015

PREPARED FOR:
County of Santa Barbara
Department of Public Works
123 East Anapamu Street
Santa Barbara, CA 93101
(805) 568-3123

PREPARED BY:
Garcia and Associates
1025 East Ocean Avenue, Suite C
Lompoc, CA 93436
Contact: Tom Olson

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1.0 INTRODUCTION

Garcia and Associates (GANDA) conducted a jurisdictional delineation for the Toro Canyon Creek Bridge on Padaro Lane (Bridge 51C-063) bridge scour repair project, proposed by the Santa Barbara County Department of Public Works (DPW). The area beneath the Toro Canyon Creek bridge has sustained undercutting and scouring beneath and around the existing support structures. Reinforcement of these support structures is needed to prevent further damage which may cause structural integrity issues with the bridge. The project will utilize articulated concrete blocks for the scour protection repairs of the bridge columns. The existing grouted rock will be removed and articulated concrete blocks will be placed around the perimeter of the pier columns. These interlocking blocks will be arranged in predetermined matrices specially engineered to surround each pier on the lead edge and down both sides.

The purpose of this report is to document the location and extent of wetlands and Waters of the U.S. as defined by the Clean Water Act (Section 404), water features that qualify as waters of the state as defined by the Porter-Cologne Water Quality Control Act, and riparian vegetation and streambeds as defined by the California Fish and Game (CFG) Code. This report was prepared to comply with permitting requirements for project activities within areas regulated under CWA Section 401 (water quality certification) and CWA 404 (discharges of dredge and fill material), and CFG Code Section 1602(a). This report does not assess impacts.

1.1. Project Location

The project is located on Padaro Lane in Santa Barbara County, California between the communities of Summerland and Carpinteria (Figure 1). The Biological Study Area (BSA) for this project is the area in which investigations, including field surveys, were conducted. The BSA is approximately 0.4 mile east of the Padaro Lane off-ramp on Highway 101 and 0.15 mile north of the confluence of the creek with the Pacific Ocean (Figure 2). The BSA is located in Township 4 North, Range 26 West as displayed on the Carpinteria U.S. Geological Survey (USGS) 7.5 minute quadrangle. The geographic latitude/longitude location of the BSA is 34°24'53.97" North and 120°34'35.92" West.

The BSA (3.6 acres) includes the area to be affected by the project (Project Impact Area) and adjacent areas. For this project, the BSA includes the 100 linear feet along Toro Canyon Creek and the east and west banks out to the outer extent of the riparian zone as well as right-of-way along Padaro Lane west to the Loon Point parking lot (Figure 2). The Project Impact Area (PIA) as defined in this report constitutes the area in which project activities may occur, consisting of approximately 0.31 acre.

Source: Bing Maps Aerial Hybrid (2015); Ganda GIS 2015

Miles
0
100

GANDA

Figure 1. Study Vicinity Map

Santa Barbara County, CA

GANDA

Source: Bing Maps Aerial Hybrid (2015); Ganda GIS 2015

0 Feet 500

Figure 2. Project Location Map

Santa Barbara County, CA

2.0 REGULATORY FRAMEWORK

Wetlands and other waters delineated in this report are potentially subject to a variety of state and federal regulations. Included in this report are Waters of the U.S. subject to the federal Clean Water Act (CWA), waters of the state as defined by the Porter-Cologne Water Quality Act, riparian vegetation and streambeds as defined by CFG Code 1602(a), and California Coastal Commission jurisdiction, as described below. Other governmental jurisdictions are not addressed in this report.

2.1. Definitions of Wetlands and Other Waters of the United States

The federal government, through Section 404 of the CWA and Section 10 of the Rivers and Harbors Act, has jurisdiction over activities in Waters of the U.S., which include a variety of water features, such as wetlands, navigable waters, and other aquatic features adjacent or tributary to navigable waters.

As used in this report, wetlands are defined based on federal regulations as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (USACE 1987). Swamps, marshes, and bogs are defined as wetlands, as are seasonally saturated or inundated areas such as seeps, springs, and vernal pools. Wetlands are identified using three parameters: vegetation, soils, and hydrology. In most cases, jurisdictional wetlands are dominated by hydrophytic (i.e., wetland) vegetation, are supported by wetland hydrology, and occur on hydric soils.

Wetlands and other waters meeting the following criteria as described in 33 CFR 328.3, were preliminarily determined to be waters of the U.S.:

1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

2) All interstate waters, including interstate wetlands;

3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

    i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

4) All impoundments of waters otherwise defined as waters of the U.S. under the definition;

5) Tributaries of waters identified in paragraphs (1) through (4) of this section;

6) The territorial seas;

7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6) of this section.

Wetlands are driven by hydrology and occur where water is present near the soil surface resulting in soil and plant characteristics that are not found in upland (mostly dry) or aquatic (almost always wet and un-vegetated) habitats. Wetlands are generally found in transition zones between upland and aquatic habitats. For the regulatory process, the USACE and U.S. Environmental Protection Agency (EPA) jointly define wetlands as follows:

"Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (EPA, 40 CFR 230.3 and USACE, 33 CFR 328.3)."

2.2. Definitions of Waters of the State

Wetlands and waters meeting the definition as described in the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13050(e)) were preliminarily determined to be waters of the state. This document defines "waters of the state" as any surface water or groundwater, including saline waters, within the boundaries of the state.

2.3. Definitions of Riparian Vegetation and Streambeds

Definitions of streambeds and riparian vegetation are contained in California Fish and Game Code 1602(a). The bed of a stream is the bottom surface of the stream. The channel of a stream is the area between the banks. The banks of a stream are the landward limit of water in the stream at the ordinary high water mark. The extent of the riparian boundary is assumed to be the zone between the top of the banks of a stream or river, or the landward edge of riparian vegetation, whichever is greater.

2.4 Definition of California Coastal Commission Wetlands

The California Coastal Commission (CCC), with the assistance of California Department of Fish and Wildlife (CDFW), is responsible for determining the presence of wetlands subject to regulation under the California Coastal Act. As the primary wetland consultant to the CCC, the CDFW essentially relies on the U.S. Fish and Wildlife Service (USFWS) wetland definition and classification system as the methodology for wetland determinations, with some minor changes in classification terminology. A major difference is that the CDFW and the CCC require the presence of only one wetland parameter (e.g., hydrology, hydric soils, or hydrophytic vegetation) for an area to qualify as a wetland. Section 30121 of the California Coastal Act (1976), the statute governing the CCC, broadly defines wetlands as:

> *"Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, or fens."*

However, the CCC Administrative Regulations (Section 13577 (b)) provides a more explicit definition:

> *"Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deepwater habitats."*

Note that the current project lies within the Coastal Zone, defined as the five-mile limit from mean high tide line of the sea for areas within the watershed of Toro Canyon Creek.

3.0 APPLIED METHODS

This delineation followed the routine wetland delineation method described in the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), with supplemental guidance as directed by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a) and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (USACE 2008b) to identify Waters of the U.S. The BSA lies within the arid west Mediterranean California (LRR-C) region. Existing information about the BSA was reviewed to characterize the vegetation, soils, and hydrology in the area. Following the initial review, a field survey was conducted to map and document wetlands and water features within the BSA. Any features that may also qualify as waters of the state (using the definition in Section 2.2 above), CDFW streambed and riparian resources, or CCC jurisdiction were noted as well. These methods are described below.

3.1. Preliminary Data Gathering and Review of Existing Materials

A review of the existing materials was conducted to identify potential wetlands and water features. Existing materials reviewed include the Carpinteria topographic quadrangle, aerial photography of the BSA, soils data from the USDA National Resources Conservation Service (USDA 2012a) including the hydric soils list of Santa Barbara County, and geospatial wetlands information provided online by the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (USFWS 2012). Soil types in the BSA were identified using the Web Soil Survey, an online soil map resource provided by the National Resources Conservation Service (NRCS) (NRCS 2012b).

3.2. Field Surveys

Field surveys were conducted to delineate the location and extent of wetlands and water features within the BSA. A field survey was conducted by GANDA botanist Mark Bibbo on April 23, 2012. The BSA was characterized by cover type and species composition, which included riparian and upland vegetation types. The extent of CDFW riparian vegetation was evaluated in the field, and delineated based on interpretation of aerial photographs.

Waters of the U.S. were identified based on the presence of an ordinary high water mark (OHWM). Due to limited reception of the GPS survey unit in the vicinity of the bridge during the site visit, a fiberglass tape measure was used to measure stream width at several points within the BSA.

Data points were collected at two representative locations with the potential to meet wetland criteria (hydrophytic vegetation, hydric soils, and wetland hydrology). These included areas within the OHWM of Toro Canyon Creek, and upland areas on the banks adjacent to the creek. Data on the vegetation, soils, and hydrologic indicators were collected at each point and the data forms are included in Appendix B.

Due to the amount of time elapsed from the first site investigation, a second field visit was conducted on May 1, 2015 by GANDA biologist Brett Hartman. During this survey the boundaries of the Waters of the U.S. were located using a GPS survey unit. This delineation is located on Figure 3.

3.2.1. Wetland Vegetation

Wetland vegetation was identified in the field based on species composition and corresponding wetland indicator status. The field investigator visually estimated the percent cover for each plant species encountered. Plot size was generally 10 feet by 10 feet; if this plot size was too large to represent the feature, the plot size was adjusted to better represent the feature. Dominant species of each stratum were defined as the most abundant plant species (when ranked in descending order of percent cover and cumulatively totaled) that immediately exceeded 50 percent of the total cover for the stratum, plus any additional species providing 20 percent or more of total cover for the stratum. The indicator status of each species was determined based on the National List of Plant Species that Occur in Wetlands: California (Reed 1988). Plants were identified according to Baldwin et. al. (2012); species nomenclature for the National List was confirmed based on the Plants National Database (USDA 2012b). The wetland vegetation criterion was met where greater than 50 percent of the dominant plant species were assigned wetland indicator categories [obligate wetland (OBL), facultative wetland (FACW), or facultative (FAC)]. Upland indicator categories include facultative upland (FACU), or obligate upland (UPL). Wetland indicator status categories are described in Table 1.

3.2.2. Wetland Hydrology

The hydrology of each feature was assessed in the field based on indicators of inundation or saturated soil conditions (USACE 1987, 2008a). Where at least one primary indicator of wetland hydrology was detected, a finding of the presence of wetland hydrology was made. Primary wetland hydrology indicators observed in the BSA included direct observations of inundation, high water table, and saturation in the upper 12 inches of the soil profile; indirect evidence of recent inundation such as water marks, sediment deposits,

drift deposits, surface soil cracks, salt crust, biotic crust and drainage patterns were also observed.

Table 1: Plant Wetland Indicator Categories (Reed 1988)

Indicator Category	Wetland Occurrence
Obligate wetland species (OBL)	Occurs almost always in wetlands (estimated >99% probability of occurring in a wetland)
Facultative wetland species (FACW)	Usually occurs in a wetland (estimated 67-99% probability of occurring in a wetland)
Facultative species (FAC)	Equally likely to occur in a wetland or a non-wetland (estimated 33-67% probability of occurring in a wetland)
Facultative upland species (FACU)	Usually occurs in non-wetlands (estimated 1-33% probability of occurring in a wetland)
Obligate upland species (UPL)	Occurs in wetlands in another region, but occurs almost always under natural conditions in non-wetlands in Region O (estimated <1% probability of occurring in a wetland)
Not listed (NL)	Plants not listed in Reed [1988] are assumed to be obligate upland species (UPL)

3.2.3. Wetland Soils

Soils were determined to be hydric where at least one hydric soil indicator was observed. Soil pits were dug to the depth necessary to determine the presence or absence of hydric soil indicators or until an impenetrable layer was encountered. Examples of hydric soil indicators include organic surface horizons, depleted matrix in the B horizon, and redoxomorphic features.

3.2.4. Water Features

Water features are natural or artificial channels that convey water, or basins that store surface water at some time of the year, which are covered by less than five percent total plant cover or where occupied by greater than five percent total plant cover are not covered by a predominance of emergent rooted hydrophytic vegetation at any time of the year.

The lateral edge of water features were mapped at the location of the OHWM. The OHWM is defined as "...the line on the [watercourse banks] established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the

surrounding areas" (USACE 1987). The bank-to-bank extent of the channel that contains the water-flow during a normal rainfall year generally serves as a good first approximation of the lateral limit of the OHWM. The upstream limit of water features is defined as the point where the OHWM is no longer perceptible.

4.0 RESULTS

The location and extent of water features within the BSA and the Project Impact Area (PIA) are displayed in Figure 3. A summary of the acreage of the single water feature type is included in Table 3. Representative site photographs are included in Appendix A, and wetland data forms are included in Appendix B.

4.1. Soil Map Units

A single soil type is mapped within the BSA (Table 2). The Goleta fine sandy loam soils are deep, well-drained soils formed in coarse and medium textured alluvium from sedimentary sources and are found within alluvial fans and valleys. This soil map unit is not designated as hydric on the hydric soils list of Santa Barbara County.

Table 2: Soil Map Units within the BSA

Map Symbol	Map Unit	Description	Hydric Status
GcC	*Goleta fine sandy loam, 2 to 9 percent slopes*	Deep, well-drained soils formed in coarse and medium textured alluvium from sedimentary sources found on alluvial fans and in valleys.	No

4.2. Waters of the U.S.

Toro Canyon Creek is an intermittent stream that flows west through the project area. Toro Canyon Creek flows into the Pacific Ocean, and is therefore hydrologically connected to 'traditional navigable waters'.

The portion of Toro Canyon Creek within the BSA is situated within a marine terrace and is bounded by steeply sloping bank terraces on both the eastern and western banks. The total linear length of Toro Canyon Creek within the BSA is approximately 185 feet and approximately 60 feet in the PIA. Stream width based on field observations of OHWM varies from 12 to 30 feet, with 2 inches to 24 inches of water at the time of survey. The channel bed is comprised of washed gravel and cobbles, with washed coarse sand and silt in sandbars and on the channel banks. Evidence of water flows include a line impressed on the bank, vegetation scour, sediment deposition, and drift lines on vegetation.

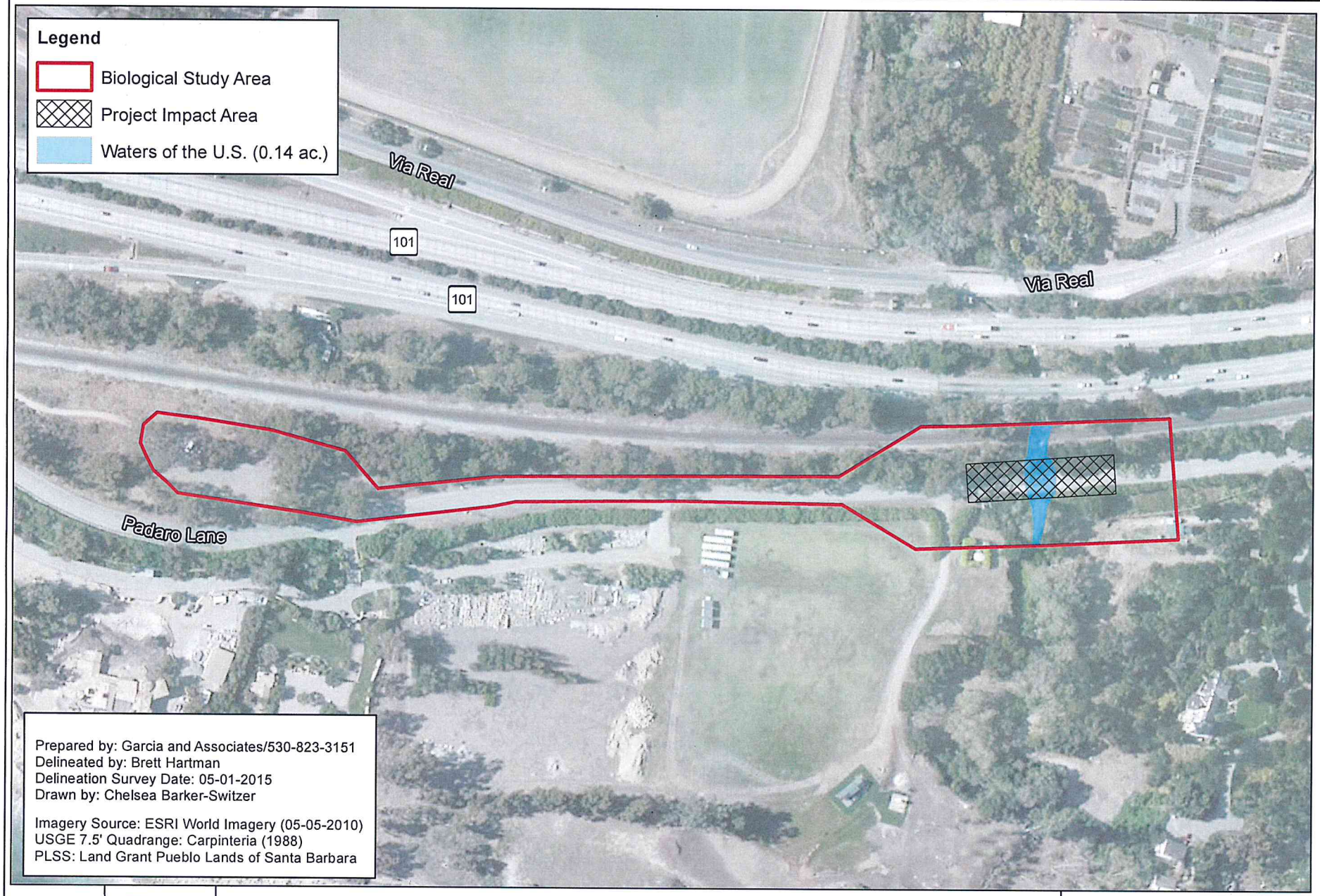


Figure 3. Waters of the U.S.

Santa Barbara County, CA

Vegetation within the central channel is generally sparse due to active scour and deposition. However, vegetation within the channel corresponds to two wetland types, aquatic bed and palustrine emergent wetland. Aquatic bed occurs within the perimeter of the active channel and is characterized by water cress (*Nasturtium officinale*). Palustrine emergent wetland occurs along creek banks. Vegetation is comprised of rooted emergent vegetation, such as horsetail (*Equisetum palustre*), small-fruited sedge (*Scirpus microcarpus*), and crofton weed (*Ageratina adenophora*). Other riparian vegetation types along the banks and floodplain terraces of Toro Canyon Creek are described in Section 4.3.

A total of 185 linear feet and 0.14 acre of Waters of the U.S. were detected within the BSA, with CDFW defined Streambeds of the State corresponding to Waters of the U.S. Approximately 60 linear feet and 0.07 acre of Waters of the U.S. are located within the PIA. Table 3 provides a summary of jurisdictional areas, and Figure 3 shows the location and extent within the BSA and PIA.

4.3. Riparian Vegetation

Within the BSA, riparian vegetation associated with Toro Canyon Creek and the adjacent stream bank terraces includes California sycamore (*Platanus racemosa*) riparian woodland. Within the BSA this vegetation type is characterized by a canopy cover dominated by large individual sycamores on either side of the bridge with smaller coast live oaks (*Quercus agrifolia*) composing the understory. Ground cover is dominated by the non-native, invasive species, periwinkle (*Vinca major*), German ivy (*Delairea odorata*), and English ivy (*Hedera helix*), and the native woody vine poison oak, (*Toxicodendron diversilobum*). Other species observed in the understory on the banks include wild blackberry (*Rubus ursinus*), mustard (*Brassica* sp.), Italian thistle (*Carduus pycnocephalus*), mugwort (*Artemisia douglasiana*), and arroyo willow (*Salix lasiolepis*).

CDFW riparian jurisdiction was defined as the extent of riparian vegetation or the bank-to-bank area, whichever is greater. Therefore, a total of 0.86 acre of CDFW riparian jurisdiction was detected within the BSA and 0.19 acre in the PIA. Table 3 provides a summary of jurisdictional areas, and Figure 3 shows the location and extent within the BSA and PIA.

Table 3: Summary of Jurisdictional Areas

Feature	BSA		PIA	
	Length (linear feet)	Area (acres)	Length (linear feet)	Area (acres)
USACE Jurisdiction				
Toro Canyon Creek	185	0.14	60	0.07
Subtotal - Waters of the U.S.	**185**	**0.14**	**60**	**0.07**
CDFW Jurisdiction				
Toro Canyon Creek	185	0.14	60	0.07
Subtotal - Streambed of the State	**185**	**0.14**	**60**	**0.07**
Riparian vegetation (including bank-to-bank area)		0.86		0.19

4.4. California Coastal Commission Jurisdiction

This project lies within the Coastal Zone, defined as the five-mile limit from mean high tide line of the sea for areas generally within the watershed of Toro Canyon Creek. Therefore the Waters of the U.S. identified in this report would also fall under California Coastal Commission jurisdiction.

5.0 SUMMARY AND CONCLUSION

This report documents the extent of waters observed in the BSA during the April 2012 and May 2015 field surveys. Toro Canyon Creek is hydrologically connected to 'traditional navigable waters' (the Pacific Ocean), and is determined to be both Waters of the U.S. and waters of the State. A total of 185 linear feet and 0.14 acre of Waters of the U.S. and Streambeds of the State were detected within the BSA and 60 linear feet and 0.07 acre within the PIA. A total of 0.86 acre of CDFW riparian jurisdiction is present within the BSA and 0.19 acre in the PIA, including the bank-to-bank area.

6.0 REFERENCES CITED

Baldwin, B.G. et. al. (ed.). 2012. The Jepson manual: vascular plants of California, Second Edition. University of California Press, Berkeley, CA.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. California Department of Fish and Game. Unpublished report.

Lichvar, R.W., and J. T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC.

National Resource Conservation Service (NRCS). 2011. California Hydric Soils List. Available online at http://soils.usda.gov/use/hydric/lists/state.html

Reed, B. 1988. National list of plant species that occur in wetlands: California (Region 0). U.S. Fish and Wildlife Service. Biological report 88 (26.10). 135 pp. Suite 101, Monroe Building 9720 Executive Center Drive, St. Petersburg, Fl 33702

United States Army Corps of Engineers (USACE) 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS.

USACE 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Technical Report ERDC/EL TR-08-28. U.S. Army Engineer Research and Development Center, Vicksburg, MS.

USACE. 2008b. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. Technical Report ERDC/CRREL TR-08-12. U.S. Army Engineer Research and Development Center, Vicksburg, MS.

United States Department of Agriculture (USDA). 2012a. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/

USDA. 2012b. Plants National Database. Available online at http://plants.usda.gov/index.html

United States Fish and Wildlife Service (USFWS). 2012. Wetlands Mapper. Available online at http://www.fws.gov/wetlands/Data/Mapper.html

Appendix A: Representative Site Photographs

Photo 1. View of Toro Canyon Creek from south of Bridge 51C-063.

Photo 2. View of Toro Canyon Creek from north of Bridge 51C-063.

Photo 3. View of west abutment and piers of Bridge 51C-063.

Photo 4. View of Toro Canyon Creek and Bridge 51C-063, looking southwest.

Appendix B: Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Padaro Lane Bridge City/County: Santa Barbara County Sampling Date: 04/23/2012

Applicant/Owner: County of Santa Barbara State: CA Sampling Point: 001-W

Investigator(s): M. Bibbo Section, Township, Range:

Landform (hillslope, terrace, etc.): Channel Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): LRR-C Lat: 34.415024 Long: -119.57624 Datum: NAD83

Soil Map Unit Name: GOLETA FINE SANDY LOAM, 2 TO 9 PERCENT SLOPES NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation n, Soil n, or Hydrology n significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation n, Soil n, or Hydrology n naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes x No _____	**Is the Sampled Area within a Wetland?** Yes x* No _____
Hydric Soil Present?	Yes n/a No _____	*Waters of the U.S.
Wetland Hydrology Present?	Yes x No _____	

Remarks:

Point taken to characterize Toro Canyon Creek, a Waters of the U.S. Intermittent Creek that flows due south 0.17 miles to the ocean.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10 sq. ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Platanus racemosa	30	y	FACW
2. Quercus agrifolia	5	n	FAC
3.			
4.			
	35	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____	= Total Cover	
Herb Stratum (Plot size: 10 sq. ft.)			
1. Nasturtium officinale	30	y	OBL
2. Equisetum palustre	2	n	FACW
3. Scirpus microcarpus	1	n	OBL
4.			
5.			
6.			
7.			
8.			
	33	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____	= Total Cover	

% Bare Ground in Herb Stratum - % Cover of Biotic Crust -

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes x No _____

Remarks:

Large sycamore on NE and SW banks shade the creekbed. Smaller live oaks are present on steep banks. Water cress dominates muddy islands and banks within the creek channel, with horsetail and sedges present on the water's edge.

SOIL

Sampling Point: 001-W

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								no soil pit dug - see remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- X Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes n/a No _____

Remarks:

No soil pit investigation at this point. Streambed is cobbly-gravelly in portions and soft-bottomed, mud in portions. While creek is intermittent the pool on the southside of the bridge may be perennial.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): 4-24"

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Toro Canyon Creek - Intermittent to perennial creek. Dashed blue line on the Carpinteria USGS quad. Flows into ocean 0.17 miles south of the bridge. OHWM = 15'-30'. Defined by steep banks, shelving, destruction of terrestrial vegetation, and line impressed on bank.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Padaro Lane Bridge City/County: Santa Barbara County Sampling Date: 04/23/2012

Applicant/Owner: County of Santa Barbara State: CA Sampling Point: 002-U

Investigator(s): M. Bibbo Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): flat Slope (%): 10

Subregion (LRR): LRR-C Lat: 34.415028 Long: -119.576450 Datum: NAD83

Soil Map Unit Name: GOLETA FINE SANDY LOAM, 2 TO 9 PERCENT SLOPES NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation n, Soil n, or Hydrology n significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation n, Soil n, or Hydrology n naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No x	**Is the Sampled Area within a Wetland?** Yes _____ No x
Hydric Soil Present?	Yes _____	No x	
Wetland Hydrology Present?	Yes _____	No x	

Remarks:

Upland paired point - steep banks coming down to channel edge.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 10 sq. ft.)			
1. Vinca major	20	y	NI
2. Delairea odorata	10	y	NI
3.			
4.			
5.			
6.			
7.			
8.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: 10 sq. ft.)			
1. Toxicodendron diversilobum	70	y	NI
2. Rubus ursinus	5	n	NI
	75 = Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust -

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No x

Remarks:

Steep banks covered by dense cover of non-native vines and poison oak.

SOIL

Sampling Point: 002-U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12"	10YR3/2	100					sandy loam	gravelly, cobbly.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

steep, upland banks.

12.4 Appendixces D 65% Preliminary Construction Plans

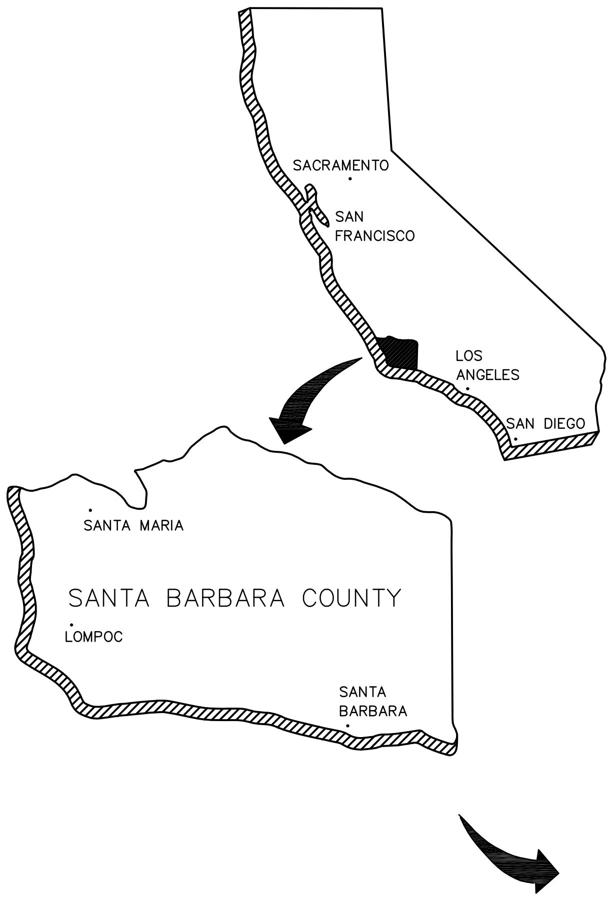
65% PLANS

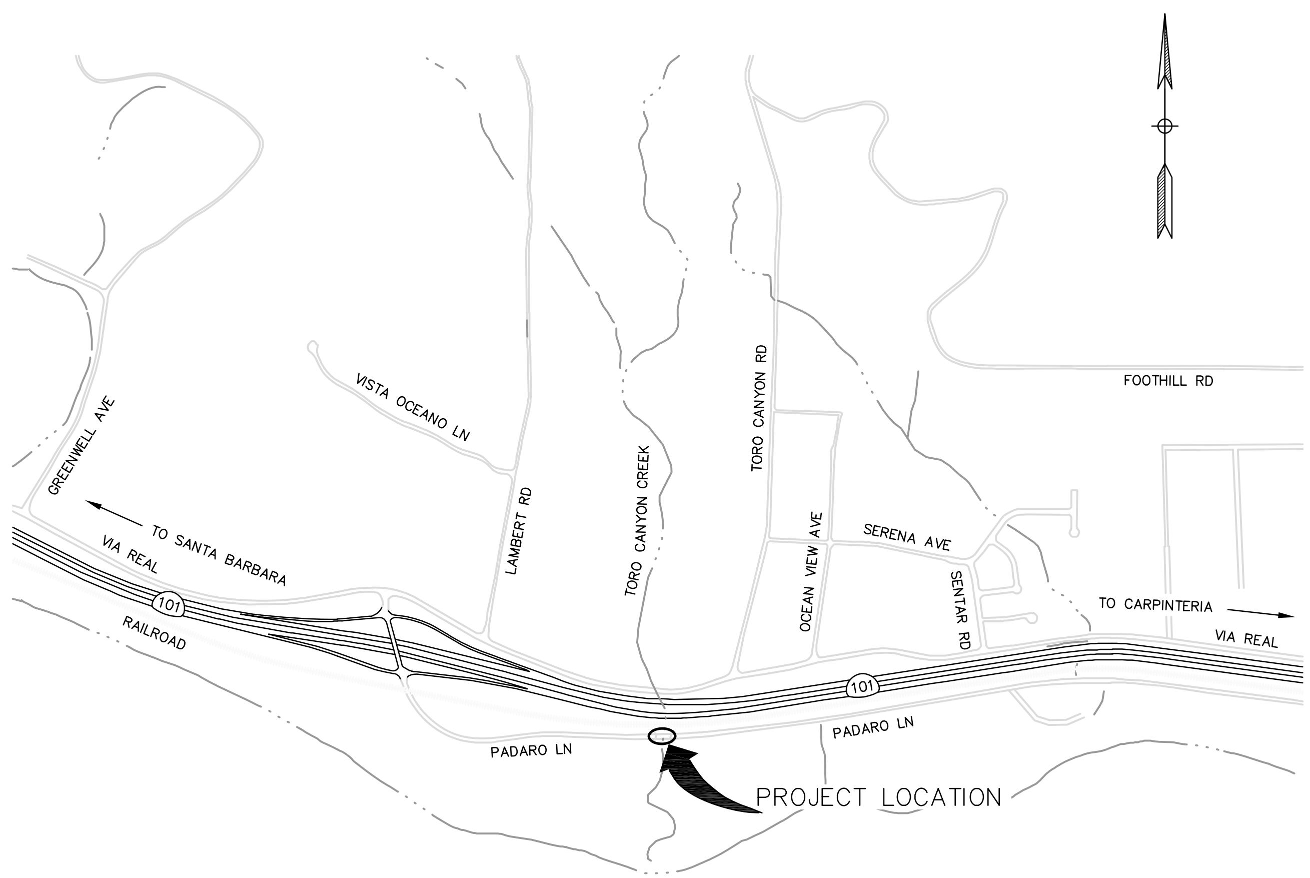
COUNTY OF SANTA BARBARA
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

PLANS FOR THE CONSTRUCTION OF

PADARO LANE SCOUR REPAIR (BRIDGE NO. 51C-O163)

OVER TORO CANYON CREEK
NEAR SUMMERLAND
FEDERAL AID PROJECT No. BPMPL–5951(139)
COUNTY PROJECT NO. 862336





VICINITY MAP
NO SCALE

APPROVED – CHAIRMAN, BOARD OF SUPERVISORS — DATE

APPROVED – DIRECTOR OF PUBLIC WORKS — DATE

APPROVAL RECOMMENDED – ENGINEERING SECTION MANAGER — DATE

INDEX TO SHEETS

SHEET NO.	TITLE
TS–1	GENERAL PLANS
L–1	LAYOUT
CD–1	CONSTRUCTION DETAILS
U–1	UTILITY PLAN (EXISTING)

INDEX TO STD DETAILS AND PLANS

NOTE:
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO WORK WITH THE LOCAL UTILITY COMPANIES TO LOCATE ALL UNDERGROUND UTILITY SERVICE LINES WITHIN THE PROJECT LIMITS PRIOR TO ANY EXCAVATION WORK.
UNDERGROUND SERVICE ALERT–SOUTHERN CALIFORNIA
(800) 422–4133 OR (800) 227–2600

CALL BEFORE YOU DIG 800-642-2444

TITLE SHEET
TS-1

CONSTRUCTION STARTED:		PROJECT ENGINEER:	COUNTY OF SANTA BARBARA DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION	DESIGN BY: CE GARCIA
CONSTRUCTION COMPLETED:				DRAWN BY: CE GARCIA
RECORD DRAWING APPROVED BY:		DATE		
SURVEY CHECKED BY:			FOR REDUCED PLANS ORIGINAL SCALE IN INCHES 0 1 2 3	

REGISTERED PROFESSIONAL ENGINEER CE GARCIA Exp. 9/30/15 CIVIL STATE OF CALIFORNIA — PRELIMINARY

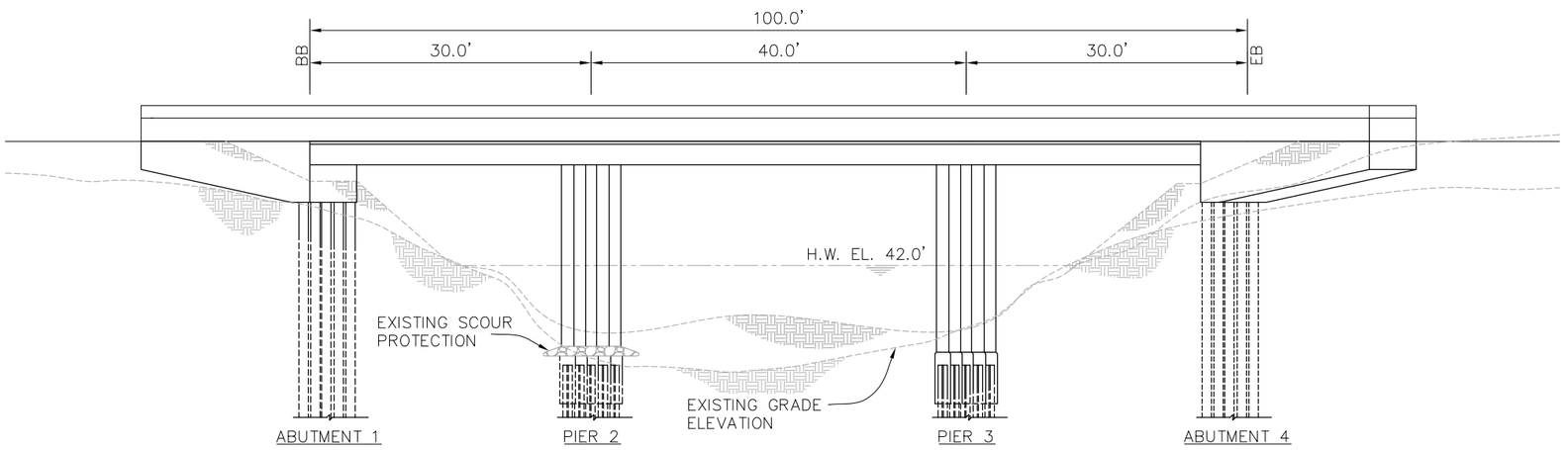
CHECKED BY:	SCALE	PROJECT NO.		SHEET NO.
R BENSEL	NO SCALE	862336	TORO CREEK BRIDGE BRIDGE 51C–163 GENERAL PLAN	1 OF 4
CONSTRUCTABILITY REVIEW BY: *				FILE NO. *

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES (PRELIMINARY STAGE ONLY)

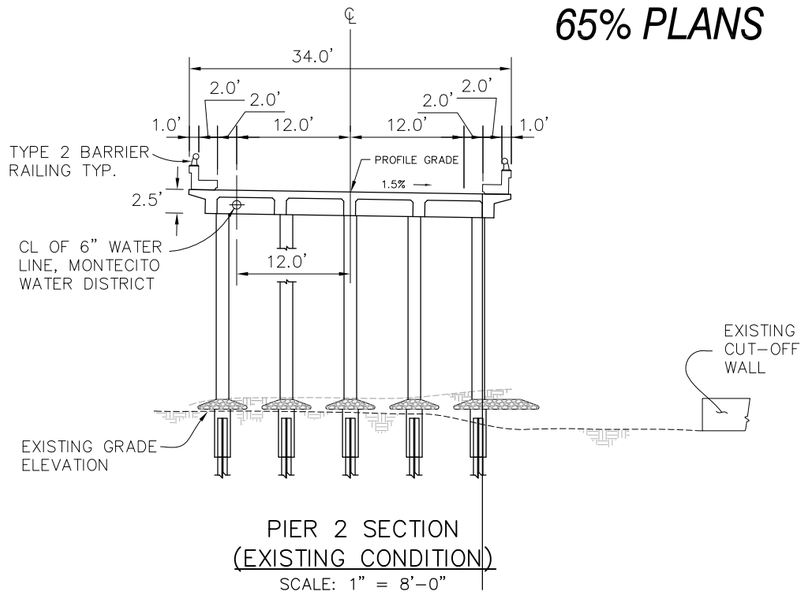
REPAIR OF BRIDGE NO. 51C-0163
COUNTY PROJECT NO. 862336

COUNTY OF SANTA BARBARA
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

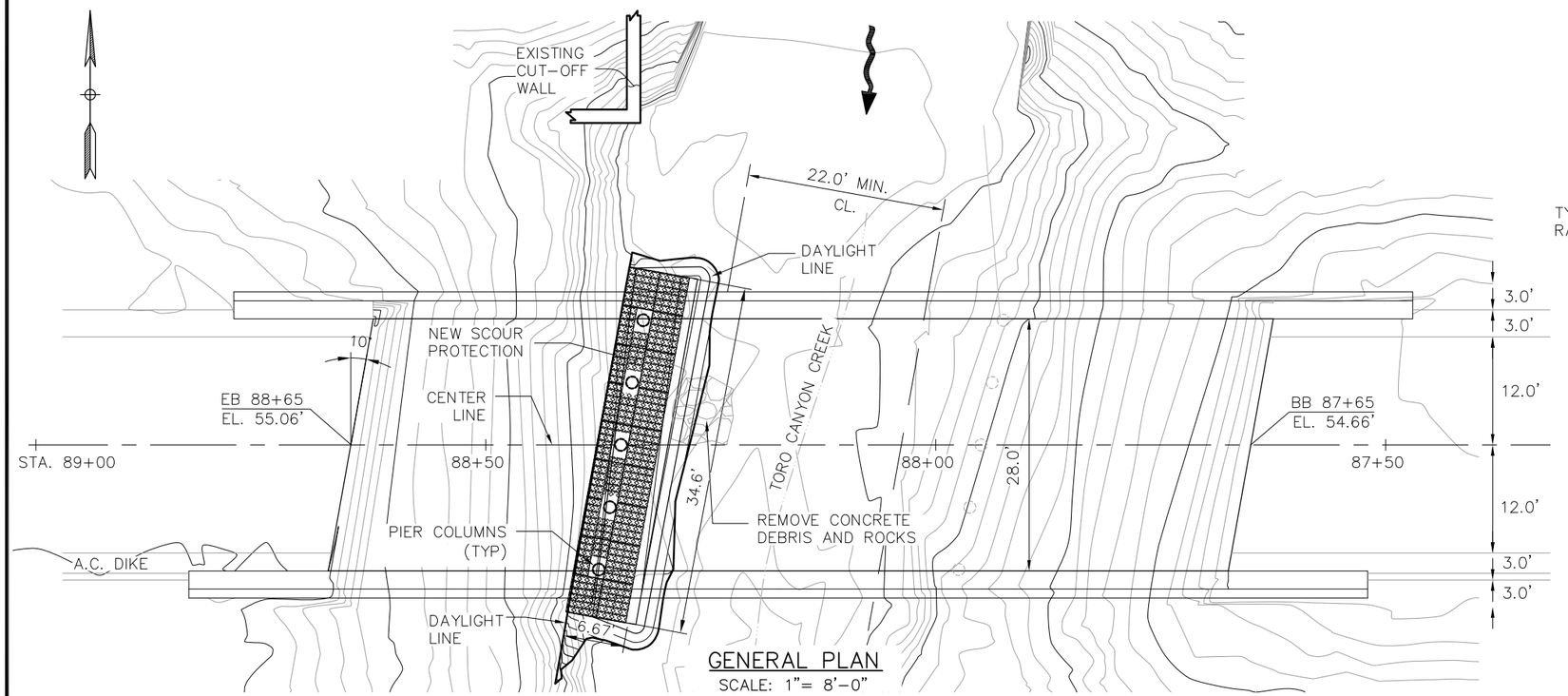
65% PLANS



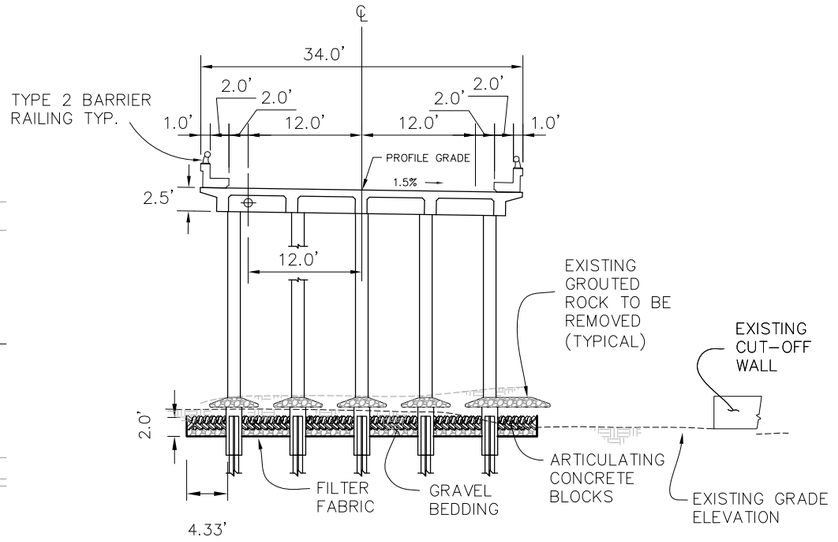
NORTH ELEVATION
SCALE: 1"= 8'–0"



PIER 2 SECTION
(EXISTING CONDITION)
SCALE: 1" = 8'–0"



GENERAL PLAN
SCALE: 1"= 8'–0"



PIER 2 SECTION WITH
PROPOSED IMPROVEMENTS
SCALE: 1" = 8'–0"

LAYOUT
L-1

CONSTRUCTION STARTED BY : *		PROJECT ENGINEER: CONSTANTINO E. GARCIA	COUNTY OF SANTA BARBARA DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION	DESIGN BY: CE GARCIA	CHECKED BY: R BENSEL	SCALE: 1" = 8'	PROJECT No. 862336	TORO CREEK BRIDGE BRIDGE 51C–163 GENERAL PLAN
CONSTRUCTION COMPLETED : *				DETAILS BY: CE GARCIA	CONSTRUCTIBILITY REVIEW : *			SHEET No. 2 OF 4
RECORD DRAWING APPROVED BY : *		DATE						FILE No. *
			FOR REDUCED PLANS ORIGINAL SCALE IN INCHES 0 1 2 3			DISREGARD PRINTS BEARING EARLIER REVISION DATES →	REVISION DATES (PRELIMINARY STAGE ONLY) 11/24/15	

PRELIMINARY

REGISTERED PROFESSIONAL ENGINEER
CE GARCIA
No. 17446
Exp. 9/30/15
CIVIL
STATE OF CALIFORNIA

HORIZONTAL & VERTICAL CONTROL NOTES :

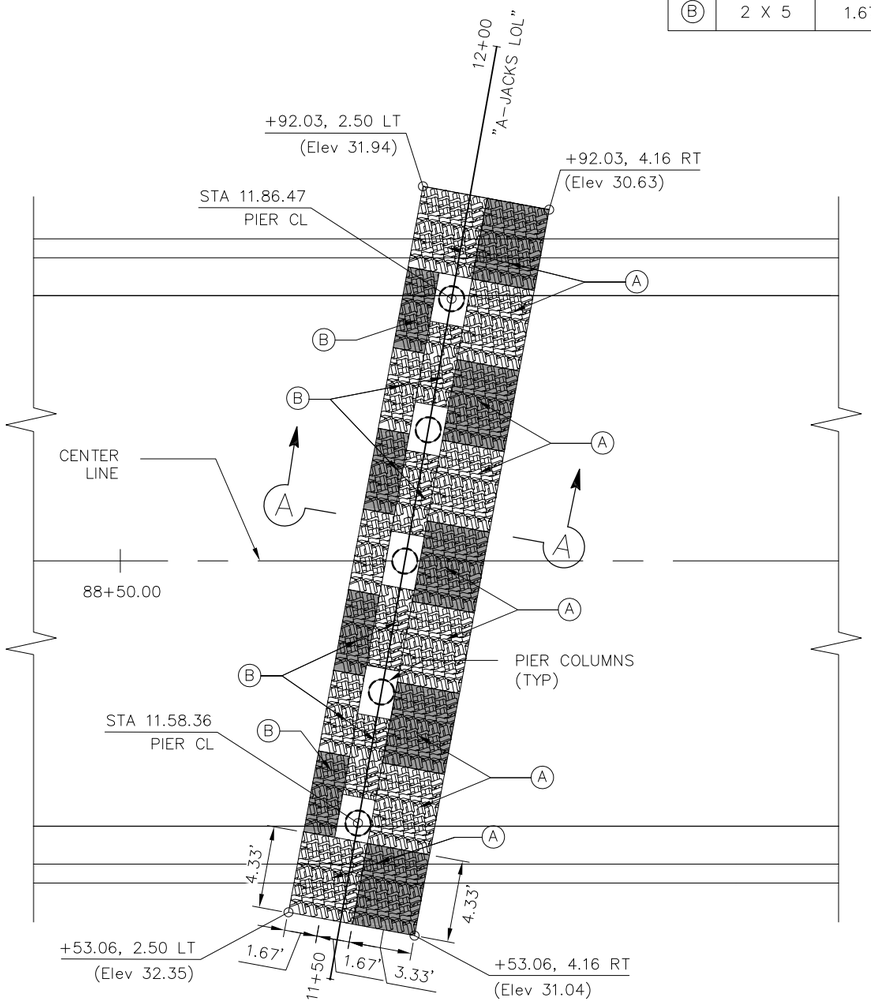
HORIZONTAL DATUM : ASSUMED

VERTICAL DATUM : ASSUMED

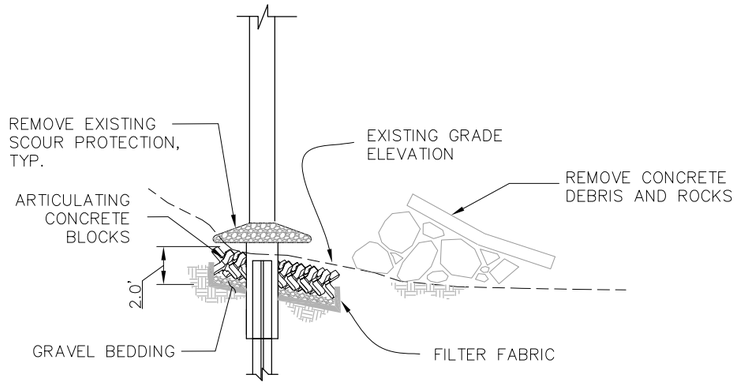
PLANE COORDINATES : NOT STATE PLANE COORDINATES

ALL COORDINATE POSITIONS ARE BASED ON GROUND DISTANCE. ALL DISTANCE SHOWN ARE BASED ON THE U.S. SURVEY FOOT
(ONE SURVEY FOOT = 1200/3937 METERS)

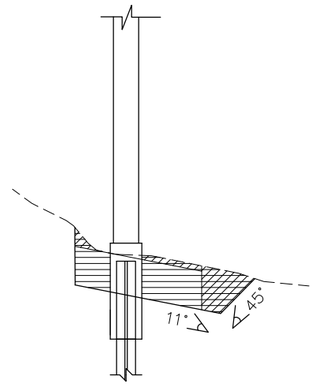
A–JACKS CONFIGURATION			
	LAYOUT	DIMENSION	NO. OF MODULES
(A)	4 X 5	3.33' X 4.33'	11
(B)	2 X 5	1.67' X 4.33'	11



ARTICULATING CONCRETE BLOCKS DETAILS
SCALE: 1"=4'–0"



SECTION A–A
SCALE: 1"=4'–0"



PIER COLUMNS
SCALE: 1"=4'–0"

LEGEND:

- EXCAVATION (TYPE D)
- BACKFILL (NATIVE MATERIALS)
- GRAVEL BEDDING

QUANTITIES	
EXCAVATION	41.0 CY
BACKFILL	24.0 CY

EXCAVATION AND BACKFILL PAY LIMITS

CONSTRUCTION NOTES :

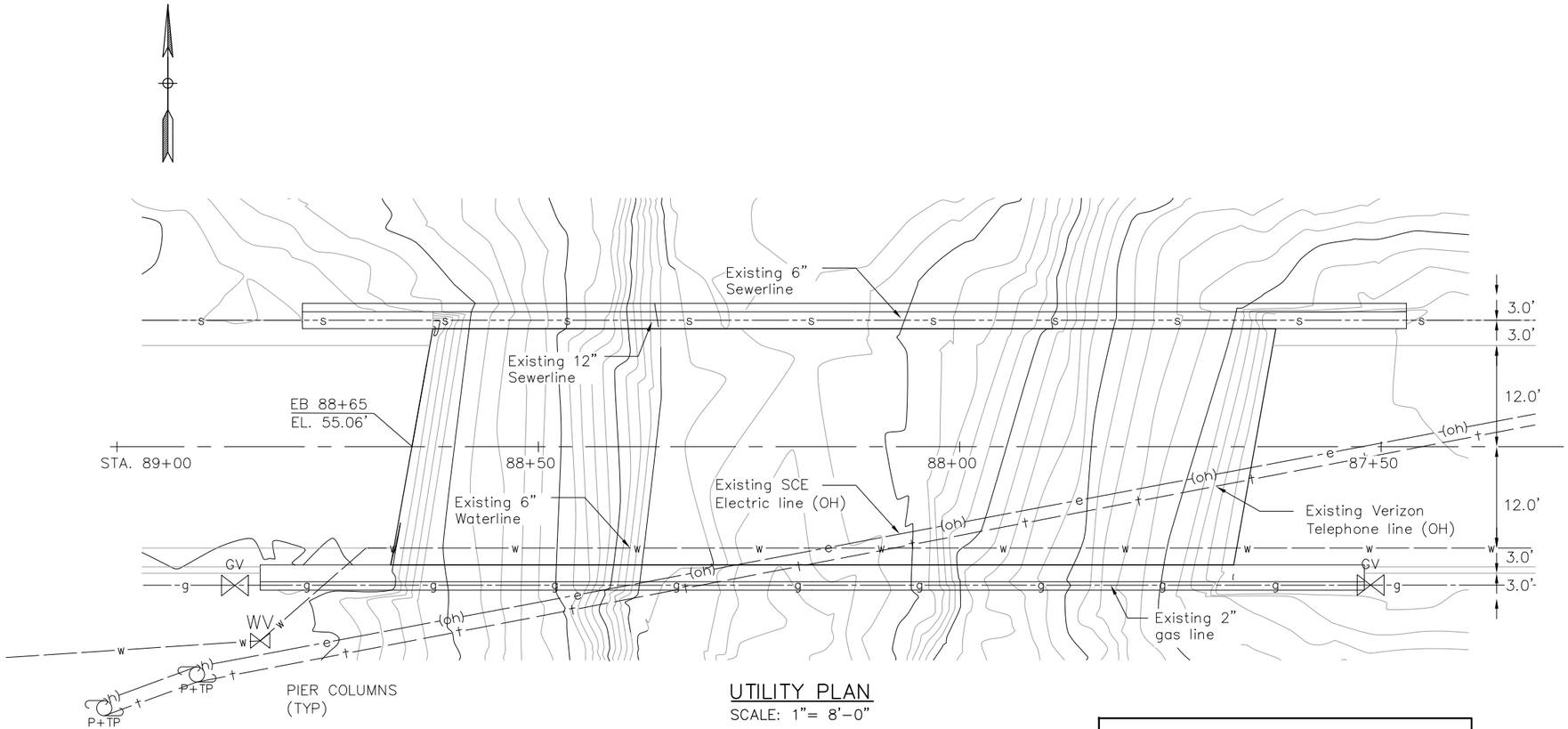
1. USE TOP OF BRIDGE ELEVATION AS REFERENCE FOR A–JACKS ELEVATION.
2. ELEVATION SHOWN IN "ARTICULATING CONCRETE BLOCKS DETAILS" IS AT TOP OF A–JACKS.
3. TIE ENTIRE PERIMETER OF ARTICULATED CONCRETE BLOCKS WITH STAINLESS STEEL CABLE.
4. DEBRIS, ROCKS, AND EXISTING FRACTURED SCOUR PROTECTION IN THE CREEK CHANNEL MUST BE REMOVED AND HAULED AWAY FROM THE PROJECT SITE.
5. FINISH GRADE SHALL BE ESTABLISHED TO APPROXIMATE EXISTING GRADE USING NATIVE MATERIALS AS BACKFILL.

CONSTRUCTION DETAIL
CD-1

CONSTRUCTION STARTED : *		PROJECT ENGINEER: CONSTANTINO E. GARCIA	COUNTY OF SANTA BARBARA DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION	DESIGN BY: CE GARCIA	CHECKED BY: R BENSEL	SCALE: 1" = 4'	PROJECT No. 862336	TORO CREEK BRIDGE BRIDGE 51C–163 GENERAL PLAN	SHEET No. 3 OF 4
CONSTRUCTION COMPLETED : *				DETAILS BY: CE GARCIA	CHECKED BY:				FILE No. *
RECORD DRAWING APPROVED BY: *		DATE				DISREGARD PRINTS BEARING EARLIER REVISION DATES →		REVISION DATES (PRELIMINARY STAGE ONLY)	

PRELIMINARY — REGISTERED PROFESSIONAL ENGINEER — CE GARCIA — No. 19446 — Exp. 9/30/15 — CIVIL — STATE OF CALIFORNIA

FOR REDUCED PLANS ORIGINAL SCALE IN INCHES 0 1 2 3



UTILITY PLAN
SCALE: 1"= 8'–0"

NOTES :

1. LOCATIONS OF UTILITY FACILITIES SHOWN ON THIS PLAN IS APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. UTILITY OWNERSHIP ON THIS PROJECT :

   WATER – MONTECITO WATER DISTRICT
   GAS – SOUTHERN CALIFORNIA GAS
   ELECTRIC – SOUTHERN CALIFORNIA EDISON
   SEWER – CARPINTERIA SANITARY DISTRICT
   PHONE – VERIZON

3. THIS PLAN IS ACCURATE FOR UTILITIES ONLY

   ABBREVIATIONS :

   w – WATER
   g – GAS
   e – ELECTRIC
   s – SEWER
   t – PHONE

LEGEND:

ELECTRIC LINE -e——— ———-(oh)-
PHONE —t— — — —t—
GAS -g———-———-g—
WATERLINE —w— — — —w—
SEWER LINE --s———--———--s--
GAS VALVE GV
WATER VALVE WV
POWER/TELEPHONE POLE P+TP

CAUTION :

UNDERGROUND AND OVERHEAD UTILITIES EXIST WITHIN THE IMMEDIATE WORK AREA AND WILL NOT BE RELOCATED NOR DEACTIVATED DURING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION AND COORDINATE CLOSELY WITH THE RESPECTIVE UTILITY COMPANIES THROUGHOUT CONSTRUCTION. LOCATIONS SHOWN FOR EXISTING UTILITIES ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

UTILITY PLAN (EXISTING)
U-1

CONSTRUCTION STARTED BY : *		PROJECT ENGINEER: CONSTANTINO E. GARCIA	COUNTY OF SANTA BARBARA DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION	DESIGN BY: CE GARCIA	CHECKED BY: R BENSEL	SCALE: 1" = 8'	PROJECT No. 862336	SHEET No. 4 OF 4
CONSTRUCTION COMPLETED : *				DETAILS BY: CE GARCIA	CONSTRUCTIBILITY REVIEW :			FILE No. *
RECORD DRAWING APPROVED BY : *		DATE				DISREGARD PRINTS BEARING EARLIER REVISION DATES →	REVISION DATES (PRELIMINARY STAGE ONLY)	

PRELIMINARY — REGISTERED PROFESSIONAL ENGINEER — CE GARCIA — No. 19446 — Exp. 9/30/15 — CIVIL — STATE OF CALIFORNIA

FOR REDUCED PLANS ORIGINAL SCALE IN INCHES 0 1 2 3

TORO CREEK BRIDGE
BRIDGE 51C–163
GENERAL PLAN

12.5 Appendixces E National Maine Fisheries Services letter dated September 17, 2012

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

SEP 17 2012

151422SWR2012PR01827: MRM

Suzan Kissee
Garcia and Associates
1025 East Ocean Ave., Suite C
Lompoc, California 93436

Dear Ms. Kissee:

NOAA's National Marine Fisheries Service (NOAA Fisheries) has reviewed your August 17, 2012, letter requesting comment on the potential presence of endangered steelhead (*Oncorhynchus mykiss*) and designated critical habitat for this species at any one of three proposed project sites in Santa Barbara County: involve Padaro Lane Bridge on Toro Canyon Creek, Kinevan Road Bridge on San Jose Creek, and Fernald Point Lane Bridge on Romero Creek. As requested NOAA Fisheries provides the following comments for each site:

1. Padaro Lane Bridge on Toro Canyon Creek – Toro Canyon Creek is not listed as steelhead critical habitat. Therefore no critical habitat is present at this project site. Based on the current marginal habitat in Toro Canyon Creek downstream the project site, impediments to steelhead passage upstream of the project site, little to no habitat immediately underneath this bridge, and no recent documentation of steelhead in this watershed, the likelihood for steelhead to be present in the project area during the proposed bridge work is low. The likelihood for steelhead occurrence at the project site would be even further reduced if work on the proposed bridge is conducted during the late summer and early fall when streamflow is expected to be negligible if present.

2. Kinevan Road Bridge on San Jose Creek – Part of San Jose Creek is listed as critical habitat and steelhead are present in this stream. However, the Kinevan Road Bridge is near the summit of Highway 154 and upstream of the upstream boundary of designated critical habitat. Therefore no critical habitat is present at this project site. Steelhead are not expected within the project site, which is upstream of several barriers or impediments (both natural and non-natural) to steelhead passage including a natural 30-foot waterfall. Your August 17, 2012, letter also reported that no steelhead were observed during recent biological surveys of the project area.

3. Fernald Point Lane Bridge on Romero Creek – This project site is within a portion of Romero Creek that is designated as critical habitat. Steelhead have been observed within lower Romero Creek upstream and downstream (in the lagoon) of this project site. However, immediately under the subject bridge and continuing to the mouth of Romero

Creek, the stream channel has been lined with concrete on the bottom and vertically on the sides. The concrete-lined channel provides little to no habitat for steelhead to reside during base flow conditions. Also, in most years Romero Creek becomes dry at this location during the summer. As a final note, the existing concrete-lined channel is not optimal for steelhead passage and may need to be modified or restored in the future to increase steelhead passage opportunities at this location. NMFS recommends the project proponent develop a project that ensures future fish-passage solutions at this location will not be delayed or hindered as a result of implementing the proposed project.

This concludes NMFS' comments regarding the potential for steelhead or critical habitat to occur at the subject bridge sites. Please contact Matt McGoogan at (562) 980-4026 if you have any questions concerning this letter or if you require additional information.

Sincerely,

Penny Ruvelas
Southern California Office Supervisor
for Protected Resources

cc: Aaron Allen, Corps, Ventura, California
Mary Larson, CDFG, Los Alamitos, California
Roger Root, USFWS, Ventura, California

12.6 Appendixces F United States Fish and Wildlife Service letter dated May 11, 2012

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO
08EVEN00-2012-SL-0324

May 11, 2012

Suzan Kissée
Garcia and Associates
104 South C Street, Suite G
Lompoc, California 93436

Subject: Species List for the Padaro Lane/Toro Creek Bridge Scour Protection Project, Santa Barbara County, California

Dear Ms. Kissée:

We are responding to your request dated April 15, 2012 and received in our office on May 2, 2012 for information on listed species and critical habitat that may occur in the vicinity of the Padaro Lane/Toro Creek Bridge Scour Protection Project in Santa Barbara County, California.

The U.S. Fish and Wildlife Service's (Service) responsibilities include administering the Endangered Species Act of 1973, as amended (Act), including sections 7, 9, and 10. Section 9 of the Act and its implementing regulations prohibit the taking of any federally listed endangered or threatened species. Section 3(19) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species.

Exemptions to the prohibitions against take may be obtained through coordination with the Service through interagency consultation for projects with Federal involvement pursuant to section 7 or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act. If the subject project is to be funded, authorized, or carried out by a Federal agency and may affect a listed species, the Federal agency must consult with the Service, pursuant to section 7(a)(2) of the Act. If a proposed project does not involve a Federal agency but may result in the take of a listed animal species, the project proponent should apply for an incidental take permit, pursuant to section 10(a)(1)(B) of the Act. Once you have determined if the proposed project will have a lead Federal agency, we can provide you with more detailed information regarding the section 7 or 10(a)(1)(B) permitting process.

The enclosed list of species fulfills the requirements of the Service under section 7(c) of the Act. Only listed species receive protection under the Act; however, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Game's Natural Diversity Data Base. You can contact the California Department of Fish and Game at (916) 324-3812 for information on other sensitive species that may occur in this area.

If you have any questions regarding this matter, please contact Jenny Marek of our staff at (805) 644-1766, extensions 325.

Sincerely,

Jeff Phillips
Deputy Assistant Field Supervisor

Enclosure

cc:
Anthony Spina, National Marine Fisheries Service
Natasha Lohmus, California Department of Fish and Game

LISTED SPECIES WHICH MAY OCCUR NEAR THE PADARO LANE/TORO CREEK BRIDGE SCOUR PROTECTION PROJECT, SANTA BARBARA COUNTY, CALIFORNIA

Plants		
Marsh sandwort	*Arenaria paludicola*	E
Gambel's watercress	*Nasturtium gambellii*	E
Birds		
Least Bell's vireo	*Vireo bellii pusillus*	E
Southwestern willow flycatcher	*Empidonax traillii extimus*	E
Amphibians		
California red-legged frog	*Rana draytonii*	T
Fish		
Tidewater goby	*Eucyclogobius newberryi*	E
Steelhead trout	*Oncorhynchus mykiss*	*

Key:
E – Endangered
T – Threatened
* Species for which the National Marine Fisheries Service has responsibility. For more information, call the Santa Rosa Field Office at 707-575-6050 or go to http://swr.ucsd.edu/