



**CITY OF SANTA BARBARA  
COMMUNITY DEVELOPMENT DEPARTMENT  
FINAL MITIGATED NEGATIVE DECLARATION – MST2009-00374  
April 16, 2012**

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970," as amended to date, this Final Mitigated Negative Declaration has been prepared for the following project:

**PROJECT LOCATION: Lower Sycamore Creek and Punta Gorda Street Bridge**

**PROJECT PROPONENT: Engineering Division, Public Works Department, City of Santa Barbara, 630 Garden Street, Santa Barbara, CA 93101**

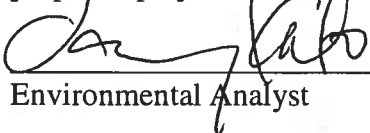
**PROJECT DESCRIPTION:** The project involves Lower Sycamore Creek and the Punta Gorda Street Bridge. The project begins at the north side of the U.S. Highway 101 Sycamore Creek Bridge and extends upstream to a point approximately 75 feet beyond the Punta Gorda Street Bridge. The southerly portion of the project is located within the Caltrans right-of-way. Only the improvements located north of the Caltrans right-of-way line are analyzed in this Initial Study/Mitigated Negative Declaration. The project includes a creek restoration plan and the replacement of the Punta Gorda Street Bridge.

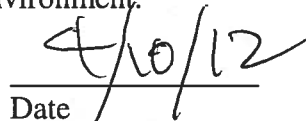
The improvements that are located within the Caltrans right-of-way are being evaluated and processed separately under the existing Highway 101 Operational Improvements Project Coastal Development Permit.

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**MITIGATED NEGATIVE DECLARATION FINDING:**

Based on the attached Initial Study prepared for the proposed project, it has been determined that the proposed project will not have a significant effect on the environment.

  
Environmental Analyst

  
Date



CITY OF SANTA BARBARA  
COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION

DRAFT INITIAL STUDY/ ENVIRONMENTAL CHECKLIST  
LOWER SYCAMORE CREEK CHANNEL WIDENING  
AND PUNTA GORDA STREET BRIDGE REPLACEMENT PROJECT

MST2009-00374

November 8, 2011 April 16, 2012

This Initial Study has been completed for the project described below because the project is subject to review under the California Environmental Quality Act (CEQA) and was determined not to be exempt from the requirement for the preparation of an environmental document. The information, analysis and conclusions contained in this Initial Study are the basis for deciding whether a Negative Declaration (ND) is to be prepared or if preparation of an Environmental Impact Report (EIR) is required to further analyze impacts. Additionally, if preparation of an EIR is required, the Initial Study is used to focus the EIR on the effects determined to be potentially significant.

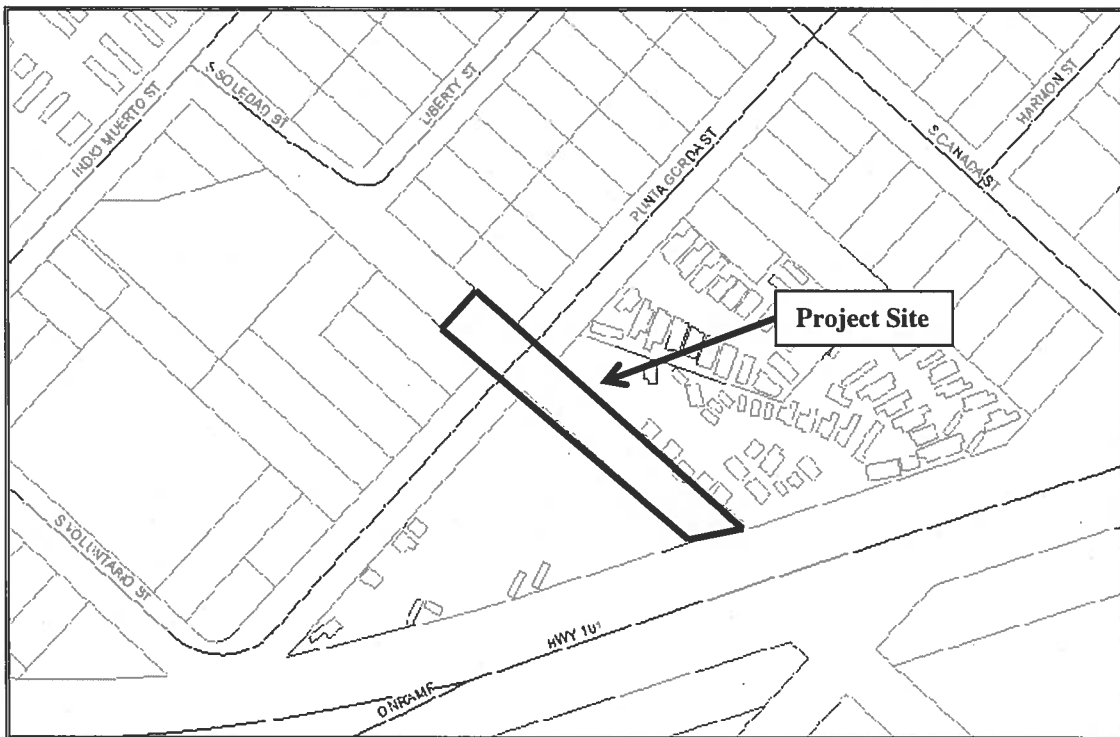
**APPLICANT/ PROPERTY OWNER**

Applicant: Public Works Department, City of Santa Barbara

Applicant Representatives: Brian D'Amour, Supervising Civil Engineer; Jessica W. Grant, Project Planner

Owner: City of Santa Barbara

**PROJECT LOCATION**



Lower Sycamore Creek Vicinity Map

The project involves Lower Sycamore Creek and the Punta Gorda Street Bridge. The project begins ~~five feet at the north side of the U.S. Highway 101 Sycamore Creek Bridge right-of-way~~ and extends upstream to a point approximately 75 feet beyond the Punta Gorda Street Bridge. The southerly portion of the project is located within the Caltrans right-of-way.

Only the improvements located north of the Caltrans right-of-way line are analyzed in this Initial Study/Mitigated Negative Declaration. The improvements that are located within the Caltrans right-of-way are being evaluated and processed separately under the existing Highway 101 Operational Improvements Project Coastal Development Permit.

## **PROJECT DESCRIPTION** (see *Exhibit A - Project Plans*)

### ***Introduction:***

Sycamore Creek is one of the four major creek systems in the City. It runs a 2.7-mile course through the City between the Stanwood Drive/Sycamore Canyon Road intersection and the ocean at East Beach. Its drainage area is approximately four square miles. The lower portion of the Sycamore Creek watershed has experienced extensive flooding in recent history, ~~primarily due to construction of the freeway (i.e., the original Highway 101 Bridge over Sycamore Creek) and increased development upstream.~~ During the 1995 rainstorm, nearly four feet of water flooded properties at the Deluxe and Green Mobile Home Parks, both located south of Punta Gorda Street and adjacent to Sycamore Creek. More recently, the 2008 Tea Fire burned much of the upper Sycamore Creek watershed. The loss of vegetation and the development of hydrophobic soils due to the wildfire increased the potential for flooding. It has been determined that the capacity and maintenance of the surface water collection and drainage system of pipes, culverts, and bridges in the Sycamore Creek watershed are inadequate for flood flow conveyance.

Caltrans recently widened Highway 101 from Milpas Street to Hot Springs Road from ~~four~~ to ~~six~~ lanes. The Highway 101 Bridge over Sycamore Creek, ~~which was a major flood impediment,~~ was also widened and now has three bays. Only the middle bay, which has a flow capacity of approximately 2,000 cubic feet per second (cfs), is currently open. The bridge will eventually have a capacity of 3,000 cfs when its two additional bays are open. However, Caltrans will not open the bays until all the channel improvements south of the freeway are widened and applicable bridges have been replaced, which may not occur for another 10 to 12 years.

In 2011, the City of Santa Barbara received approximately \$2.6 million in grant funding from the Housing and Urban Development 2008 Disaster Recovery Initiative Program to improve lower Sycamore Creek. While the long range plan is to widen Sycamore Creek from Yanonali Street to the Pacific Ocean, the City is focusing the initial channel widening efforts north of the freeway, ending just north of the Punta Gorda Street Bridge. The widening of this portion of the channel would increase the flow rate to approximately 2,000 cfs, which would match the flow rate of the open middle bay under the Highway 101 Sycamore Creek Bridge.

### ***Project Phases:***

The Lower Sycamore Creek Channel Widening and Punta Gorda Street Bridge Replacement Project is comprised of two phases. The Phase 1 component includes channel improvements beginning ~~five feet at the~~ at the north side of the Highway 101 Caltrans right-of-way line and extending approximately 150 feet upstream toward Punta Gorda Street. The Phase 2 component includes channel improvements beginning at the northerly end of Phase 1 and extending 195 feet upstream to a point approximately 75 feet upstream of the Punta Gorda Street Bridge. Phase 2 includes the replacement of the Punta Gorda Street Bridge. A creek restoration plan is incorporated into both phases. Both phases will be constructed concurrently.

## **CHANNEL IMPROVEMENTS (PHASE 1 & 2)**

Approximately half of the channel improvements would occur during Phase 1 of the project and half would occur during Phase 2 as described above. Currently, the distance between the top of banks for this portion of Lower Sycamore Creek varies between 25 and 50 feet. The width of the channel bottom varies between 9 and 12 feet. The banks of the creek are defined by cement flood walls, concrete-filled bags, and pipe and wire revetment in most of the project area. The west bank of the creek is essentially vertical due to a retaining wall and a pipe and wire revetment. The east bank has both pipe and wire revetment and earthen banks.

The project includes widening the creek to approximately 60 feet between the top of banks, which would match the existing public right-of-way width of 60 feet. Widening of the creek would involve removing all materials (e.g., cement, pipe, wire) within the creek area and grading the creek so that the bottom of the channel would be 28 feet wide (20-foot-wide earthen channel bottom, plus 4 feet of riprap on each side buried by soil).

The creek would also include a low-flow, earthen channel 2- to 3-feet wide and about 6- to 12-inches deep for tidewater goby migration. At the toe of the bank, the buried riprap would rise at a slope of 1.5:1 (horizontal: vertical) for a vertical distance of 2 feet, except at the new Punta Gorda Street Bridge, where the rip rap would extend to the face of the abutments. Above the riprap the banks would be earthen with a slope of 2:1 (horizontal: vertical). All new earthen banks

would have a bank face of approximately nine feet in height. Cross sections are shown on sheet C2 (2 of 4)8 of the project plans (*see Exhibit A*). Improvements also include the construction of warped wingwalls (walls that extend beyond the bridge to retain the earth behind the abutment) on both banks, adjacent to the Highway 101 Sycamore Creek Bridge. The western wall would be 7 feet high and 19 feet long, and the eastern wall would be an 8 feet high and 12.5 feet long. A six-foot high black chain link fence is proposed along the length of the top of bank on both sides of the creek. From a flood conveyance standpoint, there would be less than 1.5 inches (0.12 feet) reduction in the 100-year water surface elevation after construction of the proposed project. This small difference cannot be visually distinguished on the project plans; therefore, only the current floodplain boundaries are shown on ~~sheet 4 of the~~ project plans (*see Exhibit A*). Supporting calculations are provided in the 100-year Water Surface Difference report prepared by Penfield & Smith and are incorporated herein by reference (*see Exhibit B*). Although there would be a negligible reduction in the floodway and the 100-year floodplain levels, there would be a decrease in the probability of flooding in the project vicinity because the creek's capacity would be increased. Currently, the flood capacity of the creek is between 900 and 1,600 cubic feet per second (CFS), which corresponds to 6- to 12- year flood. The project would increase flood capacity to approximately 2,000 cfs, which corresponds to a 17-year flood. As stated previously, this would match the current flow rate of the Highway 101 Sycamore Creek Bridge.

The project would require diversion and dewatering of the creek before and during construction activities. The creek diversion and dewatering system would be installed that diverts the creek flow from upstream of construction activities into a pipe/culvert and conveys the runoff through the project site to a point downstream of construction activities. The diversion dam would be constructed within the natural channel using sandbags and/or straw hay bales and plastic sheeting. The pipe(s)/culvert(s) would be of appropriate size and material to convey anticipated creek flows. A biological monitor would be present throughout the diversion and dewatering operation (see Biological Resources section for further discussion). The Diversion and Dewatering Plan is incorporated herein by reference (*see Exhibit C*).

The existing sewer line under the creek is shallow and would interfere with the channel improvements. The existing pipe and adjacent manholes in the street would be removed, and a dual-pipe inverted sewer siphon system would be constructed to lower the sewer pipe(s) to at least 3 feet below the new flow line of the creek and to maintain existing sewer flow patterns. Two new manholes would be constructed in the street to connect the sewer siphon to the existing sewer pipes.

The section of Sycamore Creek located downstream from Punta Gorda Street is bordered on the east by the Green Mobile Home Park and on the west by the former Deluxe Mobile Home Park. The former Deluxe Mobile Home Park property is currently vacant, with the exception of a dilapidated structure that will be removed by the property owner prior to construction, since it encroaches into the City's 60-foot public right-of-way. The Green Mobile Home Park has a 30-foot wide Revocable Encroachment Permit to accommodate seven mobile home sites that encroach into the City's 60-foot public right-of-way. The encroachment permit has been terminated and the City Attorney's office is working with the Green Mobile Home Park to have all the structures within the right-of-way removed prior to the commencement of construction. Also, the Green Mobile Home Park driveway entrance on Punta Gorda Street is located within the public right-of-way and would be removed. Retaining the driveway was evaluated and determined to not be a feasible option, as described in the Lower Sycamore Creek Drainage Improvements Project Driveway Alternatives Report prepared by Penfield & Smith, incorporated herein by reference (*see Exhibit D*).

The section of Sycamore Creek located upstream from the Punta Gorda Street Bridge is bordered by single-family residences. On the western side, a portion of the creek bank is currently located on private property. As part of the project, this portion of the creek would be relocated to be completely within the 60-foot public right-of-way. On the eastern side, within the public right-of-way, is a five foot wide earthen pedestrian path that would remain.

The total amount of material to be excavated from the creek banks and creek bottom is estimated to be approximately 3,6500 cubic yards (CY). Creek excavation would occur as the work progresses so that all 3,6500 CY of material would not be stockpiled at one time. Expected debris includes stacked burlap bags filled with concrete, large rocks, mortared riprap, slabs of concrete, grouted stone, formed walls, pipe and wire revetment, and other bank material found throughout the length of the project. There are no known contaminated soils in the project area.

The excavated materials would be recycled to the maximum extent feasible. The green waste would be recycled as compost and mulch. The City would examine the suitability of the excavated material for local beach sand replenishment. Soil could also be distributed to other construction sites requiring fill. Most materials would be transported within a radius of approximately 10 to 25 miles from the project site. Some material would be transported to the Tajiguas Landfill, located 25 miles west of the project site.

Channel excavation would last from 30 to 40 days. It is expected that 96 to 128 CY of material would be removed each day. This would result in approximately 6 to 8 truck trips per day and approximately 250 total truck trips to transport the excavated material.

### **CREEK RESTORATION PLAN (PHASE 1 & 2)**

The existing vegetation along Sycamore Creek is a mix of non-native species, landscape and ornamental vegetation, and native riparian species. The creek widening would result in the removal of most of the existing vegetation in the project area; therefore, a creek restoration plan would be incorporated into both Phase 1 and Phase 2. The creek restoration plan involves the planting of native species on the newly constructed creek banks for the length of the project, except for where warped wingwalls would replace earthen banks for a length of approximately 19 feet on the western side and 7 feet on the eastern side of the creek adjacent to Highway 101 Sycamore Creek Bridge. The plan consists of four planting zones on each side of the creek (Water's Edge, Riprap, Riprap Edge, and Upper Bank Zones). The creek restoration plan is described on sheets L-1 through L-8 of the project plans (*see Exhibit A*) and is further discussed in the Biological Resources section.

During construction, the creek restoration specialist would use judgment to adjust planting locations in the field to make good use of micro-site conditions that would favor one species over another. The planting maintenance period would be five years. After the planting maintenance period, the City would coordinate with County Flood Control District on creek maintenance, since the District currently provides yearly maintenance on this portion of Sycamore Creek.

### **PUNTA GORDA STREET BRIDGE REPLACEMENT (PHASE 2)**

The channel widening during Phase 2 necessitates removal and replacement of the Punta Gorda Street Bridge. The existing bridge is a concrete box culvert with a 21-foot wide span, 7.5 foot rise and concrete channel bottom. The proposed bridge would have a ~~50~~48-foot wide span, nine-foot rise and earthen bottom. The new bridge would be a precast/prestressed concrete bridge, ~~prefabricated bridge as recommended by the Lower Sycamore Creek Drainage Improvements Project Bridge Selection Evaluation, incorporated herein by reference (*see Exhibit E*).~~ This type of bridge was selected because it provides the most capacity within the new channel section and has of the limited impact to the creek (less dewatering, less earthwork, and less wet concrete in the channel). The new bridge would be larger and centered more closely within the right-of-way than the existing bridge. It would also be outside the creek banks' high water line/full level and above the top of bank.

Bridge construction activities would generally proceed in the following sequence:

- Punta Gorda Street would be closed on either side of existing bridge and through traffic would be routed onto Indio Muerto Street, located northwest of the bridge. The street closure would require the temporary rerouting of MTD Bus Route 2 and the temporary closure or relocation of the bus stop near the bridge on Punta Gorda Street. Work would involve installation of barricades and signs in the vicinity of the project and along the detour routes.
- Two overhead utility poles would be relocated by Southern California Edison and one communication pole would be relocated by Verizon.
- A creek diversion and dewatering system would be installed that diverts the creek flow from upstream of construction activities into a pipe/culvert and conveys the runoff through the project site to a point downstream of construction activities (*see Exhibit C*). The diversion dam would be constructed within the natural channel using sandbags and/or straw hay bales and plastic sheeting. The pipe(s)/culvert(s) would be of appropriate size and material to convey anticipated creek flows.
- Demolition of the existing concrete sidewalks, curb and gutter and asphalt street surface, and structural base would occur within the project area. Pavement would be saw cut to the limits shown on the plans. Some of this material may be recycled for reuse as base material for the improved street and for bridge backfill. Material that cannot be reused would be disposed of off-site.
- The existing gas line under the street pavement and on the bridge would be removed and temporarily relocated by the Gas Company.
- The existing waterline attached under the bridge would be removed and disposed of offsite. The temporary capping of the water line may temporarily affect the water pressure in the vicinity of the project. The existing water meter, blow-off valve and fire hydrant would be relocated outside the limits of the new bridge.

- The existing bridge would be demolished and disposed of offsite. The existing concrete bridge structure, wing-walls, and grouted rock would be removed from the creek. The removal of the existing bridge would generate an estimated 380 tons of waste, mainly concrete, reinforced concrete, stone masonry, steel and asphalt. The majority of the waste could be recycled. The 62 tons of stone masonry could be diverted for use on other City projects. Some of the demolition material may be recycled for reuse as base material for the improved street and for bridge backfill. Material that cannot be reused would be disposed of offsite.
- Portions of hardscape and landscaping that are in conflict with new construction would be removed. The areas around the corners of the new bridge would be cleared of vegetation and fencing to allow access for construction the new bridge foundations and wing walls.
- Shoring would be installed as necessary to allow for the structural excavation for the new bridge footings and wing walls. Anticipated methods consist of cantilevered or braced sheet piling or soldier beam and lagging systems. A dewatering system would be installed within the excavations to remove any groundwater that may be encountered at depths below the channel bottom. The groundwater would be pumped through appropriate settling tanks and filters and released into the creek downstream of the construction site. Concrete would be poured into areas that have been dewatered.
- The sewer by-pass system would be installed to allow effluent to continue to flow from northeast of the project site towards Voluntario Street. This system would require the use of a pump placed in the new upstream manhole and flexible piping to convey the effluent to the new downstream manhole. It may be necessary to convey the effluent to the next existing downstream manhole near Voluntario Street. If this is necessary, traffic safety measures would be installed to protect the piping from vehicular damage.
- Bridge foundation support piles would be constructed. Bridge construction would include the use of cast-in-drilled-hole (CIDH) piles, which do not have the noise and vibration effects that are associated with driven displacement piles (such as concrete piles or closed-end pipe piles). Construction below the groundwater in the medium stiff clay and silt, and loose to medium dense sand of the alluvium would require wet methods of installation. Specifications would be written to require the contractor to pump the water from the pile borings that would come in contact with wet concrete into a containment tank and for proper disposal offsite.
- The cast-in-place concrete foundations would be formed with reinforcement, poured and finished.
- New curb, gutter and sidewalks would be constructed. The new bridge would have six-foot wide sidewalks. With the removal of the Green Mobile Home Park access driveway, the new sidewalk would connect directly to the existing sidewalk along the southern side of Punta Gorda Street.

## **CONSTRUCTION INFORMATION**

### ***Construction Noise:***

In order to minimize construction noise in the area, an acoustical insulation material would be attached to the construction fence and would extend from the top of the fence (8 feet high) to the ground. Also, a movable acoustical curtain would be used to completely block the line of sight from the adjacent residences during construction of the bridge foundation support piles. Noise levels would be closely monitored for compliance within the allowable limits.

### ***Duration of Construction:***

Project construction would last approximately four months and would be scheduled between July 1 and November 1, 2013~~2~~, to coincide with minimal flow in the creek. An initial survey for the tidewater goby would be completed within one week prior to the start of construction activities. If work outside the creek channel occurs before July 1, 2013~~2~~, measures to prevent sediment, trash, and debris from entering the creek would be implemented. Punta Gorda Street would only be closed during Phase 2 of the project. The project construction may be prolonged due to inclement weather conditions, mechanical failure, funding constraints, or environmental reasons.

### ***Staging and Stockpiling Areas:***

Most staging would occur on the Green Mobile Home Park access driveway currently located within the public right-of-way. As stated previously, this access driveway would be removed as part of the project. Temporary construction easements would likely be needed from 1205 Punta Gorda Street (APN 017-293-018), 1133 Punta Gorda Street (APN

017-291-010), the Green Mobile Home Park (017-334-001) and the former Deluxe Mobile Home Park (APN 017-332-003) for temporary fence relocations and additional staging areas, as shown on the project plans. These easements would not require the relocation of any residents. Staging would also be located along the creek banks.

At the main staging areas, the contractor would install temporary trailers with sanitary facilities. Some excavated materials would be stockpiled at the staging areas, but the majority would be transported offsite as discussed previously.

***Equipment for Construction:***

Construction equipment would include bulldozers, graders, concrete and concrete pump trucks, dump trucks, cranes, off-highway trucks, water trucks, etc. Most equipment would be used for eight hours each day. The equipment would be stored at the staging areas described above.

***Construction Crew:***

Approximately 10 to 15 construction crewmembers would be required to construct the proposed project. It is estimated that approximately 10 to 15 passenger vehicles would be used by the construction crews for commuting to the project site.

***Haul Routes:***

The haul route for hauling materials and equipment to and from the project site would primarily be Highway 101 and nearby on/off ramps. The Milpas Street on/off ramp is near the project area and provides the most direct route to the proposed staging and stockpiling sites. The Salinas Street on/off ramp may also be used. Access and haul routes from the stockpiling sites to the construction site would use streets that are nearest to the creek, and take the most direct route.

***Utilities:***

The project would involve the reconstruction of various utilities within Punta Gorda Street and the relocation of several overhead utility poles. The utilities affected by the project are:

- City of Santa Barbara 8" Sanitary Sewer Line
- City of Santa Barbara 6" Potable Water Line
- City of Santa Barbara Fire Hydrant
- City of Santa Barbara Water Meter and blow-off valve
- City of Santa Barbara Street Light
- Southern California Gas Company 6" Gas Line
- Southern California Edison Power Poles (two total)
- Verizon Communication Pole (one total)

**MAINTENANCE**

The City would maintain the channel and bank restoration areas for five years to ensure establishment of planted vegetation. Maintenance activities include monitoring, watering, weed control, replacement of plants that fail to establish, erosion repair, and pruning of willows at the edge of the channel to minimize dense growth that can impede high flows and increase the potential for flooding.

After the five year maintenance period by the City, the Santa Barbara County Flood Control District would maintain the channel for flood control purposes. Flood control maintenance could consist of manual cutting and herbicide treatment of vegetation in compliance with their permits for such activities. There would be no change to the maintenance procedures or frequency in the project area due to the proposed channel and bridge improvements.

**Required City Review/Approvals:**

1. Review of the Initial Study/Mitigated Negative Declaration by the Planning Commission.
2. Adoption of the Mitigated Negative Declaration by the Architectural Board of Review.
3. Design Review Approval by the Architectural Board of Review (SBMC Chapter 22.68).
4. Building and Public Works permits.

**Other Agencies:**

Several resource agencies have jurisdiction over the project including the U.S. Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service, the National Marine Fisheries Service (NMFS), the California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWQCB). The USACE and RWQCB have jurisdiction



over wetlands and waters within the ordinary high water mark. If additional state wetlands are present, the RWQCB would have jurisdiction over those as well. As shown on the plans, the existing ordinary high water mark varies in width from about 16 feet to 23 feet. A Preliminary Identification of the Ordinary High Water Mark report prepared by Penfield & Smith is incorporated herein by reference (*see Exhibit F*). The NMFS has jurisdiction over the endangered California steelhead. CDFG has jurisdiction over the entire riparian corridor, which is currently between about 20 and 60 feet wide, depending on the location along the channel. The project is undergoing a separate National Environmental Protection Agency (NEPA) evaluation due to federal funding of the project.

**Other Agency Review/Permits Required:**

1. U. S. Army Corps of Engineers 404 Permit
2. Regional Water Quality Control Board 401 Permit
3. Department of Fish and Game Streambed Alteration Agreement (Section 1601)
4. U.S. Fish and Wildlife Service Biological Opinion or Biological Evaluation
5. National Marine Fisheries Service Biological Opinion or Biological Evaluation
6. National Environmental Protection Agency (NEPA) Environmental Assessment

**BACKGROUND: ALTERNATIVE CHANNEL WIDTHS**

The applicant evaluated both a 20-foot wide and 28-foot wide channel bottom for purposes of comparing impacts related to flood capacity, water quality, and habitat. Penfield and Smith evaluated the channel capacity at both widths as well as conducted the sediment evaluation. Cardno Entrix provided the biological resource analysis.

Current flood capacity is limited to between 900 and 1,600 cubic feet per second (cfs) between Highway 101 and Punta Gorda Street, which corresponds to a 6- to 12- year flood. A channel with a 28-foot wide channel bottom would provide a flow rate of approximately 2,000 cfs, which corresponds to a 17-year flood. This flow rate would match the flow rate of the open middle bay under the Highway 101 Sycamore Creek Bridge. A channel with a 20-foot wide channel bottom would yield a flow rate of 1,700 cfs, which would neither meet the project's flood capacity goals or the goals set forth in the Disaster Recovery Initiative grant (the funding source for the project). The Channel Capacity comparison chart prepared by Penfield & Smith is incorporated herein by reference (*see Exhibit G*).

The sediment deposition rate under low flow conditions would be slightly greater with either channel width than under current conditions. This is because a wider channel would reduce water velocity for a given volume of water, and thus reduce the sediment carrying capacity of that water, resulting in sediment deposition. Therefore, a 28-foot wide channel would tend to drop more sediment than a 20-foot wide channel for the same reasons. However, the sediment evaluation study concluded that the conditions following project construction would be adequate to move sediment through the area with little to no accumulation given the flow conditions and the proposed channel width (28-feet). It was also determined that the project would not result in a change in the maintenance procedures (including sediment removal) or frequency of maintenance performed by the Santa Barbara County Flood Control District. The Sediment Evaluation Report, Addendum, and Memorandum prepared by Penfield & Smith are incorporated herein by reference (*see Exhibit H*).

The Biological Memorandum states that the proposed restoration with either channel width would lead to increased future shading of the creek area in the long term than currently exists, which would be an improvement for tidewater goby and Steelhead Trout, two Federally listed species known to be in the project vicinity. The 20-foot wide alternative project would allow for more shading to occur sooner because the planted vegetation on the creek would have less distance to grow. However, the biological memorandum concludes that both alternatives would not have significant, unmitigable impacts in the short term related to shading of the creek and sensitive species. The Biological Memorandum prepared by Cardno Entrix is incorporated herein by reference (*see Exhibit I*).

Balancing the flood capacity, water quality, and habitat goals, the applicant has decided to move forward with a 28-foot wide channel bottom.

**Please note:** Some of the attached exhibits describe a larger project than is currently being proposed because the previous project included a Phase 3 component (extending north to the Indio Muerto Bridge.) The current proposal includes only Phases 1 and 2.

## **ENVIRONMENTAL SETTING**

### **Existing Site Characteristics**

**Topography:** The project site is gently sloping north to south. The existing creek channel generally consists of a 9- to 12-foot wide earthen channel with 9-foot high slopes inclined at about 1-1/2:1 (horizontal: vertical) to about 3:1 (horizontal: vertical) or flatter. Some portions of the creek bank are vertical.

**Drainage/Flooding:** Sycamore Creek is a major watershed in the City. The project site is located in the 100-year floodplain and the floodway. Current flood capacity in the project area is limited to between 900 and 1,600 cubic feet per second (cfs). Flooding has occurred on properties adjacent to the creek. The project site is located outside the Tsunami run-up zone.

**Fire Hazard:** The project site is not located in the City's High Fire Hazard Area.

**Biological Resources:** The vegetation along Sycamore Creek comprises a mix of non-native, landscape and ornamental vegetation, and native riparian species. A number of highly invasive non-native species are present. Non-native trees include ash, landscaped redwood, and pitosporum. Native trees include arroyo willow, western sycamore and coast live oak. Vertical banks are covered with non-native climbing landscape vines.

Federally listed species known to be in the project vicinity are the endangered tidewater goby and Southern California steelhead. Sycamore creek is also designated by the National Marine Fisheries Service (NMFS) as critical habitat for the Southern California steelhead. Other special status aquatic to semi-aquatic species (two-striped garter snake, southwestern pond turtle, and California red-legged frog) have a low potential to be present. However, pond turtles have been observed in the project vicinity and are more likely than the other two species to be present. The Cooper's hawk, a California Department of Fish and Game special status bird species, may forage and nest in the vicinity of the project area.

**Archaeological Resources:** The project site is located within the Prehistoric Watercourse Buffer, American Period (1870-1900) and Early 20<sup>th</sup> Century (1900-1920) archaeological resource sensitivity areas, as identified on the City's Master Environmental Assessment (MEA) Cultural Resources Sensitivity Map. A Phase I Archaeological Resources Report prepared by Bryon Bass dated July 2009 concluded that there is a very low potential for historic or pre-historic archaeological resources to occur on the project site.

**Historic Resources:** No historic resources are present on the project site.

**Noise:** The project site has an average ambient noise level of between 60 and greater than 70 decibels (dBA Ldn 24-hour day/night average). The primary noise source in the area is vehicular traffic on Highway 101.

### **Existing Land Use**

**Existing Facilities and Uses:** The project site is public right-of-way consisting of Sycamore Creek, Punta Gorda Street and the Punta Gorda Street Bridge. Utilities are located within the right-of-way.

**Access and Parking:** The project site provides vehicular and pedestrian access along Punta Gorda Street and on Punta Gorda Street Bridge. No street parking is available on the bridge. A driveway providing access to the Green Mobile Home Park from Punta Gorda Street is located within the public right-of-way.

**PROPERTY CHARACTERISTICS**

<b>Assessor's Parcel Number:</b>	ROW-001-603	<b>General Plan Designation:</b> Open Space/Stream
<b>Zoning:</b>	R-3/R-4 (surrounding parcels)	<b>Project Size:</b> 0.654 acres
<b>Existing Land Use:</b>	Creek/Bridge	<b>Proposed Land Use:</b> Creek/Bridge
<b>Slope:</b>	Creek gently sloping from north to south	
<b>SURROUNDING LAND USES:</b>		
<b>North:</b>	Creek	
<b>South:</b>	Creek/ Highway 101 <u>Sycamore Creek Bridge</u>	
<b>East:</b>	Green Mobile Home Park/ Single-family residence	
<b>West:</b>	Former Deluxe Mobile Home Park/ Single-family residence	

**PLANS AND POLICY DISCUSSION**

**Land Use and Zoning Designations:**

The General Plan Land Use designation for the parcel is Open Space/Stream. The project involves improvements to the existing creek, creek banks, and replacement of an existing bridge; therefore, the project can be found to be consistent with the General Plan Land Use designation.

The project area is zoned R-3 (between Highway 101 and Punta Gorda Street) and R-4 (north of the Punta Gorda Bridge), with the majority of the uses in the area being either single-family residences or mobile homes. Although the zoning designation does not apply directly to the creek or bridge, the project would not conflict with any requirements of either zone.

**General Plan Policies:**

1. Land Use Element

The project site is located in the Eastside Neighborhood which is bounded on the north by Canon Perdido Street; on the south by Highway 101; on the east by the base of the Riviera; and on the west by the rear of the commercial strip along the east side of Milpas Street.

The Land Use Element of the General Plan states that Sycamore Creek, which runs through much of the Eastside, can provide another opportunity to increase parkland in this neighborhood, if it can be protected for public use as another of the City's major creek open spaces. Although the project would not provide additional public use areas, the open space areas would be improved through the creek restoration plan. In addition, increasing the flow capacity of the creek to reduce flooding would provide a great benefit to the neighborhood. Therefore, the project could be found consistent with the Land Use Element.

2. Conservation Element

City Conservation Element policies provide that significant environmental resources of the City be preserved and protected. The Conservation Element requires implementation of resource protection measures for archaeological, historic and architectural resources; protection and enhancement of visual, biological and open space resources; protection of specimen and street trees; maintenance of air and water quality; and minimization of potential drainage, erosion and flooding hazards. The Conservation Element recognizes that while full implementation of the policies would be the most desirable, there are often competing demands for preservation, enhancement, development and conservation.

The major creeks in the City which provide drainage from the mountains and hills to the sea are largely natural in appearance and thus contribute significantly to the aesthetic quality of the City. In addition, they function as an important ecological resource while providing connecting linear open space links from the hillsides to the shoreline. The creeks also

provide the potential for aesthetic enhancement of recreational, residential, and commercial areas.

Sycamore Creek is one of the four major creek systems in the City. It runs a 2.7-mile course through the City between the Stanwood Drive/Sycamore Canyon Road intersection and the ocean at East Beach. Its drainage area is approximately four square miles. It constitutes a substantial watershed from which flooding frequently occurs. Sycamore Creek is heavily urbanized through the Eastside and East Beach neighborhoods. The Conservation Element recognizes the flooding potential for Sycamore Creek.

The following four policies of the Conservation Element directly apply to the project:

*Visual Resources Policy 1.0* "Development adjacent to creeks shall not degrade the creeks or their riparian environments."

Existing retaining walls, pipe and wire revetments, and other materials would be removed from the creek banks. The flow capacity of the creek would be improved. The Creek Restoration Plan which includes removal of non-native species and planting of native species on the creek banks for the length of the project would be beneficial to the creek ecosystem. Therefore, the project could be found consistent with this policy of the Conservation Element.

*Biological Resources Policy 5.0* "The habitats of rare and endangered species shall be preserved."

Mitigation measures are included in the project in order to protect endangered species and their habitats as described further in the Biological Resources section below. Therefore, the project could be found consistent with this policy of the Conservation Element.

*Drainage and Flood Control Policy 2.0* "Floodplain management programs shall be implemented through the Building Officer of the Division of Land Use Controls, and the Flood Control Division."

The proposed project would improve the flow capacity of this section of Sycamore Creek, an area that has been subject to flooding in the past. Therefore, the project could be found consistent with this policy of the Conservation Element.

*Drainage and Flood Control Policy 4.0* "Goals and policies of this element are interrelated with those of the Safety and Open Space Elements and shall be considered together in land use planning decisions."

Implementation Strategies:

4.2 Creeks and their banks constitute a scenic open space resource within the City in their natural state; thus, the Open Space Element also recognizes the importance of keeping structures out of the stream channels for preservation of City resources.

4.3 The Safety Element recognizes the hazard to lives and property of encroachment of structures into stream channels and on stream banks; thus, it also supports the findings of this Element on the basis of hazard reduction.

The implementing strategies above are addressed in the project. The project includes a creek restoration plan that would restore the creek banks to a natural state. The project includes removal of structures currently located within the public right-of-way that would conflict with the widening of the channel. Increasing the flow capacity of the channel would reduce hazards to lives and property in the surrounding area. Therefore, the project could be found consistent with this policy of the Conservation Element.

### 3. Open Space Element:

The Open Space Element is concerned primarily with conserving, providing, and improving, as appropriate, land and water areas significant in the Santa Barbara landscape. Those would be defined as the ocean, mountains, major hillsides, creeks, shoreline, major parks and the freeway. The project site involves Sycamore Creek. The project would widen the channel, improve the flow capacity, and restore the creek bank. Therefore, the project could be found consistent with the Open Space Element.

### 4. Seismic Safety/Safety Element

The City's Seismic Safety/Safety Element requires that development be sited, designed and maintained to protect life, property and public well being from seismic and other geologic hazards, and to reduce or avoid adverse economic, social, and environmental impacts caused by hazardous geologic conditions. The Seismic Safety/Safety Element addresses a number of potential hazards including, geology, seismicity, flooding, liquefaction, tsunamis, high groundwater, and

erosion. The project would not expose people or property to seismic or geologic hazards. The project would increase the flow capacity of the creek to reduce flooding in the area. Therefore, the project could be found consistent with the Seismic Safety/Safety Element.

#### 5. Noise Element

The City's Noise Element includes policies intended to achieve and maintain a noise environment that is compatible with the variety of human activities and land uses in the City. The proposed project would not generate an increase in existing ambient noise levels in the area in the long term because the use of the site would remain the same. Short-term construction noise would be minimized through adherence to City Noise Ordinance requirements and mitigation measures discussed further in the Noise section below. Therefore, the project could be found consistent with the Noise Element.

#### 6. Circulation Element

The City's Circulation Element contains goals and implementing measures to reduce adverse impacts to the City's street system and parking by reducing reliance on the automobile, encouraging alternative forms of transportation, reviewing traffic impact standards, and applying land use and planning strategies that support the City's mobility goals. The new bridge would replace an existing bridge that is a part of the City's existing circulation system. Temporary circulation impacts from construction would be limited in time and managed through detours and other traffic management strategies. Therefore, the project could be found consistent with the Circulation Element.

#### **Land Use Compatibility:**

Certain land uses have the potential to result in incompatibility with existing surrounding land uses or activities. Typically, development applications for General Plan Amendments, Rezones, Conditional Use Permits, Performance Standard Permits, and certain modifications have the greatest potential to result in land use compatibility issues. Incompatibility can result from a proposed project's generation of noise, odor, safety hazards, traffic, visual effects, or other environmental impacts. This Initial Study provides an analysis of environmental impacts, including land use compatibility, within the primary impact sections (i.e., air quality, noise etc.). However, in instances where an impact does not rise to a level of significance, land use compatibility concerns may still exist due to certain adverse (less than significant) impacts. Any adverse impacts that raise land use compatibility concerns will require careful evaluation by decision-makers prior to project approval.

The project involves improvements to an existing creek and replacement of an existing bridge. The proposed use of the area would be consistent with the existing use therefore operationally the land use would not change significantly. However, construction activities would temporarily affect neighboring land uses in regard to air quality, noise and traffic.

#### **MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)**

A Mitigation Monitoring and Reporting Program has been prepared for the project in compliance with Public Resources Code §21081.6 (see *Exhibit J*).

#### **ENVIRONMENTAL CHECKLIST**

The following checklist contains questions concerning potential changes to the environment that may result if this project is implemented. If no impact would occur, **NO** should be checked. If the project might result in an impact, check **YES** indicating the potential level of significance as follows:

**Significant:** Known substantial environmental impacts. Further review needed to determine if there are feasible mitigation measures and/or alternatives to reduce the impact.

**Potentially Significant:** Unknown, potentially significant impacts that need further review to determine significance level and whether mitigable.

**Potentially Significant, Mitigable:** Potentially significant impacts that can be avoided or reduced to less than significant levels with identified mitigation measures agreed-to by the applicant.

**Less Than Significant:** Impacts that are not substantial or significant.

1. AESTHETICS		NO	YES
Could the project:			<i>Level of Significance</i>
a)	Have a substantial adverse effect on a scenic vista?		Less Than Significant
b)	Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings, within a state scenic highway?		Less Than Significant
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?		Less Than Significant
d)	Create a new source of substantial light or glare?	X	

### **Visual Aesthetics - Discussion**

**Issues:** Issues associated with visual aesthetics include the potential blockage of important public scenic views, project on-site visual aesthetics and compatibility with the surrounding area, and changes in exterior lighting.

**Impact Evaluation Guidelines:** Aesthetic quality, whether a project is visually pleasing or unpleasing, may be perceived and valued differently from one person to the next, and depends in part on the context of the environment in which a project is proposed. The significance of visual changes is assessed qualitatively based on consideration of the proposed physical change and project design within the context of the surrounding visual setting. First, the existing visual setting is reviewed to determine whether important existing visual aesthetics are involved, based on consideration of existing views, existing visual aesthetics on and around the site, and existing lighting conditions. Under CEQA, the evaluation of a project's potential impacts to scenic views is focused on views from public (as opposed to private) viewpoints. The importance of existing views is assessed qualitatively based on whether important visual resources such as mountains, skyline trees, or the coastline, can be seen, the extent and scenic quality of the views, and whether the views are experienced from public viewpoints. The visual changes associated with the project are then assessed qualitatively to determine whether the project would result in substantial effects associated with important public scenic views, on-site visual aesthetics, and lighting.

Significant visual aesthetics impacts may potentially result from:

- Substantial obstruction or degradation of important public scenic views, extensive grading and/or removal of substantial amounts of vegetation and trees visible from public areas without adequate landscaping; or substantial loss of important public open space.
- Substantially damage scenic resources within a scenic highway (Highway 154; Highway 101; Cabrillo Blvd between Highway 101 and Castillo Street; Sycamore Canyon Road (144)/Stanwood Drive(192)/Mission Ridge Road (192)/Mountain Drive to the Old Mission on Los Olivos Street; or Shoreline Drive from Castillo Street to the end of Shoreline Park.)
- Substantial negative aesthetic effect or incompatibility with surrounding land uses or structures due to project size, massing, scale, density, architecture, signage, or other design features.
- Substantial light and/or glare that poses a hazard or substantial annoyance to adjacent land uses and sensitive receptors.

### **Visual Aesthetics – Existing Conditions and Project Impacts**

#### **1.a) and b) Scenic Views and Scenic Highways**

The City's Master Environmental Assessment (MEA) maps do not identify the project site as being located in an area of visual sensitivity; however, both Sycamore Creek and the Punta Gorda Street Bridge are visible from the public right-of-way (Punta Gorda Street). The project site is adjacent to a designated scenic highway (Highway 101); however, due to the existing sound wall along the freeway, this portion of the creek cannot be seen from the highway. The project would not result in an obstruction of views to the creek, would not include extensive grading, and would not result in loss of

public open space. There would be no change in the existing views of the surrounding area. Therefore, the project's impacts to scenic views and scenic highways would be *less than significant*.

**1.c) Aesthetics**

The aesthetics of Sycamore Creek through the planting of native vegetation and the replacement of the existing Punta Gorda Street Bridge would improve as a result of the project. The new 7 foot high, 19 foot long warped wingwall along the western creek bank and the new 8 foot high, 12.5 foot long warped wingwall along the eastern creek bank would be compatible with the adjacent Highway 101 Sycamore Creek Bridge and would not constitute a substantial negative aesthetic effect. The temporary impacts during construction would be minor. Therefore, the project's aesthetics impacts would be *less than significant*.

The project is generally consistent with the Architectural Board of Review (ABR) Design Guidelines. The project was reviewed by the ABR on April 4, 2011. The minutes of the meeting state that the majority of the Board supported the project (*see Exhibit K*). The project requires Project Design Approval and Final approval by the ABR for consistency with the ABR design guidelines for views, visual aesthetics and compatibility, and lighting.

**1.d) Lighting/Glare**

The proposed project would not include any additional lighting. Existing street lights may be removed and replaced. Since all replacement lighting is required to comply with the City's Outdoor Lighting Ordinance and no new lighting is proposed, there would be *no impacts* on lighting and glare.

**Visual Aesthetics - Mitigation**

No mitigation is required.

**Visual Aesthetics - Residual Impacts**

Less than significant.

<b>2. AIR QUALITY</b> Could the project:	<b>NO</b>	<b>YES</b> <i>Level of Significance</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?		Less Than Significant
b) Exceed any air quality emission threshold?		Less Than Significant
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is designated in non-attainment under an applicable federal or state ambient air quality standard?		Less Than Significant
d) Expose sensitive receptors to substantial pollutants?		Less Than Significant
e) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		Less Than Significant
f) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?		Less Than Significant
g) Create objectionable odors?		Less Than Significant

**Air Quality - Discussion**

**Issues.** Air quality issues involve pollutant emissions from vehicle exhaust, stationary sources (i.e. gas stations, boilers, diesel generators, dry cleaners, oil and gas processing facilities, etc), and minor stationary sources called "area sources"

(i.e. residential heating and cooling, fireplaces, etc.) that contribute to smog, particulates and nuisance dust associated with grading and construction processes, and nuisance odors. Stationary sources of air emissions are of particular concern to sensitive receptors, as is construction dust and particulate matter. Sensitive receptors are defined as children, elderly, or ill people that can be more adversely affected by air quality emissions. Land uses typically associated with sensitive receptors include schools, parks, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and clinics.

Smog, or ozone, is formed in the atmosphere through a series of photochemical reactions involving interaction of oxides of nitrogen [NO<sub>x</sub>] and reactive organic compounds [ROC] (referred to as ozone precursors) with sunlight over a period of several hours. Primary sources of ozone precursors in the South Coast area are vehicle emissions. Sources of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) include demolition, grading, road dust, agricultural tilling, mineral quarries, and vehicle exhaust.

The City of Santa Barbara is part of the South Coast Air Basin. The City is subject to the National Ambient Air Quality Standards and the California Ambient Air Quality Standards (CAAQS), which are more stringent than the national standards. The CAAQS apply to six pollutants: photochemical ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and lead. The Santa Barbara County Air Pollution Control District (SBCAPCD) provides oversight on compliance with air quality standards and preparation of the County Clean Air Plan.

Santa Barbara County is considered in attainment of the federal eight-hour ozone standard, and in attainment of the state one-hour ozone standard. The County does not meet the state eight-hour ozone standard or the state standard for particulate matter less than ten microns in diameter (PM<sub>10</sub>); but does meet the federal PM<sub>10</sub> standard. The County is in attainment for the federal PM<sub>2.5</sub> standard and unclassified for the state PM<sub>2.5</sub> standard.

The APCD has also issued several notifications and requirements regarding toxic air emissions generated from activities such as gasoline dispensing, dry cleaning, freeways, manufacturing, etc., that may require projects with these components to mitigate or redesign features of the project to avoid excessive health risks. Additionally, APCD requires submittal of an asbestos notification form for each regulated structure that is proposed to be demolished or renovated.

Global Climate Change (GCC) is a change in the average weather of the earth that can be measured by changes in wind patterns, storms, precipitation and temperature. Although there is not unanimous agreement regarding the occurrence, causes, or effects of GCC, there is a substantial body of evidence that climate change is occurring due the introduction of gases that trap heat in the atmosphere. Common greenhouse gases (GHG) include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, ozone and aerosols. Natural processes emit GHG that help to regulate the earth's temperature; however, it is believed that substantial increases in emissions from human activities, such as electricity production and vehicle use, have substantially elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. While other greenhouse gases have higher global warming potential, carbon dioxide is emitted in such vastly higher quantities that it accounts for 85 percent (in terms of carbon dioxide equivalent) of all greenhouse gas emissions by the United States. Greenhouse gas emissions are typically measured in terms of mass carbon dioxide equivalents (CO<sub>2</sub>e), which is the product of the mass of a particular greenhouse gas and its specific global warming potential (CO<sub>2</sub> has a global warming potential of 1).

California is a substantial contributor of GHG (2nd largest contributor in the U.S. and the 16th largest contributor in the world); with transportation and electricity generation representing the two largest contributing factors (41 and 22 percent, respectively). Assembly Bill 32 created the California Global Warming Solutions Act of 2006 that requires the California Air Resources Board to adopt regulations to evaluate statewide greenhouse gas emissions, and then create a program and emission caps to limit statewide emissions to 1990 levels. California State Senate Bill 97, enacted in 2007, required that the CEQA Guidelines be amended to include "guidance for the mitigation of greenhouse gas emission or the effects of greenhouse gas emissions." The California Office of Planning and Research developed amendments to the CEQA Guidelines which were adopted by the California Natural Resources Agency on December 30, 2009 and became effective March 18, 2010. These amendments established a general framework for addressing global climate change impacts in the CEQA process. A number of state and regional agencies within California are working to develop procedures to evaluate climate change impacts in CEQA documents and to determine whether those impacts are significant. While these standards are being developed for Santa Barbara County, APCD recommends that CEQA documents include: 1) a discussion of a project's impacts to and from global climate change; 2) a quantification of greenhouse gas emissions from all project sources; and 3) a discussion of how climate change impacts have been mitigated to the extent reasonably possible for each project.

**Impact Evaluation Guidelines:** A project may create a significant air quality impact from the following:



- Exceeding an APCD pollutant threshold; inconsistency with District regulations; or exceeding population forecasts in the adopted County Clean Air Plan.
- Exposing sensitive receptors, such as children, the elderly or sick people to substantial pollutant exposure.
- Substantial unmitigated nuisance dust during earthwork or construction operations.
- Creation of nuisance odors inconsistent with APCD regulations.

Long-Term (Operational) Impact Guidelines: The City of Santa Barbara uses the SBCAPCD thresholds of significance for evaluating air quality impacts. The APCD has determined that a proposed project will not have a significant air quality impact on the environment if operation of the project will:

- Emit (from all project sources, both stationary and mobile) less than 240 pounds per day for ROC and NO<sub>x</sub>, and 80 pounds per day for PM<sub>10</sub>;
- Emit less than 25 pounds per day of ROC or NO<sub>x</sub> from motor vehicle trips only;
- Not cause a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not exceed the APCD health risks public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state air quality plans for Santa Barbara.

Substantial long-term project emissions could potentially stem from stationary sources which may require permits from the APCD and from motor vehicles associated with the project and from mobile sources. Examples of stationary emission sources that require permits from APCD include gas stations, auto body shops, diesel generators, boilers and large water heaters, dry cleaners, oil and gas production and processing facilities, and wastewater treatment facilities.

Short-Term (Construction) Impacts Guidelines: Projects involving grading, paving, construction, and landscaping activities may cause localized nuisance dust impacts and increased particulate matter (PM<sub>10</sub>). Substantial dust-related impacts may be potentially significant, but are generally considered mitigable with the application of standard dust control mitigation measures. Standard dust mitigation measures are applied to projects with either significant or less than significant effects.

Exhaust from construction equipment also contributes to air pollution. Quantitative thresholds of significance are not currently in place for short-term or construction emissions. However, SBCAPCD uses combined emissions from all construction equipment that exceed 25 tons of any pollutant except carbon monoxide within a 12-month period as a guideline threshold for determining significance of construction emission impacts.

Cumulative Impacts and Consistency with Clean Air Plan: If the project-specific impact exceeds the ozone precursor significance threshold, it is also considered to have a considerable contribution to cumulative impacts. When a project is not accounted for in the most recent Clean Air Plan growth projections, then the project's impact may also be considered to have a considerable contribution to cumulative air quality impacts. The Santa Barbara County Association of Governments and Air Resources Board on-road emissions forecasts are used as a basis for vehicle emission forecasting. If a project provides for increased population growth beyond that forecasted in the most recently adopted CAP, or if the project does not incorporate appropriate air quality mitigation and control measures, or is inconsistent with APCD rules and regulations, then the project may be found inconsistent with the CAP and may have a significant impact on air quality.

Global Climate Change: According to recent amendments to Appendix G of the CEQA Guidelines, a project would have significant impacts related to greenhouse gas emission if it would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. A number of state and regional agencies within California are currently working to develop procedures to determine specifically how this significance determination should be interpreted and to develop plans and policies for the reduction of greenhouse gas emissions. In the meantime, projects should be designed to reduce greenhouse gas emissions to the extent reasonably possible.

Additionally, as an interim measure, several jurisdictions around the State, including Santa Barbara County, are temporarily using greenhouse gas emissions thresholds adopted in June 2010 by the Bay Area Air Quality Management District (BAAQMD). The BAAQMD thresholds are the most recently-adopted thresholds currently in use in California. Consistent with the BAAQMD's guidance, the project's contribution to cumulative impacts to GHG emissions and

climate change would be cumulatively considerable if the project would produce in excess of 1,100 metric tons CO<sub>2</sub>E/year.

## **Air Quality – Existing Conditions and Project Impacts**

### **2.a) Clean Air Plan**

Direct and indirect emissions associated with the project are accounted for in the 2010 Clean Air Plan emissions growth assumptions. Appropriate air quality mitigation measures, including construction dust suppression, would be applied to the project, consistent with CAP and City policies, and are identified herein as recommended mitigation measures. The project could be found consistent with the 2010 Clean Air Plan; therefore, impacts would be *less than significant*.

### **2.b-f) Air Pollutant Emissions, Sensitive Receptors, and Cumulative Impacts**

#### **Long-Term (Area Source & Operational) Emissions:**

The project would widen the creek channel and replace an existing bridge and would not change the general uses in the area. The project would somewhat change the maintenance area of the creek due to the widening, but would not change in any significant way the maintenance procedures or frequency of maintenance of the creek according to the Sediment Evaluation Report and Memorandum (*see Exhibit H*). The project would, therefore, not result in measurable increases in traffic trips or long-term operational air emissions from that which exists today. Therefore, the project's impacts on long-term air quality would be *less than significant*.

#### **Short-Term (Construction) Emissions:**

The project would involve grading, paving, and landscaping activities which could cause localized dust related impacts resulting in increases in particulate matter (PM10 and PM2.5). Utilizing URBEMIS, these emissions were estimated to be 0.20 and 0.08 tons per year respectively for construction (*see Exhibit L*). While APCD does not have a numeric threshold for construction emissions from non-stationary sources, APCD recommends standard dust control measures for any discretionary project involving earth-moving activities. Dust-related impacts to sensitive receptors would be *less than significant*, and would be further reduced with implementation of the recommended mitigation measures identified below, which are also included in the City's standard conditions of approval.

Diesel and gasoline powered construction equipment also emit particulate matter, NO<sub>x</sub>, and ROC. Utilizing URBEMIS, these emissions were estimated to be 1.08 and 0.14 tons per year respectively for construction (*see Exhibit L*). While APCD does not have a numeric threshold for construction emissions from non-stationary sources, the SBCAPCD recommends measures for limiting vehicle exhaust, which are identified below as recommended mitigation measures. The project's impacts on short-term emissions would be *less than significant*.

#### **Global Climate Change:**

As stated above under the Long-Term Emissions section, the project would not measurably increase traffic trips or operational emissions in the long term from that which exists today. New sources of carbon dioxide emissions that could result from the project are a result of temporary construction activities. The project would generate approximately 115.50 tons per year CO<sub>2</sub> from construction without mitigation (*see Exhibit L*). These emissions would be further reduced with the implementation of the measures outlined below. The project would, therefore, not result in substantial greenhouse gas emissions or impede the ability of the State to attain greenhouse gas reduction goals and impacts would be considered *less than significant*.

### **2.g) Odors**

The project would not include operation of land uses involving odors or smoke. The project would not contain features with the potential to emit substantial odorous emissions, from sources such as commercial cooking equipment, combustion or evaporation of fuels, sewer systems, or solvents and surface coatings. Due to the nature of the land use, the project's impacts related to odors would be *less than significant*.

## **Air Quality – Recommended Mitigation**

The following measures shall be shown on grading and building plans and shall be adhered to throughout grading, hauling, and construction activities:

**AQ-1** During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind

speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.

- AQ-2 Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- AQ-3 If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- AQ-4 Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- AQ-5 After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
- AQ-6 The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.
- AQ-7 All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
- AQ-8 Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at [www.arb.ca.gov/msprog/ordiesel/ordiesel.htm](http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm).
- AQ-9 All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.
- AQ-10 Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
- AQ-11 Diesel powered equipment should be replaced by electric equipment whenever feasible.
- AQ-12 If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.
- AQ-13 Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- AQ-14 All construction equipment shall be maintained in tune per the manufacturer's specifications.
- AQ-15 The engine size of construction equipment shall be the minimum practical size.
- AQ-16 The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- AQ-17 Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

### **Air Quality - Residual Impacts**

Less Than Significant.

3. BIOLOGICAL RESOURCES	NO	YES <i>Level of Significance</i>
Could the project result in impacts to:		
a) Natural communities (e.g. oak woodland, coastal habitat, etc.).		Potentially Significant, Mitigable
b) Locally designated historic, Landmark or specimen trees?		Less Than Significant
c) Wetland habitat (e.g. marsh, riparian, and vernal pool)?		Potentially Significant, Mitigable
d) Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?		Potentially Significant, Mitigable
e) Wildlife dispersal or migration corridors?		Potentially Significant, Mitigable

### **Biological Resources - Discussion**

**Issues:** Biological resources issues involve the potential for a project to substantially affect biologically-important natural vegetation and wildlife, particularly species that are protected as rare, threatened, or endangered by federal or state wildlife agencies and their habitat, native specimen trees, and designated landmark or historic trees.

**Impact Evaluation Guidelines:** Existing native wildlife and vegetation on a project site are qualitatively assessed to identify whether they constitute important biological resources, based on the types, amounts, and quality of the resources within the context of the larger ecological community. If important biological resources exist, project effects to the resources are qualitatively evaluated to determine whether the project would substantially affect these important biological resources. Significant biological resource impacts may potentially result from substantial disturbance to important wildlife and vegetation in the following ways:

- Elimination or substantial reduction or disruption of important natural vegetative communities and wildlife habitat or migration corridors, such as oak woodland, coastal strand, riparian, and wetlands.
- Substantial effect on protected plant or animal species listed or otherwise identified or protected as endangered, threatened or rare.
- Substantial loss or damage to important native specimen trees or designated landmark or historic trees.

### **Biological Resources – Existing Conditions and Project Impacts**

#### **3.a-c.) Natural Communities; Historic, Landmark, or Specimen Trees; and Wetland Habitat**

A Biological Resources Assessment Report prepared by SAIC (June 2010) and a follow up Biological Memorandum prepared by Cardno Entrix (August 2011) were prepared for the project and are incorporated herein by reference (*see Exhibit M and I respectively*). According to these reports, vegetation along Sycamore Creek comprises a mix of non-native, landscape and ornamental vegetation, and native riparian species along the creek banks and emergent wetland and unvegetated streambed in the channel. The section of Sycamore Creek between Highway 101 and Punta Gorda Street is bordered on the east by the Green Mobile Home Park and on the west by the former Deluxe Mobile Home Park. The former Deluxe Mobile Home Park property is currently vacant, except for one dilapidated structure, and contains mostly non-native plant species. The west bank of the creek is approximately vertical over most of this reach and is held in place by a retaining wall and by pipe and wire revetment. This section of creek supports some clumps of native arroyo willows and assemblages of non-native vegetation. Shading of the creek on this reach is partial and varies by the time of day and year. Upstream of Punta Gorda Street, the creek's east bank supports a dense stand of native arroyo willows and substantial plantings of native shrubs and trees (small oaks and sycamores). The west bank supports a variety of non-native and native plants. This reach of the creek is shaded throughout the day.

The channel widening would result in the removal of most of the vegetation in the project area. The removal of the non-native invasive species and the planting of new native species would be beneficial to the creek ecosystem. However, some native species would be removed, and removal of most of the vegetation will temporarily eliminate most shading of the creek. Native trees to be removed include several arroyo willows, a 3" coast live oak, and a 3" western sycamore. None of the trees are designated as historic or landmarks. A large specimen coastal redwood tree would be removed.

While this tree is native to northern California, it is not native to the Santa Barbara area and it will be replaced with a large number of native trees and plants. Impacts to historic, landmark, and specimen trees, therefore, would be less than significant.

The project includes a Creek Restoration Plan following construction. The plan consists of four planting zones on each side of the creek and includes new willow cuttings along the proposed rip rap bordering the channel, native riparian vegetation of local genetic stock, and over 80 native riparian trees and large shrubs. Removed arroyo willows would be replaced at a ratio of 10:1 or to produce a canopy five years after planting that is at least as large as that removed. Removed small coast live oak and western sycamore trees would be replaced at a ratio of 5:1. The proposed revegetation plan includes provisions for monitoring and plant maintenance for 5 years following planting. Adherence to the plan and these monitoring provisions are required below as mitigation measures. The removal of most of the existing vegetation, including arroyo willows, at the site during construction would temporarily eliminate the shading of the creek. However, new fast growing willows planted in the rip rap zone would, at the end of the five year maintenance period, provide a greater amount of average shading over the entire project area than currently exists, assuming these planted willows are not removed and are only pruned during maintenance activities following construction. Other native plant species planned for restoration on the creek banks would grow more slowly, but eventually could also provide shading to the creek bottom when they mature.

Currently, Santa Barbara County Flood Control District regularly clears vegetation from the creek to maintain optimal flows during high rainfall years. Following construction of the proposed project, the City would monitor and maintain the planted banks for a period of five years. Maintenance during this time period by the City would be limited to monitoring, watering, weed control, replacement of plants that fail to establish, erosion repair, and pruning of willows at the edge of the channel that can impede high flows. After five years, the creek channel would be maintained by Santa Barbara County Flood Control District consistent with their current practices and permits. According to the Sediment Evaluation Report prepared for the project (*see Exhibit H*) the proposed widening of the creek would result in reduced flow velocities in the creek. However the velocity and shear stress in the channel will still be high enough to adequately move sediments in the channel bottom, even during smaller runoff events, and the project will have a negligible change in the long-term sediment carrying capacity of the creek in the project area. In a follow up Memorandum from Penfield and Smith (*see Exhibit H*) and in conversations with the County Flood Control District, it was determined that the project will not necessitate any short- or long-term changes in maintenance procedures or frequency of maintenance in Lower Sycamore Creek from those currently conducted by the County Flood Control District.

According to the Biological Memorandum (*see Exhibit I*), however, significant removal of planted bank vegetation and significant removal of willows from regular channel maintenance following construction would inhibit the reestablishment of channel shading following construction and result in potentially significant impacts to the creek and associated wildlife and aquatic species. Therefore, required mitigation measures have been included that prevent the removal of planted arroyo willow in the rip rap zone by the City or County Flood Control District as part of future maintenance until bank vegetation can be allowed to mature and provide shade to the creek. Additionally, a mitigation measure has been required to prevent removal of planted upper bank vegetation as part of future channel maintenance activities.

The project site includes 0.04 acres of wetland habitat. As stated above, the County Flood Control District currently clears vegetation in the Sycamore Creek channel periodically for flood maintenance purposes. Between maintenance activities, growth of wetland vegetation occurs. This would continue to occur after completion of the project. The bottom elevation of the creek would remain the same as the existing condition. No permanent net loss of wetlands would occur as a result of the project. The creek restoration plan following construction of the proposed project includes planting of wetland vegetation along the water's edge and several required mitigation measures are outlined below to minimize temporary construction impacts to the creek. Widening the channel bottom would provide for a larger streambed that will result in a larger area subject to periodic channel maintenance for flood purposes and more area for wetland vegetation to establish between maintenance activities. The approved Environmental Impact Report (EIR) and associated permits for the periodic County Flood Control District channel maintenance activities in Sycamore Creek allow for changes in maintenance areas from year to year. Mitigation measures in that approved EIR require the County Flood Control District to inventory the area affected by each maintenance activity annually and provide habitat mitigation, where appropriate, based on the amount of habitat disturbed and type of disturbance. This practice would continue following construction of the subject project for any channel maintenance conducted by the County Flood Control District under their existing permits. The project's overall impacts to natural communities, creek habitats, and wetlands, therefore, would be potentially significant, mitigable.

### 3.d) Endangered, Threatened, Rare Species or their Habitats

According to the biological reports prepared for the project (*see Exhibit M and I*), several sensitive species may potentially inhabit the project area. Tidewater goby, a federally endangered species and California Species of Special Concern, are known to inhabit lower Sycamore Creek from the creek mouth upstream to at least Punta Gorda Street and were observed during the biological survey conducted for the project at several locations in the project area. Sycamore Creek is not currently designated by the United States Fish and Wildlife Service (USFWS) as critical habitat for tidewater goby. Southern California steelhead, a federally endangered species and California Species of Special Concern, are also known to occur within the limits of the project area. Steelhead likely use Lower Sycamore Creek in the vicinity of the project area for migratory passage with adults moving upstream to spawn during higher flows in winter, and both adults and juveniles moving downstream to the ocean in the spring. According to the biological reports, the project area provides migratory passage only and no spawning or rearing habitat for the steelhead. Sycamore Creek is designated by the National Marine Fisheries Service (NMFS) as critical habitat for Southern California steelhead.

According to the submitted biological reports, two other special status aquatic to semi-aquatic species (two-striped garter snake and California red-legged frog), have a low potential to be present. However, southwestern pond turtles, a California Species of Special Concern, have been observed in the project vicinity. Southwestern pond turtle may occur as transient visitors to the area as no breeding habitat and only minimal forage and cover is present for them.

The Cooper's hawk, a California Department of Fish and Game special status bird species, may forage and nest in the vicinity of the project area. Yellow warbler and yellow breasted chat, both California Species of Special Concern, may occur in the project area as transient and summer residents, but are unlikely to nest in the project area due to lack of habitat. No sensitive plant species were observed in the project area.

While all of these species would potentially be somewhat impacted temporarily by the construction of the project, portions of the project area are highly disturbed and provide marginal habitat. The project would result in restoration and revegetation to the creek in a way that would provide long-term benefits to many of the above listed sensitive species in the long term. The Biological Memorandum analyzed the amount of shading that currently exists on the creek due to vegetation, and the amount of shading that would occur as a result of the project. Currently an average of 40 percent of the creek is shaded at the sunniest time of the day and year. Almost all existing vegetation would be removed during project construction. However, after five years of vegetation growth, an average of 50 percent of the creek would be shaded at the sunniest time of the day and year, which is an improvement over the current condition. As discussed in the previous section, mitigation measures have been required to ensure shading is restored to the creek. Removal of vegetation would eliminate shading of the water for at least one year. However, the water temperature in the creek is expected to not change significantly as a result. Reestablishment of a low flow channel as part of construction (discussed below in more detail) would also minimize impacts to aquatic species related to insufficient water depths during the dry season following construction. Additionally, bridge construction would include the use of cast-in-drilled-hole (CIDH) piles, which do not have the noise and vibration effects that are associated with driven displacement piles (such as concrete piles or closed-end pipe piles). Finally, mitigation measures have been required below that would minimize impacts to water quality and creek habitats at the project site and downstream of the project. Therefore, impacts related to shading, habitat, water temperature, and water quality on sensitive species would be potentially significant, mitigable. Species specific impacts are discussed below.

*Tidewater Goby:* Construction activities could directly affect tidewater gobies if any are present and could indirectly affect the species downstream through altered water flows in the creek and potential releases of sediment or pollutants into the stream. The channel would need to be dewatered in the work area so equipment could be operated within the channel. This would require capture and relocation of all tidewater gobies present in the work area by a qualified biologist with all appropriate permits prior to and during dewatering. Injury or mortality of some individuals could result from handling the species, and consultation with the U.S. Fish and Wildlife Service would be required under Section 7 of the Endangered Species Act.

The Biological Memorandum prepared by Cardno Entrix (*see Exhibit I*) states that a nearly flat channel bottom would not be suitable habitat for most aquatic species, and particularly fish such as the tidewater goby because water depth would be uniformly very shallow under low-flow conditions and no cover would be present immediately after construction is complete. Although a low-flow channel, approximately 2 to 3 feet wide (similar to what is currently present), would be expected to form within the wider channel bottom after the first major runoff event and establish habitat suitable for the tidewater goby, even a short-term loss of adequate habitat for the tidewater goby between channel construction and the first runoff event would be considered a potentially significant impact. Therefore, the creation of a

low-flow channel following grading in the creek is incorporated into the project and is a required mitigation measure below. Other measures to minimize effects on the tidewater goby are included as mitigation measures. Therefore, the project's impacts on the tidewater goby would be *potentially significant, mitigable*.

*California Steelhead Trout:* It is anticipated that steelhead would not be affected by construction activities for the proposed project because work would be completed during the dry season when steelhead would not be migrating through the project area. In general, the project would decrease peak velocities in portions of the creek, which would improve passage for steelhead. However, required mitigation measures related to project timing and best management measures below would prevent construction related impacts to steelhead in the project reach and downstream of the project. Therefore, the project's impacts on the California Steelhead would be *potentially significant, mitigable*.

*Southwestern pond turtle:* Individual pond turtles could be present as transient visitors, although only marginal habitat occurs in the vicinity of the project. If pond turtles are encountered during project construction, the individuals would be allowed to move out of the area or they would be captured and relocated by the biological monitor, resulting in minimal impacts to these species. These and other measures protecting aquatic species are required below as mitigation measures. Therefore, the project's impact to the southwestern pond turtle would be *potentially significant, mitigable*.

*Cooper's hawk, yellow warbler, and yellow breasted chat:* See section 3 e) below. The project's impact to these species would be *potentially significant, mitigable*.

With the implementation of the measures listed below, overall project impacts to sensitive species would be less than significant.

### **3.e) Wildlife Dispersal or Migration Corridors**

The removal of vegetation along the banks of Sycamore Creek would result in a loss of habitat for common wildlife species including birds and mammals. Section 3.a-c) above describes the measures to minimize impacts to habitat during construction and to restore native riparian habitats. The project would not create barriers to wildlife movement up and down the creek following construction. Loss of vegetation during construction, however, may affect nesting of birds, such as the Cooper's hawk, protected under the Federal Migratory Bird Treaty Act (MBTA) if vegetation removal were to occur during the breeding season (February 15 through September 1). A qualified biologist would be required to conduct a nesting bird survey prior to removal of any trees or vegetation scheduled to occur from February 15 to September 15. If any nesting is found, the trees/vegetation shall not be removed until after the young have fledged. Compliance with this requirement would ensure that the impact on migratory birds would be *potentially significant, mitigable*.

### **Biological Resources – Required Mitigation**

**BIO-1 Project Environmental Coordinator Required.** Submit to the Planning Division a contract with a qualified independent consultant to act as the Project Environmental Coordinator (PEC). Both PEC and the contract are subject to approval by the City's Environmental Analyst. The PEC shall be responsible for assuring full compliance with the provisions of the Mitigation Monitoring and Reporting Program (MMRP) and Conditions of Approval to the City. The contract shall include the following, at a minimum:

- a. The frequency and/or schedule of the monitoring of the mitigation measures.
- b. A method for monitoring the mitigation measures.
- c. A list of reporting procedures, including the responsible party, and frequency.
- d. A list of other monitors to be hired, if applicable, and their qualifications.
- e. Submittal of biweekly reports during all construction activity regarding MMRP and condition compliance by the PEC to the Community Development Department/Case Planner.
- f. Submittal of a Final Mitigation Monitoring Report.
- g. The PEC shall have authority over all other monitors/specialists, the contractor, and all construction personnel for those actions that relate to the items listed in the MMRP and conditions of approval, including the authority to stop work, if necessary, to achieve compliance with mitigation measures.

**BIO-2 Construction Mitigation Measures.** The applicant shall adhere to the following construction mitigation measures, unless modified during permitting and consultation activities with California Department of Fish and Game (CDFG), Army Corps of Engineers (ACOE), United States Fish and Wildlife Service (USFWS), or the National Marine Fisheries Service (NMFS). These measures should be printed on the final project plans.



1. A qualified biologist shall conduct environmental training for all construction personnel prior to their commencing work on the project. This includes all new crews as they arrive to work at the site. The training shall include: a description of the tidewater goby, steelhead, and other sensitive environmental resources; the habitats where these species are found; protocols to follow when any individuals of sensitive species are found; measures that are part of the project to protect these resources; boundaries of the project; and penalties for violations of the Endangered Species Act and permit conditions.
2. The construction contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) for each phase of the project. Best Management Practices (BMPs) to reduce erosion, minimize the discharge of sediment, and eliminate the discharge of non-storm water pollutants to the creek shall be included in the SWPPP. All BMPs shall be maintained by the construction contractor in good working order throughout the project duration.
3. A qualified biologist shall monitor: 1) construction activities in stream habitat, and 2) performance of sediment control/detention devices to identify or reconcile conditions that could adversely affect steelhead, tidewater gobies, or their habitat. The biological monitor shall be present during all construction activities that have the potential to adversely affect environmental resources.
4. Trash and debris from the construction site will be collected daily and disposed in covered dumpsters within the staging area.
5. If sensitive wildlife species are identified within the work area, such as southwestern pond turtle, all construction shall stop and the individual shall be given time to move out of the area. Alternatively, the biological monitor, with the appropriate regulatory authority, may move individuals out of harm's way to the closest similar habitat that can be avoided by project activities. If feasible, blocking nets can be set to prevent return of the species to the work area.
6. Work in the creek shall be scheduled for July 1 to November 1 for minimal flow in the creek and to avoid peak breeding season for tidewater goby (late April through June).
7. Removal of vegetation shall be avoided during the nesting season (February 15 to September 15) where feasible. A qualified biologist shall conduct a nesting bird survey prior to removal of any trees or vegetation scheduled to occur from February 15 to September 15. If any nesting is found, the trees/vegetation shall not be removed until after the young have fledged and the biologist should establish a protective buffer around the nest as needed.
8. Work outside the creek channel can occur before July 1 as long as measures to prevent sediment, trash, and debris from entering the creek are implemented.
9. Materials used to isolate the dewatered area shall be clean and inert materials that will not cause turbidity or release toxic materials to the water. They shall be installed with minimal disturbance of the creek bed and after the area has been cleared of tidewater gobies and any other sensitive aquatic species.
10. All pumped water with visible turbidity (relative to undisturbed water in the creek) shall be settled and/or filtered prior to discharge into the creek downstream of the work area. Energy dissipation shall be used at the discharge of the diversion and the dewatering return to prevent channel bed scour.
11. All pump intakes shall be screened with 1/8-inch mesh that is securely fastened. In addition, screening of the same mesh size shall be placed around the intake at a distance where water velocity caused by the pump is below the level that could suck fish against the screen.
12. The biological monitor shall inspect pump intake screens daily when in use to ensure that screens are intact and functioning properly. Any deficient screens shall be repaired or replaced immediately by the contractor.
13. A biological monitor shall be present throughout the dewatering and water diversion operation with the authority to halt work if injury or mortality of listed fish species is observed. Prior to implementation of the plan, the U.S. Fish and Wildlife Service shall be notified.
14. Small pits shall be excavated in the creek bed as needed to collect seepage into the dewatered area so it can be pumped out. These pits, and any other ponded water within the dewatered area, shall be inspected by the biological monitor at least daily (at the beginning of construction activities) for the presence of native fish. Any found will be captured and relocated by a qualified biologist.
15. The contractor shall inspect and maintain the dewatering system 7 days a week while in operation.



16. The qualified biologist shall inspect the dewatered area daily to ensure that the diversion remains intact and that no tidewater gobies or other fish have entered the work area. Erosion control measures shall also be inspected.
17. An initial survey for the tidewater goby shall be completed within one week prior to the start of construction activities in the creek. If tidewater gobies are found, isolate the area to be dewatered using fish block nets (1/8-inch mesh) inflowing water or silt fence in stagnant water.
18. All steelhead, tidewater gobies, and other special status species shall be captured and relocated to suitable downstream habitat. The number of steelhead and tidewater gobies observed, number relocated, and date and time of capture and relocation shall be recorded. Seine, dip net, throw net, minnow trap, and hand can be used to capture the species. Fish captured shall be held in clean buckets with creek water in the shade for the minimum time needed to clear the work area.
19. Concrete shall not be poured in the channel or in the channel area that could be exposed to runoff if rain is forecast to occur within 15 days after the pour.
20. Sediment collected in erosion control or sediment detention devices shall be disposed of offsite and will not be allowed to reenter the creek channel.
21. Stockpiled materials, such as excavated soils, shall be stored at least 30 feet from the top of bank if being stored for more than two days and contained with BMPs (e.g., straw bales, Visqueen, gravel bags, and fiber rolls) to prevent wind or water erosion and runoff to the creek.
22. All concrete pours shall be contained so that wet concrete does not come in contact with surface or groundwater. The contractor shall have spill contingency materials on site and personnel trained in their use when concrete is poured. This includes pumps and equipment to measure pH in the water to 0.1 unit as well as water containment (e.g., baker tank or truck) equipment to immediately remove contaminated water during concrete pours.
23. Any water within the work area that has or may have come in contact with wet concrete or grout shall be tested for pH. If the pH is greater than 8.5 or more than 0.5 unit above that of the adjacent creek water, pump the water out and treat prior to disposal where it cannot affect surface or groundwater.
24. Concrete trucks shall only be allowed to wash out into a Baker tank in the staging area. The washout material shall be disposed of offsite.
25. Equipment used within the dewatered creek channel shall be inspected daily for leaks by the monitor. If any are found, a drip pan shall be placed under the leak and it shall be repaired immediately by the contractor.
26. If the dewatered creek bed is too soft for equipment/personnel to work in without disturbing sediments to a depth of more than a few inches, the contractor shall use creosote free, clean timber mats (or other inert platform) typically used in wetland construction BMPs.
27. Refueling of construction equipment shall be in an area at least 50 feet from the top of bank that is bermed and has an impermeable surface unless there is a secondary containment method implemented.
28. Spill containment and cleanup materials (e.g., shovels, absorbent pads, plastic bags) shall be on site, and construction personnel shall be trained in their use.
29. All equipment maintenance and cleaning shall be offsite or within a staging area over an impermeable surface. All residues of such activities shall be disposed of offsite.
30. All fuel, lubricants, paints, and other construction liquids shall be stored in sealed containers within a bermed containment area at least 100 feet from the creek unless there is a secondary containment method implemented.
31. All debris and other construction materials shall be cleared from Sycamore Creek prior to reintroduction of stream flows to the channel following removal of the diversion dams.
32. Remove and bag all cape ivy prior to general clearing and dispose offsite to prevent its spread (can grow from a piece 1 inch [2.5 centimeters] long).
33. Remove and bag all seed heads from castor bean and sticky eupatorium prior to general clearing and dispose offsite.

34. A low-flow channel 2 to 3 feet wide and 6 to 12 inches deep (with more at 12 inches than shallower) shall be installed at the end of project construction activities. This channel shall connect to the existing upstream and downstream low-flow channel.

### **BIO-3 Revegetation.**

1. Final restoration and revegetation plans shall be submitted for review and approval of the City of Santa Barbara Creeks Division prior to final design review approval of the project.
2. Revegetation with native riparian plants shall occur in available space along and at the top of the banks to facilitate soil stabilization and restoration of the riparian corridor along Sycamore Creek consistent with the revegetation plans submitted October 24, 2011 or as modified in the future by the Architecture Board of Review or other state and federal agencies (CDFG, ACOE, USFWS, or NMFS). Consistent with the project's proposed restoration plan, all oak and sycamore trees with a diameter at breast height (dbh) of 6 inches (15 centimeters) or more shall be replaced at a minimum ratio of 10:1 surviving after five years while trees smaller than that shall be replaced at a ratio of 5:1. Willows shall be replaced at a minimum ratio of 10:1 or to produce a canopy at least as large as that removed after five years. Oak and sycamore trees will be planted at or within approximately two feet (0.6 meter) of the bank top, depending on location of adjacent structures (including roads). Vines (e.g., blackberry) and herbaceous species will be planted between and below the trees for soil stabilization. Willows will be planted from the top of the riprap to the oaks and sycamores. These will be limbed as they grow to allow flood water passage.
3. The planted area shall be monitored and maintained by the City in concert with a restoration specialist for a period of 5 years. Minimum success criteria should reflect those performance standards outlined in the submitted revegetation plans dated October 24, 2011 or as modified in the future by the Architecture Board of Review or other state and federal agencies (CDFG, ACOE, USFWS, or NMFS).

### **BIO-4 Maintenance.**

1. Maintenance of the creek by the City within the first five years following construction shall be limited to monitoring, watering, weed control, replacement of plants that fail to establish, erosion repair, and pruning of willows at the edge of the channel to minimize dense growth that can impede high flows and increase the potential for flooding.
2. If the County Flood Control District has to remove accumulated sediment from the channel at any time in the future, a low-flow channel shall be installed as part of that project. This channel shall connect to the existing upstream and downstream low-flow channel.
3. The following measures shall apply to any regular channel maintenance for flood control purposes conducted by the City or Santa Barbara County Flood Control District in the project area following construction of the project:
  - a. Native vegetation clearance should be minimized to the extent feasible for the life of the project.
  - b. Native plantings in the Riprap Edge Zone or Upper Bank Zone shall not be removed by the City or County Flood Control District as part of regular channel maintenance for flood flow purposes.
  - c. Willow plantings in the Riprap Zone shall not be removed by the City or County Flood Control District as part of regular channel maintenance for flood flow purposes. If trimming is needed, willow plantings should be trimmed to encourage upward (canopy) growth and discourage low branches that could reduce stream flow.
  - d. Any vegetation clearing during maintenance activities shall be conducted such that no visible turbidity enters the adjacent undisturbed channel.
  - e. Maintenance activities within the channel bottom should be planned for July 1 to November 1 to avoid the peak breeding season of the tidewater goby and the wet season to the extent feasible. Maintenance of the channel or banks should be scheduled outside of the nesting season for birds (February 15 to September 15) to the extent feasible. If work needs to be conducted within the bird nesting season, a qualified biologist shall conduct a survey to determine if any birds are breeding, and if so, will establish a protective buffer around the nest. Work outside the creek channel can occur before July 1 as long as measures to prevent sediment, trash, and debris from entering the creek are implemented.

- f. Any herbicide use shall be limited to Aquamaster™ or any herbicides recommended by the California Department of Fish and Game for use in stream habitats.
- g. Measures to prevent the spread of non-native invasive species (plant and wildlife) shall be implemented to the extent feasible such as making sure that all equipment working in the creek is clean and free of invasive species. This includes boots and hand tools used in the creek. Procedures for preventing introduction of non-native invasive species include:
  - i. Inspect all equipment, trucks, and engines to ensure they are clean of weed seeds.
  - ii. Ensure that all equipment and personal gear are free of New Zealand mudsnails. Cleaning methods can be found at:
    1. <http://www.dfg.ca.gov/invasives/mudsnail>,
    2. <http://seagrant.oregonstate.edu/sgpsubs/onlinepubs.html> and
    3. [http://www.anstaskforce.gov/Documents/NZMS\\_MgmtControl\\_Final.pdf](http://www.anstaskforce.gov/Documents/NZMS_MgmtControl_Final.pdf)

**BIO-5 Other Agency Approvals:** Prior to issuance of building or public works permit, all necessary permits and consultations with the Army Corps of Engineers, California Department of Fish and Wildlife Service, California Regional Water Quality Control Board, National Marine Fisheries Service, and United States Fish and Wildlife Service shall be complete.

**Biological Resources - Residual Impacts**

Less than significant.

4. CULTURAL RESOURCES Could the project:	NO	YES <i>Level of Significance</i>
a) Disturb archaeological resources?		Less Than Significant
b) Affect a historic structure or site designated or eligible for designation as a National, State or City landmark?	X	
c) Have the potential to cause a physical change which would affect ethnic cultural values or restrict religious uses in the project area?	X	

**Cultural Resources - Discussion**

**Issues:** Archaeological resources are subsurface deposits dating from Prehistoric or Historical time periods. Native American culture appeared along the channel coast over 10,000 years ago, and numerous villages of the Barbareno Chumash flourished in coastal plains now encompassed by the City. Spanish explorers and eventual settlements in Santa Barbara occurred in the 1500's through 1700's. In the mid-1800's, the City began its transition from Mexican village to American city, and in the late 1800's through early 1900's experienced intensive urbanization. Historic resources are above-ground structures and sites from historical time periods with historic, architectural, or other cultural importance. The City's built environment has a rich cultural heritage with a variety of architectural styles, including the Spanish Colonial Revival style emphasized in the rebuilding of Santa Barbara's downtown following a destructive 1925 earthquake.

**Impact Evaluation Guidelines:** Archaeological and historical impacts are evaluated qualitatively by archeologists and historians. First, existing conditions on a site are assessed to identify whether important or unique archaeological or historical resources exist, based on criteria specified in the State CEQA *Guidelines* and City Master Environmental Assessment *Guidelines for Archaeological Resources and Historical Structures and Sites*, summarized as follows:

- Contains information needed to answer important scientific research questions and there exists a demonstrable public interest in that information.

- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with an important prehistoric or historic event or person.

If important archaeological or historic resources exist on the site, project changes are evaluated to determine whether they would substantially affect these important resources.

### **Cultural Resources – Existing Conditions and Project Impacts**

#### **4.a) Archaeological Resources**

The project site is located within the Spanish/Mexican Period, Hispanic-American Transition Period (1850-1870), American Period (1870-1900) and Early 20<sup>th</sup> Century (1900-1920) archaeological resource sensitivity areas, as identified on the City's Master Environmental Assessment (MEA) Cultural Resources Sensitivity Map. A Phase I Archaeological Resources Report prepared by Bryon Bass dated July 2009 concluded that there is a very low potential for significant *in situ* archaeological resources to occur in the area of potential effect (APE) and no site testing, mitigation measures or other actions are recommended or required. Therefore, the project's impacts on archaeological resources would be *less than significant*. The Historic Landmarks Commission accepted the Phase I report on September 9, 2009. The report is on file with the City of Santa Barbara for decision makers and qualified personnel to review. The standard condition of approval regarding the discovery of unanticipated archaeological resources has been added as a recommended mitigation measure.

**4.b) Historic Resources** There are no historic properties on the project site; therefore, the project would have *no impact* on historic resources.

#### **4.c) Ethnic/Religious Resources**

There is no evidence that the site involves any ethnic or religious use or importance. The project would have *no impact* on ethnic or religious resources.

### **Cultural Resources – Recommended Mitigation**

**CR-1. Unanticipated Archaeological Resources Contractor Notification.** Standard discovery measures shall be implemented per the City master Environmental Assessment throughout grading and construction: Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts. If such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and the Owner shall retain an archaeologist from the most current City Qualified Archaeologists List. The latter shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, which may include, but are not limited to, redirection of grading and/or excavation activities, consultation and/or monitoring with a Barbareño Chumash representative from the most current City qualified Barbareño Chumash Site Monitors List, etc.

If the discovery consists of possible human remains, the Santa Barbara County Coroner shall be contacted immediately. If the Coroner determines that the remains are Native American, the Coroner shall contact the California Native American Heritage Commission. A Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

If the discovery consists of possible prehistoric or Native American artifacts or materials, a Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to any certificate of occupancy for the project.

### **Cultural Resources – Residual Impacts**

Less than significant.

5. GEOPHYSICAL CONDITIONS	NO	YES <i>Level of Significance</i>
Could the project result in or expose people to:		
a) Seismicity: fault rupture?		Less Than Significant
b) Seismicity: ground shaking or liquefaction?		Less Than Significant
c) Seismicity: seiche or tsunami?	X	
d) Landslides or mudslides?		Less Than Significant
e) Subsidence of the land?		Less Than Significant
f) Expansive soils?		Less Than Significant
g) Excessive grading or permanent changes in the topography?		Less Than Significant

### **Geophysical Conditions - Discussion**

**Issues:** Geophysical impacts involve geologic and soil conditions and their potential to create physical hazards affecting persons or property; or substantial changes to the physical condition of the site. Included are earthquake-related conditions such as fault rupture, groundshaking, liquefaction (a condition in which saturated soil loses shear strength during earthquake shaking); or seismic sea waves; unstable soil or slope conditions, such as landslides, subsidence, expansive or compressible/collapsible soils; or erosion; and extensive grading or topographic changes.

**Impact Evaluation Guidelines:** Potentially significant geophysical impacts may result from:

- Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, groundshaking, liquefaction, or seismic waves.
- Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.
- Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.

### **Geophysical Conditions – Existing Conditions and Project Impacts**

#### **5.a) Seismic Hazards – Fault Rupture**

The City Master Environmental Assessment (MEA) does not identify the project site as being near any faults. This is confirmed in the Geotechnical Report prepared by Fugro dated July 2010, incorporated herein by reference (*see Exhibit N*). Because no known active or potentially active faults are located within or immediately adjacent to the subject site, impacts associated with fault rupture would be *less than significant*.

#### **5.b) Seismic Hazards - Ground shaking or Liquefaction**

The City's Master Environmental Assessment (MEA) identifies the project site as being in an area of high liquefaction potential. According to the Geotechnical Report, there is the potential for some liquefaction to occur at the Punta Gorda Street Bridge location below a depth of 28 feet; however, it was determined that the potential for the soil layers to liquefy and result in ground deformation, settlement or impacts to deep foundations is considered unlikely. Therefore, impacts related to ground shaking and liquefaction would be *less than significant*.

#### **5.c.) Seismic Hazards - Seiche or Tsunami**

Seiche refers to seismic waves within an enclosed water body such as a lake or reservoir. No enclosed water bodies are located in proximity to the project area. Therefore, there would be *no impacts* from a seiche. Also, the City's Master Environmental Assessment (MEA) identifies the project site as being located outside the tsunami run-up zone. Therefore, there would be *no impacts* related to a tsunami.

#### **5.d.) Landslides or mudslides:**

The City's Master Environmental Assessment (MEA) identifies the project site as being located in an area that has a very

low potential for landslides. According to the Geotechnical Report, the proposed design for the channel would also result in stable slope conditions in the project area. Therefore, to the projects impacts related to landslides or mudslides would be *less than significant*.

**5.e.) Subsidence of the Land**

Although the potential for liquefaction is unlikely, the potential for settlement of soils caused by liquefaction of soils in the area of the new bridge was addressed in the Geotechnical Report. Because the project would follow the recommendations of the report in regard to bridge foundation design, impacts from subsidence would be *less than significant*.

**5.f.) Geologic or Soil Instability - Expansive Soils**

The City’s Master Environmental Assessment (MEA) identifies the project site as having soils with low shrink-swell potential. Therefore, impacts from expansive soils would be *less than significant*.

**5.g) Topography, Grading, Erosion, Sedimentation**

The topography of the project site would change as a result of the project. The existing creek channel would be increased from a 9-12 foot wide channel with approximately 9 foot high bank slopes to a 28 foot wide channel with 9 foot high bank slopes. The existing width at the top of the bank ranges from 25 to 50 feet and would be increased to 60 feet. Grading to increase the width of the channel is estimated to be 3,6500 cubic yards of cut and 340 cubic yards of fill. This is not an excessive amount of grading or a substantial change to the topography. Therefore, impacts associated with topography and grading would be *less than significant*.

The City’s Master Environmental Assessment (MEA) identifies the project site as being located in areas of both slight and moderate erosion potential. The slope stability analysis in the Geotechnical Report concludes that the proposed design of the creek would result in a stable slope condition. The Sedimentation Evaluation Report prepared by Penfield & Smith dated July 30, 2010 (Addendum dated January 3, 2011; Memorandum dated August 3, 2011) incorporated herein by reference (*see Exhibit H*) concludes that there would be a negligible change to the long-term sediment carrying capacity within the project area as a result of the project. Therefore, impacts associated with erosion and sedimentation would be *less than significant*.

**Geophysical Conditions – Mitigation**

No mitigation is required.

**Geophysical Conditions – Residual Impacts**

Less than significant.

<b>6. HAZARDS</b> Could the project involve:	<b>NO</b>	<b>YES</b> <i>Level of Significance</i>
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?		Less Than Significant
b) The creation of any health hazard or potential health hazards?		Less Than Significant
c) Exposure of people to existing sources of potential health hazards?		Less Than Significant
d) Increased fire hazard in areas with flammable brush, grass, or trees?		Less Than Significant

**Hazards - Discussion**

**Issues:** Hazardous materials issues involve the potential for public health or safety impacts from exposure of persons or the environment to hazardous materials or risk of accidents involving combustible or toxic substances.

**Impact Evaluation Guidelines:** Significant impacts may result from the following:

- Siting of incompatible projects in close proximity to existing sources of safety risk, such as pipelines, industrial processes, railroads, airports, etc.
- Exposure of project occupants or construction workers to unremediated soil or groundwater contamination.
- Exposure of persons or the environment to hazardous substances due to improper use, storage, or disposal of hazardous materials.
- Siting of development in a high fire hazard areas or beyond adequate emergency response time, with inadequate access or water pressure, or otherwise in a manner that creates a fire hazard

### **Hazards – Existing Conditions and Project Impacts**

#### **6.a) Accidental Explosion or Hazardous Substance Release**

The project site does not contain hazardous substances that would have the potential to result in explosions. Therefore, impacts related to risk of accidental explosion would be *less than significant*.

During the demolition phase, hazardous substances that may occur in the existing bridge construction materials could be released into the environment. If hazardous substances are present, they would be subject to all applicable federal, state, and local laws, regulations, and policies pertaining to hazardous materials. Therefore, impacts related to release of hazardous substances would be *less than significant*.

During the construction phase, there could be relatively small amounts of hazardous materials generated by construction equipment use and maintenance. The emissions associated with construction and operation would be subject to all applicable federal, state, and local laws, regulations, and policies pertaining to hazardous materials. Also, equipment use, fueling and maintenance would be controlled on site to avoid any contamination entering the City's storm drain system. Other hazards, including air emissions, are discussed in the air quality section. Compliance with existing regulations and recommended mitigation measures under the Air Quality section would ensure that hazardous material/waste impacts would be reduced to less than significant levels. In addition, mitigation measures outlined in the Biological Resources section would further reduce impacts related to hazardous substances. Therefore, construction related impacts would be *less than significant*.

#### **6.b) Health Hazard**

The project would not cause or create a long-term health hazard. Therefore, impacts related to creation of health hazards or potential health hazards would be *less than significant*.

#### **6.c.) Existing Sources of Health Hazards**

A review of the State Water Board Geotracker Database did not reveal any active remediation activities in the project area. There are no known sources of health hazards, such as chemical storage tanks or industrial uses in the project area. Therefore, impacts from existing hazardous materials would be *less than significant*.

#### **6.d) Fire Hazard**

The project site is not located in the City's High Fire Hazard Area. An existing fire hydrant would be relocated as approved by the Fire Department. Therefore, impacts associated with fire hazard would be *less than significant*.

### **Hazards - Mitigation**

No mitigation is required.

### **Hazards – Residual Impacts**

Less than significant.

7. NOISE Could the project result in:	NO	YES <i>Level of Significance</i>
a) Substantial increase in existing ambient noise levels?		Less Than Significant
b) Exposure of people to severe noise levels or excessive ground borne vibration?		Potentially Significant, Mitigable

### Noise - Discussion

**Issues:** Noise issues are associated with siting of a new noise-sensitive land use in an area subject to high ambient background noise levels, siting of a noise-generating land use next to existing noise-sensitive land uses, and/or short-term construction-related noise.

The primary source of ambient noise in the City is vehicle traffic noise. The City Master Environmental Assessment (MEA) *Noise Contour Map* identifies average ambient noise levels within the City.

Ambient noise levels are determined as averaged 24-hour weighted levels, using the Day-Night Noise Level ( $L_{dn}$ ) or Community Noise Equivalence Level (CNEL) measurement scales. The  $L_{dn}$  averages the varying sound levels occurring over the 24-hour day and gives a 10 decibel penalty to noises occurring between the hours of 10:00 p.m. and 7:00 a.m. to take into account the greater annoyance of intrusive noise levels during nighttime hours. Since  $L_{dn}$  is a 24-hour average noise level, an area could have sporadic loud noise levels above 60 dB(A) which average out over the 24-hour period. CNEL is similar to  $L_{dn}$  but includes a separate 5 dB(A) penalty for noise occurring between the hours of 7:00 p.m. and 10:00 p.m. CNEL and  $L_{dn}$  values usually agree with one another within 1 dB(A). The Equivalent Noise Level ( $L_{eq}$ ) is a single noise level, which, if held constant during the measurement time period, would represent the same total energy as a fluctuating noise.  $L_{eq}$  values are commonly expressed for periods of one hour, but longer or shorter time periods may be specified. In general, a change in noise level of less than three decibels is not audible. A doubling of the distance from a noise source will generally equate to a change in decibel level of six decibels.

Guidance for appropriate long-term background noise levels for various land uses are established in the City General Plan Noise Element Land Use Compatibility Guidelines. Building codes also establish maximum average ambient noise levels for the interiors of structures.

High construction noise levels occur with the use of heavy equipment such as scrapers, rollers, graders, trenchers and large trucks for demolition, grading, and construction. Equipment noise levels can vary substantially through a construction period, and depend on the type of equipment, number of pieces operating, and equipment maintenance. Construction equipment generates noise levels of more than 80 or 90 dB(A) at a distance of 50 feet, and the shorter impulsive noises from other construction equipment (such as pile drivers and drills) can be even higher, up to and exceeding 100 dB(A). Noise during construction is generally intermittent and sporadic, and after completion of the initial demolition, grading and site preparation activities, tends to be quieter.

The Noise Ordinance (Chapter 9.16 of the Santa Barbara Municipal Code) governs short-term or periodic noise, such as construction noise, operation of motorized equipment or amplified sound, or other sources of nuisance noise. The ordinance establishes limitations on hours of construction and motorized equipment operations, and provides criteria for defining nuisance noise in general.

**Impact Evaluation Guidelines:** A significant noise impact may result from:

- Siting of a project such that persons would be subject to long-term ambient noise levels in excess of Noise Element Land Use Compatibility Guidelines.
- Substantial noise from grading and construction activity in close proximity to noise-sensitive receptors for an extensive duration.



## Noise – Existing Conditions and Project Impacts

### 7.a-b) Increased Noise Level; Exposure to High Noise Levels

#### Long-Term Operational Noise:

The project site is in an area that is subject to average ambient noise levels of 60 dB(A) and greater, as shown on the City's Master Environmental Assessment noise contour map. The primary noise source in the area is vehicular traffic on Highway 101. There would be no increase in exposure of people to the existing noise levels and no substantial noise generation is anticipated to occur as a result of the proposed project because the uses on the project site would not change. Therefore, the project's long-term operational noise impacts would be *less than significant*.

#### Temporary Construction Noise:

The project would result in temporary construction noise due to grading and construction activities. Noise from grading and construction equipment, truck traffic and vibration would affect surrounding areas during the construction period. The total construction period is anticipated to last approximately four months. Bridge construction would include the use of cast-in-drilled-hole (CIDH) piles, which do not have the noise and vibration effects that are associated with driven displacement piles (such as concrete piles or closed-end pipe piles). Although construction noise would be short term, generally intermittent and sporadic, due to residential uses being adjacent to the site, noise impacts on sensitive receptors would be *potentially significant, mitigable*. Implementation of the mitigation measures below which require acoustical insulation materials and limit the construction hours would reduce the impacts to a less than significant level.

## Noise –Required Mitigation

**N-1. Acoustical Insulation Material.** Acoustical insulation material shall be attached to the construction fence and shall extend from the top of the fence (8 feet high) to the ground. Also, a movable acoustical curtain shall be used to shield the residential areas from construction noise. The curtain shall be designed to completely block the line of sight from the adjacent residences during construction of the bridge foundation support piles. Noise levels shall be closely monitored for compliance within the allowable limits.

**N-2. Neighborhood Notification Prior to Construction.** At least twenty (20) days prior to commencement of construction, the contractor shall provide written notice to all property owners, businesses, and residents within 300 feet of the project area. The notice shall contain a description of the project, the construction schedule, including days and hours of construction, the name and phone number of the Project Environmental Coordinator (PEC) and Contractor(s), site rules and Conditions of Approval pertaining to construction activities, and any additional information that will assist Building Inspectors, Police Officers and the public in addressing problems that may arise during construction.

**N-3. Construction Contact Sign.** Immediately after permit issuance, signage shall be posted at the points of entry to the site that list the contractor(s) and Project Environmental Coordinator's (PEC) name, contractor(s) and PEC's telephone number(s), construction work hours, site rules, and construction-related conditions, to assist Building Inspectors and Police Officers in the enforcement of the conditions of approval. The font size shall be a minimum of 0.5 inches in height. Said sign shall not exceed six feet in height from the ground if it is free-standing or placed on a fence. It shall not exceed 24 square feet if in a multi-family or commercial zone or six square feet if in a single family zone.

**N-4. Construction Hours.** Construction (including preparation for construction work) shall only be permitted Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. and Saturdays between the hours of 9:00 a.m. and 4:00 p.m., excluding the following holidays:

New Year's Day	January 1st*
Martin Luther King's Birthday	3rd Monday in January
Presidents' Day	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4th*
Labor Day	1st Monday in September
Thanksgiving Day	4th Thursday in November
Following Thanksgiving Day	Friday following Thanksgiving Day
Christmas Day	December 25th*

\*When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday, respectively, shall be observed as a legal holiday.

When, based on required construction type or other appropriate reasons, it is necessary to do work outside the allowed construction hours, contractor shall contact the Chief of Building and Safety to request a waiver from the above construction hours, using the procedure outlined in Santa Barbara Municipal Code §9.16.015 Construction Work at Night. Contractor shall notify all residents within 300 feet of the parcel of intent to carry out said construction a minimum of 48 hours prior to said construction. Said notification shall include what the work includes, the reason for the work, the duration of the proposed work and a contact number.

**Noise – Residual Impact**

Less than significant.

8. POPULATION AND HOUSING Could the project:	NO	YES Level of Significance
a) Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?	X	
b) Displace existing housing, especially affordable housing?		Less Than Significant

**Population and Housing - Discussion**

**Impact Evaluation Guidelines:** Issues of potentially significant population and housing impacts may involve:

- Growth inducement, such as provision of substantial population or employment growth or creation of substantial housing demand; development in an undeveloped area, or extension/ expansion of major infrastructure that could support additional future growth.
- Loss of a substantial number of housing units, especially loss of more affordable housing.

**Population and Housing – Existing Conditions and Project Impacts**

**8.a) Growth-Inducing Impacts**

The project site is in an urbanized area that is currently served by all required infrastructure. The project would not involve an increase in major public facilities such as extension of water or sewer lines or roads that would facilitate other growth in the area. The project would not involve substantial long term employment growth that would increase population or housing demand. Therefore, there would be *no impacts* to population growth.

**8.b) Housing Displacement**

Seven mobile homes/recreational vehicles have been located within the public right-of-way under a Revocable Encroachment Permit with the City. The encroachment permit has been terminated and the City Attorney’s office is working with the Mobile Home Park to have all the structures within the right-of-way removed prior to the commencement of construction. Five of the housing units could be relocated to other areas of the park, resulting in a potential net loss of two housing units. The loss of two units is not considered a substantial loss of affordable housing units and; therefore, impacts to housing would be *less than significant*.

**Population and Housing - Mitigation**

No mitigation is required.

**Population and Housing – Residual Impact**

Less than significant.

9. PUBLIC SERVICES Could the project have an effect upon, or result in a need for new or altered services in any of the following areas:	NO	YES <i>Level of Significance</i>
a) Fire protection?		Less Than Significant
b) Police protection?		Less Than Significant
c) Schools?	X	
d) Maintenance of public facilities, including roads?		Less Than Significant
e) Other governmental services?		Less Than Significant
f) Electrical power or natural gas?		Less Than Significant
g) Water treatment or distribution facilities?		Less Than Significant
h) Sewer or septic tanks?		Less Than Significant
i) Water distribution/demand?		Less Than Significant
j) Solid waste disposal?		Potentially Significant, Mitigable

### **Public Services - Discussion**

**Issues:** This section evaluates project effects on fire and police protection services, schools, road maintenance and other governmental services, utilities, including electric and natural gas, water and sewer service, and solid waste disposal.

**Impact Evaluation Guidelines:** The following may be identified as significant public services and facilities impacts:

- Creation of a substantial need for increased police department, fire department, road maintenance, or government services staff or equipment.
- Generation of substantial numbers of students exceeding public school capacity where schools have been designated as overcrowded.
- Inadequate water, sewage disposal, or utility facilities.
- Substantial increase in solid waste disposal to area sanitary landfills.

**Facilities and Services:** In 2010, the City certified a Final Environmental Impact Report (FEIR) on the Plan Santa Barbara General Plan Update. The FEIR concluded that under existing conditions as well as the projected planned development and all studied alternatives, all public services (police, fire, library, public facilities, governmental facilities, electrical power, natural gas and communications) could accommodate the potential additional growth. The FEIR also determined that growth in the City under the General Plan would not result in a considerable contribution to cumulative impacts on public services on the South Coast.

**Schools:** None of the school districts in the South Coast have been designated "overcrowded" as defined by California State law. Per California Government Code Section 66000, the City collects development impact fees from new development to offset the cost of providing school services/additional infrastructure to accommodate new students generated by the development.

**Water:** The City of Santa Barbara's water supply comes primarily from the following sources, with the actual share of each determined by availability and level of customer demand: Lake Cachuma and Tecolote Tunnel; Gibraltar Reservoir, Devils Canyon and Mission Tunnel; groundwater; State Water Project Table A allotment; desalination; and recycled water. Conservation and efficiency improvements are projected to contribute to the supply by offsetting demand that would otherwise have to be supplied by additional sources. On June 14, 2011, based on the comprehensive review of the City's water supply, the City Council approved the Long Term Water Supply Program (LTWSP) for the planning period 2011-2030. The LTWSP outlines a strategy to use the above sources to meet the City's estimated system demand (potable plus recycled water) of 14,000 AFY, plus a 10% safety margin equal to 1,400 AFY, for a total water supply

target of 15,400 AFY. The LTWSP concludes that the City's water supply is adequate to serve the anticipated demand plus safety margin during the planning period.

**Solid Waste:** Most of the waste generated in the City is transported on a daily basis to seven landfills located around the County. The County of Santa Barbara, which operates the landfills, has developed impact significance thresholds related to the impacts of development on remaining landfill capacity. These thresholds are utilized by the City to analyze solid waste impacts. The County thresholds are based on the projected average solid waste generation for Santa Barbara County from 1990-2005. The County assumes a 1.2% annual increase (approximately 4000 tons per year) in solid waste generation over the 15-year period. The County's threshold for project specific impacts to the solid waste system is 196 tons per year (this figure represents 5% of the expected average annual increase in solid waste generation [4000 tons/year]) for project operations. Source reduction, recycling, and composting can reduce a project's waste stream by as much as 50%. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable. Proposed projects with a project specific operational impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase in solid waste of 1% or more of the expected average annual increase in solid waste generation [4000 tons/year], which equates to 40 tons per year, is considered an adverse cumulative impact.

The County of Santa Barbara adopted revised solid waste generation thresholds and guidelines in October 2008. According to the County's thresholds of significance, any construction, demolition or remodeling project of a commercial, industrial or residential development that is projected to create more than 350 tons of construction and demolition debris is considered to have a significant impact on solid waste generation. The County's 350 ton threshold has not been formally adopted by the City; however, it provides a useful method for calculating and analyzing construction waste generated by a project.

## **Public Services – Existing Conditions and Project Impacts**

### **9.a) Fire Protection**

The project includes the relocation of an existing fire hydrant. The Fire Department has reviewed the project and determined that fire access and the location of the fire hydrant is adequate. While the project would include planting of more vegetation than exists today, this would not significantly impact needed fire protection for the area. Therefore, the impacts to fire protection would be less than significant.

### **9.b) Police Protection**

According to the Plan Santa Barbara FEIR, police service is operating at an adequate level. The project does not include a change in use of the project area. Therefore, the impacts to police protection would be less than significant.

### **9.c) Schools**

The project site includes a creek and bridge and does not include residential or commercial uses. Therefore, there would be no impacts to schools.

### **9.d) Maintenance of Public Facilities & Public Road**

The project site includes a bridge that is maintained by the City. The City would maintain the replacement bridge as well. The creek would be maintained by the City for five years after the construction completion. After the five year maintenance period, the County Flood Control District would maintain the channel for flood control purposes. There are no other public facilities that would be affected by the project. Impacts to public facilities, including roads, would be less than significant.

### **9.e) Other Government Facilities**

The proposed project would not result in a need for significant additional City services; therefore, the impacts to government facilities would be less than significant.

### **9.f) Electrical power, cable, telephone, or natural gas services**

The project includes relocating two electrical power poles, one communication line and a gas line. All public services are available to the project site. Therefore, the project's impacts to these utilities would be less than significant.

### **9.g & i) Water Treatment Facilities & Water Service**

The project includes relocating the existing water line and construction a new water line under the new bridge. All public services are available to the project site. There would be no increase in water demand. The temporary capping of the water line may affect the water pressure in the vicinity of the project. This would be a temporary impact during construction that would not be significant. Therefore, the project's impacts on the City's water supply, treatment, and distribution facilities would be less than significant.

### **9.h) Sewer**

Properties within the City of Santa Barbara city limits are currently served by the El Estero Treatment Plant. The maximum capacity of the El Estero Treatment Plant is 11 million gallons per day (MGD), with current average daily flow of 8.5 MGD. The Treatment Plant is designed to treat the wastewater from a population of 104,000, which is more than the City's current population.

A Sewer Relocation Evaluation report prepared by Penfield & Smith, dated July 30, 2010, is incorporated herein by reference (*see Exhibit O*). The report states that existing sewer line is shallow and would interfere with the improved channel grading and flow. The project includes a new inverted sewer siphon system to increase the depth of the sewer line under the proposed creek. The project would not result in an increase in sewage treatment. Therefore, the project's impacts to sewer facilities would be less than significant.

### **9.j) Solid Waste Generation/ Disposal**

Long-Term (Operational). No measurable increase in solid waste generation is expected because there would be no change of use in the project area. Therefore, the impacts to solid waste generation and disposal would be less than significant.

Short-Term (Demolition & Construction). The total amount of material to be excavated from creek banks and the creek bottom is estimated to be about 3,6500 cubic yards (CY). The excavated material would be stockpiled or be taken off site for storage or recycling, depending on whether it meets project specifications. The material could also be distributed to other construction sites requiring fill. Expected debris includes stacked burlap bags filled with concrete, large rocks, mortared riprap, slabs of concrete, grouted stone, formed walls, pipe and wire revetment, and other bank material found throughout the length of the project. Most of the metal and concrete would be recycled. The green waste would be recycled as compost and mulch. The City would examine suitability of the excavated material for beach nourishment. If material is suitable, it can be used to restore sand supply on local beaches.

Demolition of the existing concrete sidewalks, curb and gutter and asphalt street surface, and structural base would occur and the existing concrete bridge structure, wing-walls, and grouted rock would be removed from the creek. The removal of the existing bridge would generate an estimated 380 tons of waste, mainly concrete, reinforced concrete, stone masonry, steel and asphalt. The majority of the waste could be recycled. The 62 tons of stone masonry could be diverted for use on other City projects. Material that falls into the creek during construction would be removed. Some of the demolition material may be recycled for reuse as base material for the improved street and for bridge backfill. Material that cannot be reused would be disposed of off-site.

However, new construction, especially remodeling and demolition, represents the greatest challenge to maintaining existing landfill diversion rates. The County of Santa Barbara has developed construction solid waste generation guidelines. Under the County's significance thresholds, any project that is projected to create more than 350 tons of construction and demolition debris is considered to have a significant impact on solid waste generation. The County's 350 ton threshold has not been formally adopted by the City; however, it provides a useful method for calculating and analyzing construction waste generated by a project. The construction debris that would be sent to the landfill is expected to be below the 350 ton threshold with the recycling and source reduction measures outlined above. The project would be required to minimize waste sent to the local landfill by recycling as much waste as possible. Application of City requirements (SBMC Ch. 7.18) for construction waste recycling will minimize any impacts to the maximum extent feasible. Therefore, the short-term solid waste demolition impacts would be considered potentially significant, mitigable.

### **Public Services –Required Mitigation**

**PS-1** The final building plans shall include a source reduction/recycling plan that at a minimum includes the applicant's proposed measures to recycle construction waste as described in the project description letter submitted August 2011 or other measures achieving the same or greater level of source reduction and recycling.

## Public Services – Residual Impacts

Less than significant.

<b>10. RECREATION</b>	<b>NO</b>	<b>YES</b>
Could the project:		<i>Level of Significance</i>
a) Increase the demand for neighborhood or regional parks or other recreational facilities?	X	
b) Affect existing parks or other public recreational facilities?		Less Than Significant

### Recreation - Discussion

**Issues:** Recreational issues are associated with increased demand for recreational facilities, or loss or impacts to existing recreational facilities.

**Impact Evaluation Guidelines:** Recreation impacts may be significant if they result in:

- Substantial increase in demand for park and recreation facilities in an area under-served by existing public park and recreation facilities.
- Substantial loss or interference with existing park space or other public recreational facilities such as hiking, cycling, or horse trails.

### Recreation – Existing Conditions and Project Impacts

#### **10.a) Recreational Demand**

Demand for additional park and recreation facilities is not expected to increase as a result of the project; therefore, there would be *no impact* on recreational demand.

#### **10.b) Existing Recreational Facilities**

The project would not impact or interfere with other parks or public trails. The existing pedestrian path along the creek north of the Punta Gorda Bridge would remain. Therefore, the impacts to existing recreational facilities would be *less than significant*.

### Recreation – Mitigation

No mitigation is required.

### Recreation – Residual Impacts

Less than significant.

11. TRANSPORTATION/CIRCULATION Could the project result in:	NO	YES <i>Level of Significance</i>
a) Increased vehicle trips?		Less Than Significant
b) Hazards to safety from design features (e.g. sharp curves, inadequate sight distance or dangerous intersections)?		Less Than Significant
c) Inadequate emergency access or access to nearby uses?		Less Than Significant
d) Decreased performance or safety of pedestrian, bicycle, or public transit facilities?		Less Than Significant
e) Conflicts with adopted policies, plans, programs, or ordinances regarding congestion management and the circulation system, taking into account all modes of transportation.		Less Than Significant

### **Transportation - Discussion**

**Issues:** Transportation issues include traffic, access, circulation and safety. Vehicle, bicycle and pedestrian, and transit modes of transportation are all considered, as well as emergency vehicle access. The City General Plan Circulation Element contains policies addressing circulation and traffic in the City.

**Impact Evaluation Guidelines:** A proposed project may have a significant impact on traffic/ circulation if it would:

#### **Vehicle Traffic**

- Cause an increase in traffic that is substantial in relation to the existing traffic load and street system capacity (see traffic thresholds below).
- Cause insufficiency in the transit system.
- Conflict with the Congestion Management Plan (CMP) or Circulation Element or other adopted plan or policy pertaining to vehicle or transit systems.

#### **Circulation and Traffic Safety**

- Create potential hazards due to addition of traffic to a roadway that has design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure) or that supports uses that would be incompatible with substantial increases in traffic.
- Diminish or reduce safe pedestrian, bicycle, or public transit circulation.
- Result in inadequate emergency access on-site or to nearby uses.
- Conflict with regional and local plans, policies, or ordinances regarding the circulation system, including all modes of transportation (vehicle, pedestrian, bicycle, and public transportation).

**Traffic Thresholds of Significance:** The City uses Levels of Service (LOS) “A” through “F” to describe operating conditions at signalized intersections in terms of volume-to-capacity (V/C) ratios, with LOS A (0.50-0.60 V/C) representing free flowing conditions and LOS F (0.90+ V/C) describing conditions of substantial delay. The City General Plan Circulation Element establishes the goal for City intersections to not exceed LOS C (0.70-0.80 V/C).

For purposes of environmental assessment, LOS C at 0.77 V/C is the threshold Level of Service against which impacts are measured. An intersection is considered “impacted” if the volume to capacity ratio is .77 V/C or greater.

**Project-Specific Significant Impact:** A project-specific significant impact results when:

- Project peak-hour traffic would cause a signalized intersection to exceed 0.77 V/C, or
- The V/C of an intersection already exceeding 0.77 V/C would be increased by 0.01 (1%) or more as a result of project peak-hour traffic.

For non-signalized intersections, delay-time methodology is utilized in evaluating impacts.

**Significant Cumulative Contribution:** A project would result in a significant contribution to cumulative traffic impacts when:

- (a) Project peak-hour traffic together with other cumulative traffic from existing and reasonably foreseeable pending projects would cause an intersection to exceed 0.77 V/C, or
- (b) Project would contribute traffic to an intersection already exceeding 0.77 V/C.

## **Transportation – Existing Conditions and Project Impacts**

### **11.a) Traffic**

**Long-Term Traffic:** The project includes the replacement of an existing bridge. The project would not result in an increase in traffic; therefore, impacts to long-term traffic would be *less than significant*.

**Short-Term Construction Traffic:** The project would generate construction-related traffic that would occur over a four month period. Staging, equipment, materials storage, and temporary construction worker parking would occur on the project site and on adjacent properties. Temporary construction traffic is generally considered an adverse but not significant impact. In this case, given the relatively short duration of the construction period, short-term construction-related traffic impacts would be a *less than significant*. Implementation of the standard conditions of approval related to construction would further reduce the adverse impacts.

### **11.b) Hazards to safety from design features**

The project includes the replacement of an existing bridge. The new bridge design has been reviewed by the City Traffic Engineer and final building plans would also be reviewed by the City Traffic Engineer to ensure that it does not create any safety hazards. The project does not include roads with sharp curves, inadequate sight distance, dangerous intersections, narrow width, or roadside ditches that would create potential hazards. Therefore, impacts related to safety would be *less than significant*.

### **11.c) Emergency Access**

The project requires removal of the Green Mobile Home Park access driveway currently located within the public right-of-way adjacent to the Punta Gorda Street Bridge. Two other driveways (on Punta Gorda Street and on Pitos Street) also provide access to the mobile home park. The Fire Department has determined that adequate emergency access to the site would be maintained. Therefore, impacts related to emergency access would be *less than significant*.

### **11.d) Bicycle /Pedestrian/Public Transit**

The project includes the replacement of an existing bridge with a new bridge. The existing bridge has five foot wide sidewalks. The new bridge would include a six foot wide sidewalk on each side that would connect to existing sidewalks on Punta Gorda Street. The existing pedestrian path located along the eastern bank, north of the bridge would be maintained. Therefore, impacts to pedestrian facilities and circulation would be *less than significant*.

The City's Bicycle Master Plan designates this portion of Punta Gorda Street as a Class III bikeway. The project would not result in a change to the designation. Therefore, impacts to bicycle facilities and circulation would be *less than significant*.

The existing MTD bus stop located on the northern side of Punta Gorda Street adjacent to the bridge would remain; however, it may be repositioned slightly after the installation of the new bridge. Temporary rerouting of MTD Bus Route 2 and the temporary closure or relocation of the bus stop may occur during construction; however, given the relatively short duration of construction, impacts to transit services would be *less than significant*.

### **11.e) Congestion Management and Circulation**

The new bridge would replace an existing bridge that is a part of the City's existing circulation system and is consistent with the Circulation Element. The project does not conflict with any adopted policies, regional or local plans, programs, or ordinances related to congestion management or the circulation system. Therefore, impacts related to congestion management and the circulation system would be *less than significant*.

## **Transportation – Recommended Mitigation**

**T-1. Haul Routes Require Separate Permit.** Apply for a Public Works permit to establish the haul route(s) for all construction-related trucks with a gross vehicle weight rating of three tons or more entering or exiting the site. The Haul Routes shall be approved by the Public Works Transportation Manager.



**T-2. Construction-Related Truck Trips.** Construction-related truck trips for trucks with a gross vehicle weight rating of three tons or more shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) in order to help reduce truck traffic on adjacent streets and roadways.

**T-3. Construction Storage/Staging.** Construction vehicle/ equipment/ materials storage and staging in the public road right-of-way shall be limited to the extent feasible and shall be subject to review and approval by the Public Works Transportation Manager.

**Transportation – Residual Impact**

Less than significant.

12. WATER ENVIRONMENT Could the project result in:	NO	YES <i>Level of Significance</i>
a) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?		Less Than Significant
b) Violate any water quality standards or waste discharge requirements?		Less Than Significant
c) Otherwise substantially degrade water quality?		Potentially Significant, Mitigable
d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		Less Than Significant
e) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		Less Than Significant
f) Substantially alter the existing drainage patterns of the site or area, including through the alternation of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		Less Than Significant
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	X	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		Less Than Significant
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of failure of a levee or dam?		Less Than Significant
j) Inundation by seiche, tsunami, or mudflow?		Less Than Significant

**Water – Discussion**

**Issues:** Water resources issues include changes in offsite drainage and infiltration/groundwater recharge; storm water runoff and flooding; and water quality.

**Impact Evaluation Guidelines:** A significant impact would result from:

## Water Resources and Drainage

- Substantially changing the amount of surface water in any water body or the quantity of groundwater recharge.
- Substantially changing the drainage pattern or creating a substantially increased amount or rate of surface water runoff that would exceed the capacity of existing or planned drainage and storm water systems.
- Altering drainage patterns or affecting creeks in a way that would cause substantial erosion, siltation, or on- or off-site flooding.

## Water Quality

- Substantial discharge of sediment or pollutants into surface water or groundwater, or otherwise degrading water quality, including temperature, dissolved oxygen, or turbidity.

## Flooding and Hazards

- Locating development within 100-year flood hazard areas; substantially altering the course or flow of flood waters or otherwise exposing people or property to substantial flood hazard.
- Exposing people or property to significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.

The City of Santa Barbara began implementing the Storm Water Management Program (SWMP) in January of 2009. The purpose of the SWMP is to implement and enforce a program designed to reduce the discharge of pollutants to the “maximum extent practicable” (MEP) to protect water quality. The SWMP addresses discharge of pollutants both during construction and after construction. The water quality treatment requirement is to retain and treat the 1-inch, 24-hr. storm. The peak runoff discharge rate requirement is that the peak runoff discharge rate shall not exceed the pre-development rate up to the 25 year storm. The volume reduction requirement is to retain on site the volume difference between pre and post conditions for the 25-yr, 24-hr storm or the 1-inch storm (whichever is larger).

## Water Resources – Existing Conditions and Project Impacts

### **12.a) Groundwater**

Storm water filters would be installed to capture and treat the 1-inch storm from the bridge. In addition, implementation of the creek restoration plan would result in the elimination of hard creek banks thereby providing increased areas for infiltration. Therefore, impacts to ground waters would be *less than significant*.

### **12.b-f) Drainage, Stormwater, Alteration of Creeks, and Water Quality**

The project would reduce the amount of impervious surface in the project area from 7,920 square feet to 4,660 square feet thereby reducing the amount of surface runoff. The reduction of impervious surface is a result of the removal of the Green Mobile Home Park access driveway, located in the public right-of-way. The post-project peak flow rates would be less than the pre-project peak flow rates. Runoff from the bridge would enter the creek; however the project would result in less runoff overall, due to less impervious surface, than currently exists. Also, storm water filters would be installed to capture and treat the 1-inch storm runoff from the bridge. Therefore, impacts related to drainage would be *less than significant*. The project would not create or contribute water which would exceed the capacity of the existing stormwater drainage system or provide substantial additional sources of polluted runoff. The water quality section below addresses construction issues associated with water quality. Impacts to stormwater would be *less than significant*.

The proposed project would widen the existing creek channel in the project vicinity from a 9-12 foot wide channel with 9 foot high bank slopes to a 28 foot wide channel with 9 foot high bank slopes. According to the Sediment Evaluation Report prepared for the project by Penfield and Smith in July 2010 and following Addendum dated January 3, 2011 (*see Exhibit H*) the proposed widening of the creek would result in reduced flow velocities in the creek. However, velocities and shear stress in the channel will still be high enough to adequately move sediments in the channel bottom, even during smaller runoff events and the project will have a negligible change in the long term sediment carrying capacity of the creek in the project area. As discussed in the Sediment Evaluation Report, the project would smooth out various scour and erosional features in the creek. The project has been designed with a buried rip rap toe of bank, an increased bridge span at Punta Gorda Street that exceeds bank full and top of bank levels, and rip rap erosion control features at the upstream and downstream connection points with the existing creek to prevent erosion in these areas. The submitted Geotechnical Report (*see Exhibit N*) also evaluated the slope stability associated with the proposed creek design and found the slopes to be stable. Maintenance of the creek channel following construction would not exceed those measures

conducted today and would avoid removal of bank vegetation that further prevents erosion. Mitigation measures outlined in the Biological Resources section further protect this bank vegetation. Impacts related to long term erosion and siltation would be less than significant.

Construction of the project would require temporarily dewatering the creek through construction of diversion dams both up and downstream of the project area and diverting creek flows through a culvert spanning the length of construction. This temporary culvert would be designed to prevent erosion of the creek bottom where water enters and exits the culverts and would be timed to coincide with times of minimal creek flow (July 1-November 1). The dewatering process can create turbidity that can affect downstream areas. Therefore, several mitigation measures have been required in the Biological Resources Section that minimize the turbidity effects during dewatering and construction in general. Additionally, mitigation measures have been required to ensure proper timing of the project during the dry season, prevent construction materials from unnecessarily entering creek habitats, ensure no contamination of the creek bed, and prevent polluted runoff from the construction site into the creek area (See Mitigation Measure BIO-2 (7-16, 19-31)). Therefore, the project impacts on water quality would be potentially significant, mitigable.

**12.g-j) Flooding and Inundation**

The total project area (0.64 acres) is located in the 100-year floodplain and a portion of the project site (0.44 acres) is in the floodway. The project does not include the placement of any new housing units or other structures (other than the bridge) within the 100-year floodplain. The main purpose of the project is to increase the flow capacity of the channel to reduce flooding risk. The project would increase the capacity of the creek in the project area from between 900 and 1,600 cubic feet per second (cfs) to approximately 2,000 cfs which will significantly reduce frequency and extent of flooding, particularly in small to moderate events. However, the 100-year water surface evaluation conducted for the project (*see Exhibit B*) shows that the project would not change the location of the 100-year floodplain or 100-year floodway from existing conditions. Therefore, impacts related to flooding would be less than significant. The project site is located outside the tsunami run-up zone and is not in an area that would be subject to risks involving seiche. The project would not substantially change any risks of mudflows in the area. Therefore, impacts related to seiche, tsunami, and mudflow would be less than significant.

**Water Resources –Mitigation**

See Mitigation Measure BIO-2 (7-16, 19-31).

**Water Resources – Residual Impact**

Less than significant.

<b>13. LAND USE AND PLANNING</b>		<b>YES</b>	<b>NO</b>
Would the project:			
a)	Physically divide an established community?		X
b)	Conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?		X

**Land Use and Planning – Discussion**

**13.a)** The project involves an existing creek channel and an existing bridge. The project does not involve a cross-town freeway, a new storm channel, utility transmission lines or any other improvements that have the potential to physically divide the community. The project would not permanently close any existing bridges or roadways. The project will not create any physical barriers that will divide the community.

**13.b)** While completing each section of this Initial Study, an analysis was undertaken of the potential conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect (a complete list of said plans, policies, and regulation is available at the City Planning Division).

Required mitigation measures related to Biological Resources, Noise, Public Services, and Water Quality, and

recommended mitigations measures related to Air Quality, Cultural Resources, and Transportation/Circulation would ensure that the project is consistent with applicable plans and policies.

<b>MANDATORY FINDINGS OF SIGNIFICANCE.</b>		<b>YES</b>	<b>NO</b>
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?		X
c)	Does the project have potential 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
d)	Does the project have potential environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X

- a) As discussed in Section 3 (Biological Resources), Section 7 (Noise), Section 9 (Public Services), and Section 12 (Water Environment) potentially significant impacts can be mitigated to a less than significant level.
- b) As discussed in Sections 1 through 12, the project does not conflict with any long-term, environmental goals.
- c) As discussed in Sections 1 through 12, the project does not have potential impacts that are individually limited, but cumulatively considerable.
- d) As discussed in Sections 1 through 12, no significant effects on humans (direct or indirect) would occur as a result of the project.

**INITIAL STUDY CONCLUSION**

On the basis of this initial evaluation it has been determined that with identified mitigation measures agreed-to by the applicant, potentially significant impacts would be avoided or reduced to less than significant levels. A Mitigated Negative Declaration will be prepared.

<i>Karla Kennedy</i>		4/10/12
Initial Study Preparer		Date
<i>[Signature]</i>		4/10/12
Environmental Analyst		Date

**EXHIBITS:**

- A. Revised Project Plans
- B. **100-year Water Surface Difference, Penfield & Smith, February 23, 2011**
- C. **Diversion and Dewatering Plan, February 2011**
- D. **Driveway Alternatives Report, Penfield & Smith, July 28, 2010**
- E. **Bridge Selection Evaluation, Penfield & Smith, July 30, 2010**

- F. Preliminary Identification of the Ordinary High Water Mark, Penfield & Smith, February 23, 2011
- G. Channel Capacity Chart, Penfield & Smith, February 23, 2011
- H. Sediment Evaluation Report, Penfield & Smith, July 30, 2010 (Addendum, January 3, 2011; Memorandum, August 3, 2011)
- I. Biological Memorandum, Cardno Entrix, August 1, 2011
- J. Mitigation Monitoring and Reporting Program
- K. Architectural Board of Review Minutes, April 4, 2011
- L. Air Quality Annual Emissions Report, October 26, 2011
- M. Biological Resources Assessment Report, SAIC, June 2010
- N. Geotechnical Report, Fugro West, Inc., July 2010
- O. Sewer Relocation Evaluation, Penfield & Smith, July 30, 2010
- P. Response to Comments

#### **LIST OF SOURCES USED IN PREPARATION OF THIS INITIAL STUDY**

The following sources used in the preparation of this Initial Study are located at the Community Development Department, Planning Division, 630 Garden Street, Santa Barbara and are available for review upon request.

Phase 1 Archaeological Resources Report, Bryon Bass, July 2009

California Environmental Quality Act (CEQA) & CEQA Guidelines

General Plan Circulation Element

General Plan Conservation Element

General Plan Open Space Element

2004 Housing Element

General Plan Land Use Element

General Plan Noise Element w/appendices

General Plan Map

General Plan Seismic Safety/Safety Element

Geology Assessment for the City of Santa Barbara

Institute of Traffic Engineers Parking Generation Manual

Institute of Traffic Engineers Trip Generation Manual

Local Coastal Plan (*Main or Airport*)

Master Environmental Assessment

Master Environmental Assessment Maps (2008)

Parking Design Standards

Santa Barbara Municipal Code & City Charter

Special District Map

Uniform Building Code as adopted by City

Zoning Ordinance & Zoning Map

