



# PUBLIC NOTICE

**U.S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT**

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**APPLICATION FOR PERMIT  
13<sup>th</sup> Street Bridge Replacement, Vandenberg Air Force Base**

**Public Notice/Application No.:** SPL-2013-00601-JWM

**Project:** 13th Street Bridge Replacement, Vandenberg AFB

**Comment Period:** January 28, 2015 to February 12, 2015

**Project Manager:** John Markham; 805-585-2150; [John.W.Markham@usace.army.mil](mailto:John.W.Markham@usace.army.mil)

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**Applicant**

Darryl York  
Department of Air Force  
1028 Iceland Avenue  
Vandenberg Air Force Base  
California 93437

**Contact**

Luanne Lum  
Department of Air Force  
1028 Iceland Avenue  
Vandenberg Air Force Base  
California 93437  
[Luanne.lum@us.af.mil](mailto:Luanne.lum@us.af.mil)  
(805) 606-5299

**Location**

The proposed project occurs within Vandenberg Air Force Base, Santa Barbara County, CA (latitude: 34.6774327926436, longitude: -120.554309843006).

**Activity**

To replace the existing 13th Street Bridge crossing of the Santa Ynez River and to demolish the existing bridge (see attached drawings). As proposed, the project would result in approximately 1.1 acres of permanent impacts to waters of the U.S., and approximately 1.80 acres of temporary impacts to waters of the U.S. For more information see page 3 of this notice.

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Interested parties are hereby notified an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that supports the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act. Comments should be mailed to:

LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
REGULATORY DIVISION  
ATTN: AARON O. ALLEN, CHIEF, NORTH COAST BRANCH  
VENTURA FIELD OFFICE  
2151 ALESSANDRO DRIVE, SUITE 110  
VENTURA, CALIFORNIA 93001

Alternatively, comments can be sent electronically to: [Aaron.O.Allen@usace.army.mil](mailto:Aaron.O.Allen@usace.army.mil).

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

### **Evaluation Factors**

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact

Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

### **Preliminary Review of Selected Factors**

**EIS Determination**- A preliminary determination has been made an environmental impact statement is not required for the proposed work.

**Water Quality**- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the California Regional Water Quality Control Board. Section 401 requires any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance.

**Coastal Zone Management**- The applicant has certified the proposed activity would comply with and would be conducted in a manner consistent with the approved State Coastal Zone Management Program. On September 22, 2014, the Corps obtained concurrence from the California Coastal Commission that the proposed project is consistent with the State's Coastal Zone Management Plan (pers. comm., Larry Simon, Federal Consistency Coordinator).

**Essential Fish Habitat**- No Essential Fish Habitat (EFH), as defined by the Magnuson-Stevens Fishery Conservation and Management Act, occurs within the project area and no EFH would be affected by the proposed project.

**Cultural Resources**- The Area of Potential Effect (APE)<sup>1</sup> for the proposed project includes all aspects of the proposed bridge replacement project, including staging, storage, access routes, construction, and demolition. In addition, the APE includes staging, storage, access routes, grading, and native habitat restoration of an approximately 19.1-acre off-site area located downstream of the proposed project site and adjacent to the Santa Ynez River estuary.

Based upon the results of record searches and on-site surveys conducted by on or behalf of VAFB, no prehistoric archaeological sites, historic archaeological sites, or historic-built sites have been identified within the footprint of the proposed bridge replacement project or the proposed off-site restoration project. Three archaeological sites are recorded within 0.25 mile of the bridge replacement project footprint: CA-SBA-923, CA-SBA-2126, and CA-SBA-3744. CA-SBA-932 was recorded as a low- to moderate-density lithic scatter covering 38,510 square meters (m<sup>2</sup>) overlooking the valley floor that also contains a historical component. Recent excavations revealed that the site contains a relatively high density of lithic debris (Enright et al. 2012). CA-SBA-2126 lies on the valley floor north of the proposed bridge replacement project, and is characterized as a deposit of marine shell and lithic debris associated with a buried soil approximately 2 meters deep. It encompasses about 28,260 m<sup>2</sup> and was previously subject to excavations associated with an oil pipeline (Woodman et al. 1991). CA-SBA-3744 lies on the valley floor southeast of the proposed bridge replacement project and is characterized as a buried, low-density deposit of marine shell and lithic debris associated with a buried soil approximately 1.5 meters deep. It was found in July 2002 during monitoring for power pole installation (Munns 2004).

Based upon the results of record searches, consultation with Tribal authorities, and surface and

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<sup>1</sup> The APE is the area within which the direct and indirect impacts of the project may have an effect on cultural resources or historic properties, and includes the proposed work areas within the lateral limits of the ordinary high water mark and their adjacent wetlands ("permit area"), as well as "upland" areas immediately adjacent to the permit area for purposes of staging, storage, or access.

subsurface surveys, VAFB determined that no historic properties would be affected by the undertaking. Pursuant to Section 106 of the National Historic Preservation Act (Section 106), VAFB requested concurrence from the State Historic Preservation Office (SHPO) regarding this finding in 2007. In a letter dated January 15, 2008, the SHPO stated the APE was properly determined and concurred with VAFB's determination.

The Corps has reviewed the Section 106 consultation completed by VAFB, including the cultural resource survey information, coordination with native American tribes, and the basis for VAFB's determinations. Based on our review, the Corps concurs with VAFB's "no historic properties affected" determination and accepts VAFB compliance with the National Historic Preservation Act for the proposed permit action. This review constitutes the extent of cultural resources investigations by the District Engineer, and he is otherwise unaware of the presence of such resources.

**Endangered Species-** Vegetative communities/habitats present within the proposed project location include (in order of abundance): non-native grassland/ruderal, willow riparian (mixed forest and scrub), central coast scrub, non-native broadleaf, and freshwater marsh. Adjacent land uses include road infrastructure, agriculture, and open space. Vegetative communities/habitats present within the proposed off-site restoration area include non-native grassland/ruderal, non-native broadleaf (black mustard/poison hemlock), central coast scrub, and coastal salt marsh. The proposed project area and its vicinity ("action area")<sup>2</sup> is known to support several federally listed species, including: 1) California red-legged frog (*Rana draytonii*); 2) tidewater goby (*Eucyclogobius newberryi*); and, 3) South-Central California Coast Evolutionarily Significant Unit (ESU) of steelhead (*Oncorhynchus mykiss*) ("steelhead"). The action area does not contain designated critical habitat for federally-listed species.

Similar to the APE for cultural resources, the action area includes all aspects of the proposed bridge replacement project, including staging, storage, access routes, construction, and demolition. In addition, the action area includes staging, storage, access routes, grading, and native habitat restoration of an approximately 19.1-acre off-site area located downstream of the proposed project site and adjacent to the Santa Ynez River estuary.

On June 10, 2014, pursuant to Section 7 of the Endangered Species Act (Section 7), VAFB requested initiation of formal consultation with the U.S. Fish and Wildlife Service (USFWS) for potential adverse effects of the proposed project upon California red-legged frog and tidewater goby. Similarly, on June 20, 2014, VAFB requested initiation of formal consultation with the National Marine Fisheries Service (NMFS) for potential adverse effects of the proposed project upon steelhead.

On September 18, 2014 and December 30, 2014, respectively, the USFWS and the NMFS issued Biological Opinions to VAFB for the proposed project. The Biological Opinions contain numerous avoidance and minimization measures for California red-legged frog, tidewater goby, and steelhead, including use of Service-approved biologists, pre-construction surveys, use of physical barriers and surface water diversions, seasonal restrictions, daily biological monitoring, and post-project reporting.

The Corps has reviewed the Section 7 consultations completed by VAFB, including baseline information, potential adverse effects, proposed avoidance and minimization measures, and incidental take statement. Based on our review, the Corps concurs with VAFB's determination that the proposed project may adversely affect but is not likely to jeopardize the continued existence of these three federally listed species, and accepts VAFB compliance with the Endangered Species Act for the proposed permit action.

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<sup>2</sup> The Corps' geographic scope of analysis ("action area") includes the proposed work areas within the lateral limits of the ordinary high water mark and their adjacent wetlands ("permit area"), as well as "upland" areas immediately adjacent to the permit area for purposes of staging, storage, or access.

**Public Hearing-** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

### **Proposed Activity for Which a Permit is Required**

**Basic Project Purpose-** The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material into a special aquatic site (e.g., wetlands, pool and riffle complex, mudflats, coral reefs). The basic project purpose for the proposed project is bridge replacement, which is not considered a water dependent activity.

**Overall Project Purpose-** The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose for the proposed project is to replace the existing 2-lane 13<sup>th</sup> Street Bridge with a 2-lane elevated bridge that will meet vehicle loading requirements for specialized missile/spacecraft transporters, normal highway loading, current seismic loading standards, capacity for a 100-year flood event, and meet Leadership in Energy & Environmental Design (LEED) specifications.

### **Additional Project Information**

**Project description-**The existing 13th Street Bridge was constructed in 1970. It serves as the only on-base transport route and vehicle link between the north and south portions of VAFB and is a critical transportation link to support several VAFB programs. The bridge also supports utilities, including essential communication lines between North and South VAFB. In 1981, the bridge was retrofitted due to structural deficiencies and inadequacy of the foundation to accommodate standard highway loading. In 2002, Penfield & Smith & Bengal Engineering evaluated the structural integrity of the bridge and found that the bridge was still unsafe for normal highway loads and at significant risk of collapse during a 5-year storm event (Penfield & Smith & Bengal 2002). During the summer of 2003, an emergency action was initiated to add micro-piles to support the existing steel pilings that were exposed due to continued degradation of the structure (USAF 2003). Additional rock riprap was placed along both the north and south channel banks in September 2005. These temporary repairs were designed to protect the existing bridge from imminent collapse during a 5-year storm event. However, the repairs were not designed to protect the bridge from collapse during larger storm events. In addition, the bridge is susceptible to collapse during a magnitude 4.0 (Richter scale) or larger earthquake and is structurally overstressed when large trucks (i.e., a standard 18-wheel truck with load) are required to transit across the bridge (Metcalf & Eddy, Inc., 2007).

If the bridge is not replaced, impacts to space launch missions and increased safety and security risks would continue. Eventual collapse of the existing structure is unavoidable, which would sever the communications and utility links between North and South VAFB, temporarily stopping space launch operations and potentially causing loss of life and expensive mission assets. Long detours over a public roadway would be required for all traffic, causing considerable delay and loss of productivity for all personnel working on South VAFB and incurring additional costs for permitting and transport of hazardous cargoes.

The proposed project includes three elements, described below: 1) construction of a new bridge on 13th Street over the Santa Ynez River and corresponding approach roads; 2) demolition and removal of the existing 13th Street Bridge and existing approach roads; and, 3) wetland restoration in a designated location within the Santa Ynez River estuary.

Prior to commencing bridge construction or demolition, the project site would be dewatered by installing upstream and downstream dams and pumping the water within the project area out of the channel to the adjacent agricultural field. Integrated into the process of dewatering would be the diversion of the active river channel through culverts passing through the project site to keep soil and construction materials out of the river as well as prevent flowing water from flooding the column excavations. The culverts would be maintained throughout the new bridge construction period. Once dewatering is complete, the project site would use clean soil and rock to construct temporary roads to access the construction and demolition sites. Once the temporary access roads have been completed, additional dewatering may need to occur during the installation of the bridge foundations. This water would also be pumped to the adjacent agricultural field within the project area (VAFB, June 2014).

Staging areas would be established on the terrace above the riparian corridor for storage of equipment, materials, and temporary personnel facilities and office trailers, as well as establishing a dewatering area with berms and a percolation reservoir. Temporary access roads would be constructed into the riparian corridor and riverbed to enable construction equipment, materials, and temporary supports to be moved into position for utilization during construction. The temporary access roads would be installed across the riverbed on both sides of the proposed new bridge location and be approximately 50 ft wide to accommodate cranes and other construction equipment. Clean soil, gravel, and shale would be used for the access roads to construct a firm surface capable of supporting travel by heavy construction equipment. Construction would also include the installation of temporary falsework in the river channel to form and cast the new bridge deck. A partial trestle might also be constructed to provide additional access and support during bridge construction. The trestle would be designed to withstand a five to ten year flood event and may be left in place over the rainy season if construction has not been completed prior to the onset of a significant rainfall event (0.5 inches during a 24 hour period) (VAFB, June 2014).

Construction of the new bridge and demolition of the existing bridge would begin in late spring or early summer 2015 and last approximately twelve to twenty months. Construction activities in the river channel would be completed or paused prior to the forecast and onset of significant rainfall (0.5 inches within a 24 hour period) and all temporary fill, water diversion, and materials placed in the river channel would be removed. As proposed, some construction activities may continue on the upper banks during the rainy season (installation of decking, conduit, and approach roads, etc.). Demolition and removal of the existing approach roads would begin in late spring or early summer 2016 and last between five and six months. If required by regulatory agencies, wetland restoration at the off-site restoration area in the Santa Ynez River Estuary would begin after construction and demolition activities for the bridge had been completed and final project impacts assessed.

The proposed bridge abutments would be anchored at the top of the slopes on the north and south banks. The existing banks and the new approach fills would be protected from erosion and scour. The new north abutment would be protected by adding approximately 12.5 ft of rock riprap, as well as leaving the existing rock riprap, gabion baskets, concrete, and steel wall associated with the existing north abutment in place. The south abutment would be protected by installing approximately 12.5 feet of new ungrouted rock riprap at the base of the abutment. The embankments for the new approach roadways would also receive rock slope protection. The rock slope protection for the new approach roadways would be soil capped and planted with interspaced native vegetative, including willow

cuttings, installed during construction. The rock riprap would be embedded below the toe of the bank and soil would be excavated and removed from the embankments to place the rock riprap. A layer of excavated soil, mixed with native plant material, would be placed on top of the excavated embankments to promote native plant growth. As proposed, there would be two supporting piers, both within the channel (between 200 and 270 ft apart), as opposed to the current bridge that has eight piers spaced 60 ft apart. Scour protection at the piers would not be necessary, as fewer piers would reduce the scour potential and velocity of flows under the bridge, in contrast to the current piers that require substantial riprap scour protection.

Table 1: Proposed Temporary and Permanent Impacts to Waters of the U.S.

Category	Impact Type		Total Impacted
	Temporary	Permanent	
<b>Jurisdictional Wetlands (acres)</b>	<b>0.5793</b>	<b>0.6819</b>	<b>1.2612</b>
<i>Fresh Water Marsh</i>	<i>0.4130</i>	<i>0.4514</i>	<i>0.8644</i>
<i>Willow Riparian-Fresh Water Marsh</i>	<i>0.0376</i>	<i>0.0833</i>	<i>0.1209</i>
<i>Willow Riparian</i>	<i>0.1287</i>	<i>0.1472</i>	<i>0.2760</i>
<b>Non-Wetland Waters (acres)</b>	<b>1.2160</b>	<b>0.4185</b>	<b>1.6345</b>
<i>Fresh Water Marsh</i>	<i>0.0427</i>	<i>0</i>	<i>0.0427</i>
<i>Willow Riparian</i>	<i>0.8123</i>	<i>0.3179</i>	<i>1.1302</i>
<i>Central Coast Scrub</i>	<i>0.0014</i>	<i>0.0014</i>	<i>0.0028</i>
<i>Non-Native</i>	<i>0.0530</i>	<i>0</i>	<i>0.0530</i>
<i>Open Water</i>	<i>0.140</i>	<i>0.0389</i>	<i>0.1796</i>
<i>Anthropogenic (Developed)</i>	<i>0.1660</i>	<i>0.0603</i>	<i>0.2262</i>
<b>Waters of the U.S.: Total (acres)</b>	<b>1.7953</b>	<b>1.1004</b>	<b>2.8958</b>
<b>Waters of the U.S. (linear feet)</b>	<b>851.1</b>	<b>398.5</b>	<b>1,249.5</b>
<i>Main Channel (linear feet)</i>	<i>623.1</i>	<i>122.5</i>	<i>745.5</i>
<i>Secondary Channel (linear feet)</i>	<i>228.0</i>	<i>276.0</i>	<i>504.0</i>

**Proposed Mitigation**– The proposed mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. In consideration of the above, the proposed mitigation sequence (avoidance/minimization/compensation), as applied to the proposed project is summarized below:

**Avoidance and Minimization:** In order to avoid and minimize potential adverse effects upon federally-listed species and water quality, the applicant proposes to implement a comprehensive monitoring plan and adaptive management strategy referenced below, including seasonal timing restrictions, listed species monitoring & relocation, construction site dewatering/diversion/exclusion, erosion and sedimentation controls, water quality monitoring, and agency coordination:

- Avoidance and Minimization Measures 1 through 27 (Biological Opinion, USFWS, September 2014);
- Minimization and Monitoring Measures 1 through 11 (Section 1.3.6.1), Minimization and Monitoring Measures 1 through 12 (Section 1.3.6.2), and Minimization and Monitoring Measures 1 and 2 (Section 1.3.6.4) (Biological Opinion, NMFS, December 2014);
- Preparation of a Storm Water Pollution Prevention Plan (SWPPP) as part of the National Pollutant Discharge Elimination System (NPDES) General Construction permit, a Soil Erosion

and Sediment Control Plan, and a hazardous waste spill prevention and containment plan. Both plans would be implemented in accordance with applicable local, state, and Air Force guidelines to minimize storm water runoff and erosion. The SWPPP shall incorporate all feasible BMPs to reduce erosion from project related activities, to prevent sediment in storm water discharges, and to minimize non-storm-water pollutants at the project site to the maximum extent feasible. Physical water quality controls may include silt fences, temporary grass cover, interceptor ditches, coconut or jute fiber rolls, erosion control mats, temporary downstream catchment basins.

Compensation: In order to compensate for unavoidable impacts to waters of the U.S., VAFB proposes to conduct habitat creation (establishment), restoration, enhancement, and preservation within the construction & demolition footprint (on-site) as well as habitat creation (establishment), restoration, enhancement, and preservation at an off-site location within the Santa Ynez River estuary, located approximately 2 miles downstream of the proposed project. Please see Tables 2 & 3 below.

Table 2: Proposed Mitigation within the (On-site) 13<sup>th</sup> Street Bridge Construction/Demolition Footprint

Habitat Type	Pre-Project	Action				Post-Restoration	Change
		Created	Enhanced	Restored	Preserved		
<b>Fresh Water Marsh (All)</b>	<b>0.9071</b>	<b>0</b>	<b>0</b>	<b>0.9729</b>	<b>0.2316</b>	<b>1.2045</b>	<b>+0.2974</b>
<i>Fresh Water Marsh-Aquatic</i>	<i>0.6235</i>	<i>0</i>	<i>0</i>	<i>0.9729</i>	<i>0.1611</i>	<i>1.1340</i>	<i>+0.5105</i>
<i>Fresh Water Marsh-Terrestrial</i>	<i>0.2836</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0.0705</i>	<i>0.0705</i>	<i>-0.2131</i>
<b>Willow Riparian-Fresh Water Marsh (All)</b>	<b>0.1209</b>	<b>0</b>	<b>0</b>	<b>0.3017</b>	<b>0.0142</b>	<b>0.3159</b>	<b>+0.1950</b>
<i>Willow Riparian-Fresh Water Marsh-Aquatic</i>	<i>0.0847</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0.0088</i>	<i>0.0088</i>	<i>-0.0759</i>
<i>Willow Riparian-Fresh Water Marsh-Terrestrial</i>	<i>0.0361</i>	<i>0</i>	<i>0</i>	<i>0.3017</i>	<i>0.0054</i>	<i>0.3071</i>	<i>+0.2709</i>
<b>Willow Riparian (All)</b>	<b>5.3681</b>	<b>0</b>	<b>0</b>	<b>2.4298</b>	<b>0.9172</b>	<b>3.3469</b>	<b>-2.0212</b>
<i>Willow Riparian</i>	<i>3.1086</i>	<i>0</i>	<i>0</i>	<i>2.4298</i>	<i>0.8098</i>	<i>3.2395</i>	<i>+0.1310</i>
<i>Willow Riparian-on Riprap</i>	<i>0.6746</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>-0.6746</i>
<i>Willow Riparian-on Sandbar</i>	<i>0.3451</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0.1074</i>	<i>0.1074</i>	<i>-0.2377</i>
<i>Willow Riparian-Senescing</i>	<i>1.2399</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>-1.2399</i>
<b>Central Coast Scrub</b>	<b>4.0632</b>	<b>0</b>	<b>0</b>	<b>5.1372</b>	<b>0.0303</b>	<b>5.1675</b>	<b>+0.4943</b>
<b>Understory</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.2669</b>	<b>0</b>	<b>0.2669</b>	<b>+0.2669</b>
<b>Non-Native (All)</b>	<b>14.5213</b>	<b>0.8158</b>	<b>0</b>	<b>12.3400</b>	<b>0.0303</b>	<b>13.1861</b>	<b>-1.3353</b>
<i>Non-native Grassland</i>	<i>13.3008</i>	<i>0.8158</i>	<i>0</i>	<i>12.3400</i>	<i>0.0303</i>	<i>13.1861</i>	<i>-0.1147</i>
<i>Non-native Broadleaf</i>	<i>1.0318</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>-1.0318</i>
<i>Non-native Woodland</i>	<i>0.1888</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>-0.1888</i>
<b>Open Water</b>	<b>0.1796</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0596</b>	<b>0.0596</b>	<b>-0.1200</b>
<b>Anthropogenic (All)</b>	<b>5.9085</b>	<b>5.0631</b>	<b>0</b>	<b>3.0681</b>	<b>0</b>	<b>8.1312</b>	<b>+2.2227</b>
<i>Agricultural Field</i>	<i>2.0770</i>	<i>0</i>	<i>0</i>	<i>2.0539</i>	<i>0</i>	<i>2.0539</i>	<i>-0.0231</i>
<i>Ruderal</i>	<i>1.3355</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>-1.3355</i>
<i>Developed</i>	<i>2.4959</i>	<i>5.0631</i>	<i>0</i>	<i>1.0142</i>	<i>0</i>	<i>6.0773</i>	<i>+3.5814</i>

Table 3: Proposed Mitigation within the (Off-site) Restoration Area, Santa Ynez River Estuary



Habitat Type	Existing	Impacted	Restoration Gains	Post-Action	Net Gain/Loss
Coastal Salt Marsh	2.34	1.40	4.02	4.94	2.60 <sup>1</sup>
CSM-middle	0.10	0.09	4.02	4.02	3.92
CSM-upper	2.21	1.31	0	0.89	-1.32 <sup>1</sup>
CSM-middle/upper	0.03	0	0	0.03	0
Central Coast Scrub	4.21	1.67	2.80	5.34	1.13
Native Grassland	0.01	0.01	0	0	-0.01
Degraded Habitats	1.58	0.57	0	1.03	-0.55
CSM-upper / NNB	0.09	0.06	0	0.03	-0.06
CSM-upper / NNG	0.16	0.02	0	0.15	-0.01
CCS / NNB	0.49	0.45	0	0.04	-0.45
NG / NNB	0.84	0.04	0	0.81	-0.03
Non-native Habitats	10.94	3.21	0	7.73	-3.21
NNB	10.54	2.81	0	7.73	-2.81
RUD	0.40	0.40	0	0.00	-0.40
Other Categories (inclusive of above categories)					
Jurisdictional Wetlands and Waters of the U.S.	0.09	0.09	4.02	4.02	3.93

1. VAFB is pursuing the use of agricultural fields southeast of the project area as an alternate area for soil deposition. Use of this area will reduce loss of CSM-upper to 0.16 acres and increase net gain of Coastal Salt Marsh to 2.76 acres.

For additional information please call Aaron Allen of my staff at 805-585-2148 or via e-mail at [Aaron.O.Allen@usace.army.mil](mailto:Aaron.O.Allen@usace.army.mil). This public notice is issued by the Chief, Regulatory Division.



*Regulatory Program Goals:*

- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

**DEPARTMENT OF THE ARMY**  
**LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS**  
 DEPARTMENT OF THE ARMY  
 LOS ANGELES DISTRICT, CORPS OF ENGINEERS  
 VENTURA FIELD OFFICE  
 2151 ALESSANDRO DRIVE, SUITE 110  
 VENTURA, CALIFORNIA 93001

[WWW.SPL.USACE.ARMY.MIL/MISSIONS/REGULATORY](http://WWW.SPL.USACE.ARMY.MIL/MISSIONS/REGULATORY)



**Figure 1-1.** Regional location of Proposed Action Area.



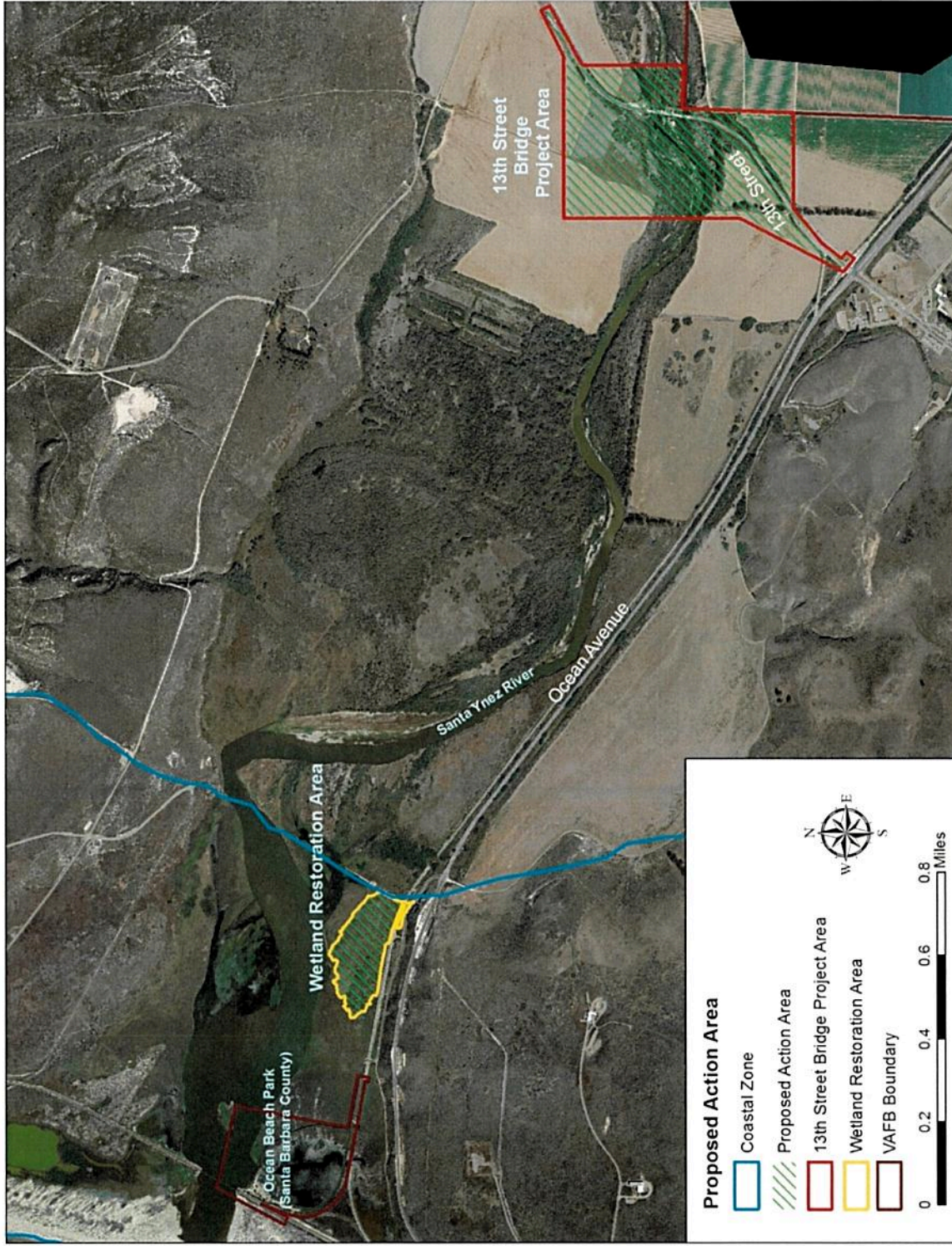
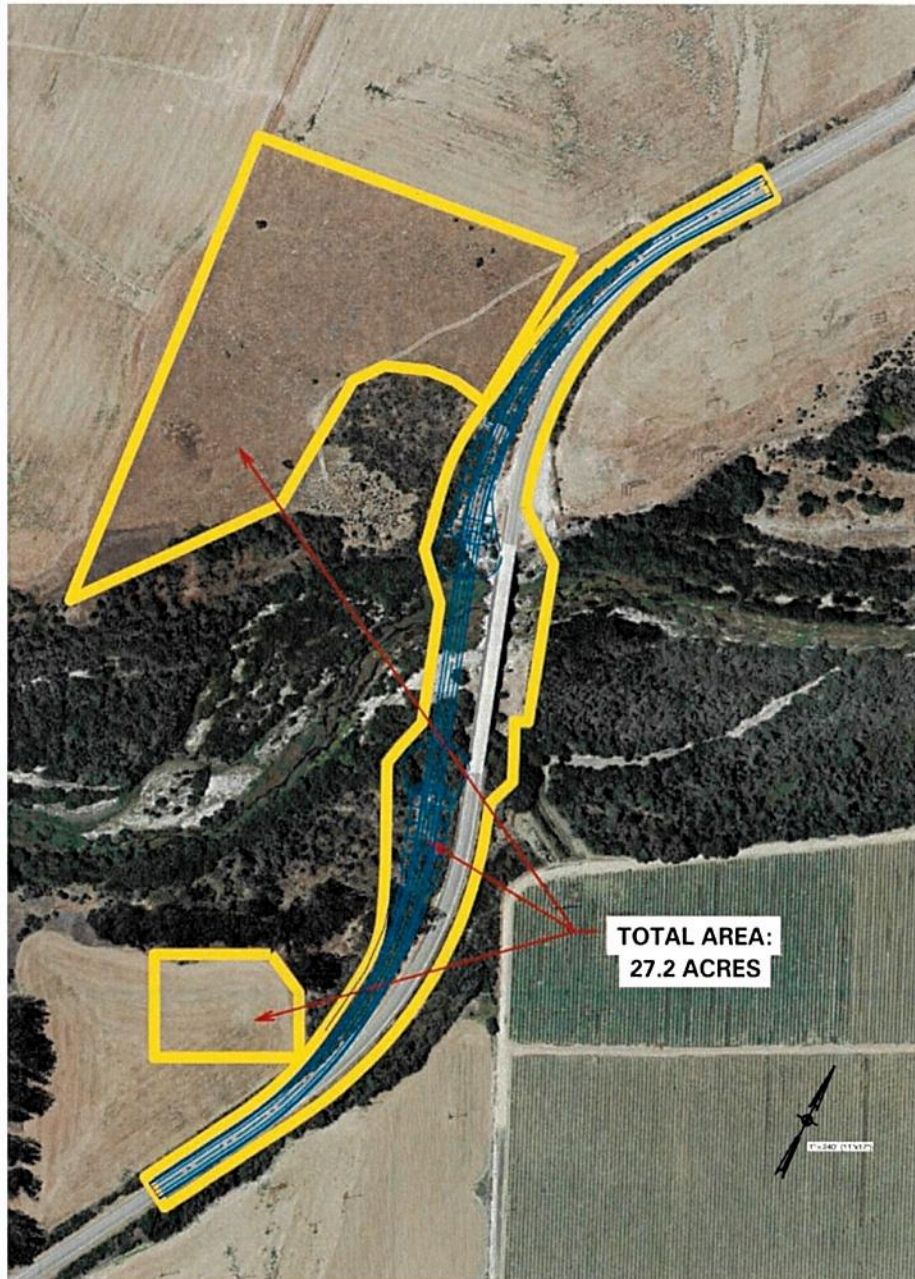


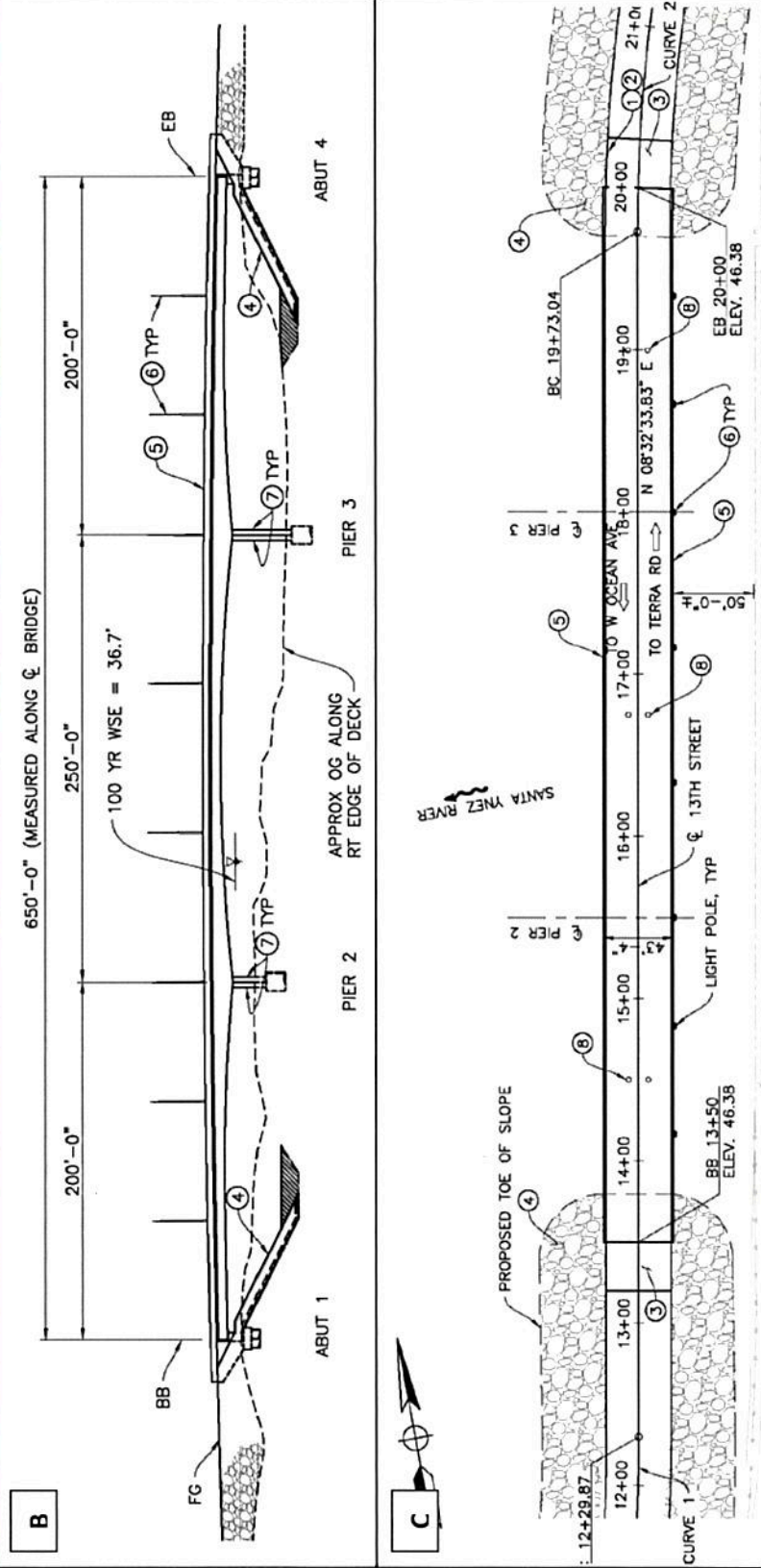
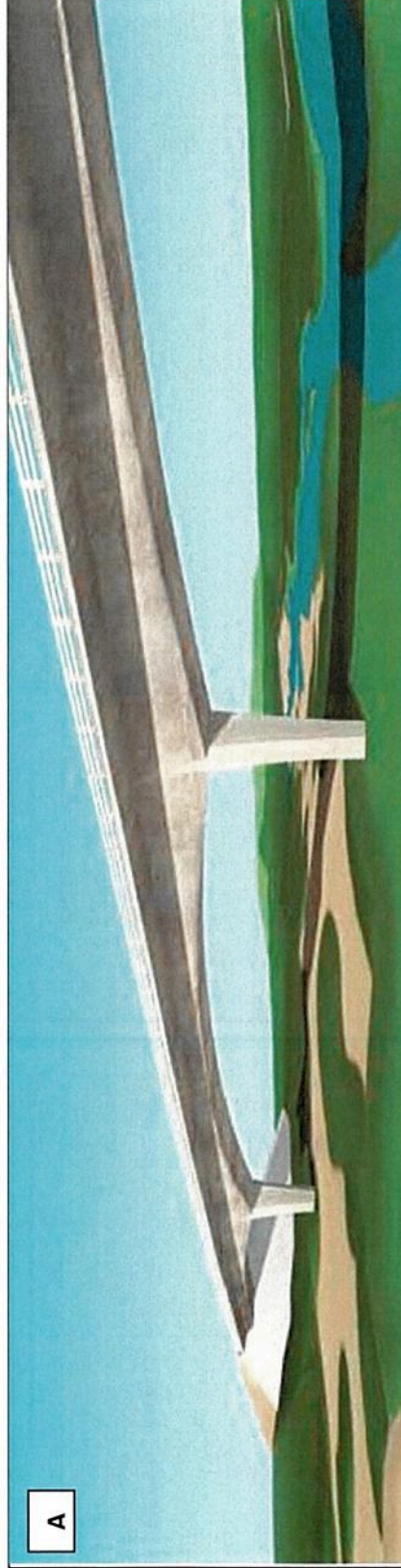
Figure 1-2. Proposed Action Area.





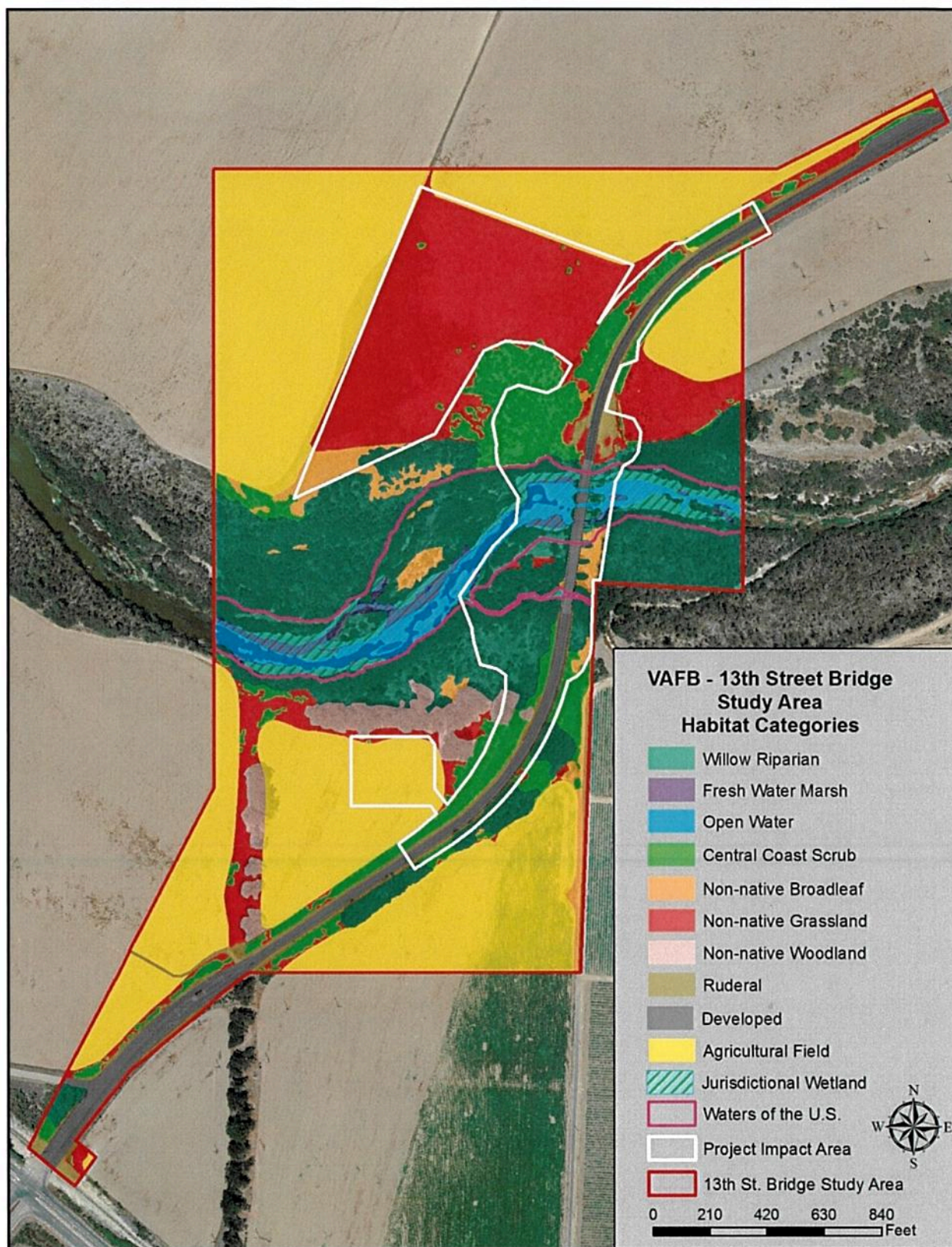
**APPROXIMATE PROJECT AREA**  
13th STREET BRIDGE REPLACEMENT PROJECT  
VANDENBERG AFB

**Figure 2-1.** Proposed project impact area of the 13th Street Bridge replacement and removal.



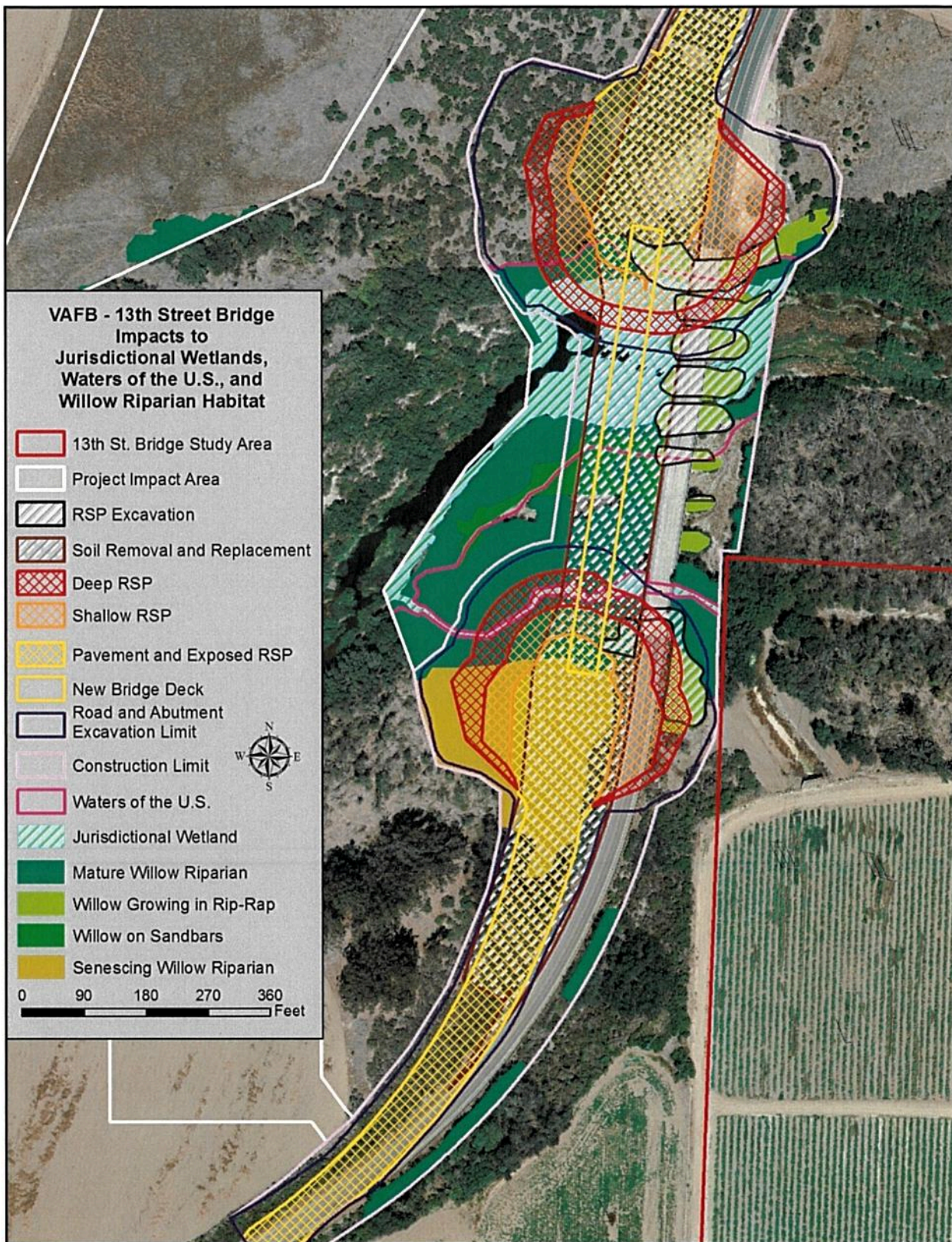
**Figure 2-3. New bridge design overview: A) Bridge rendering – profile view; B) refined design – top view.**





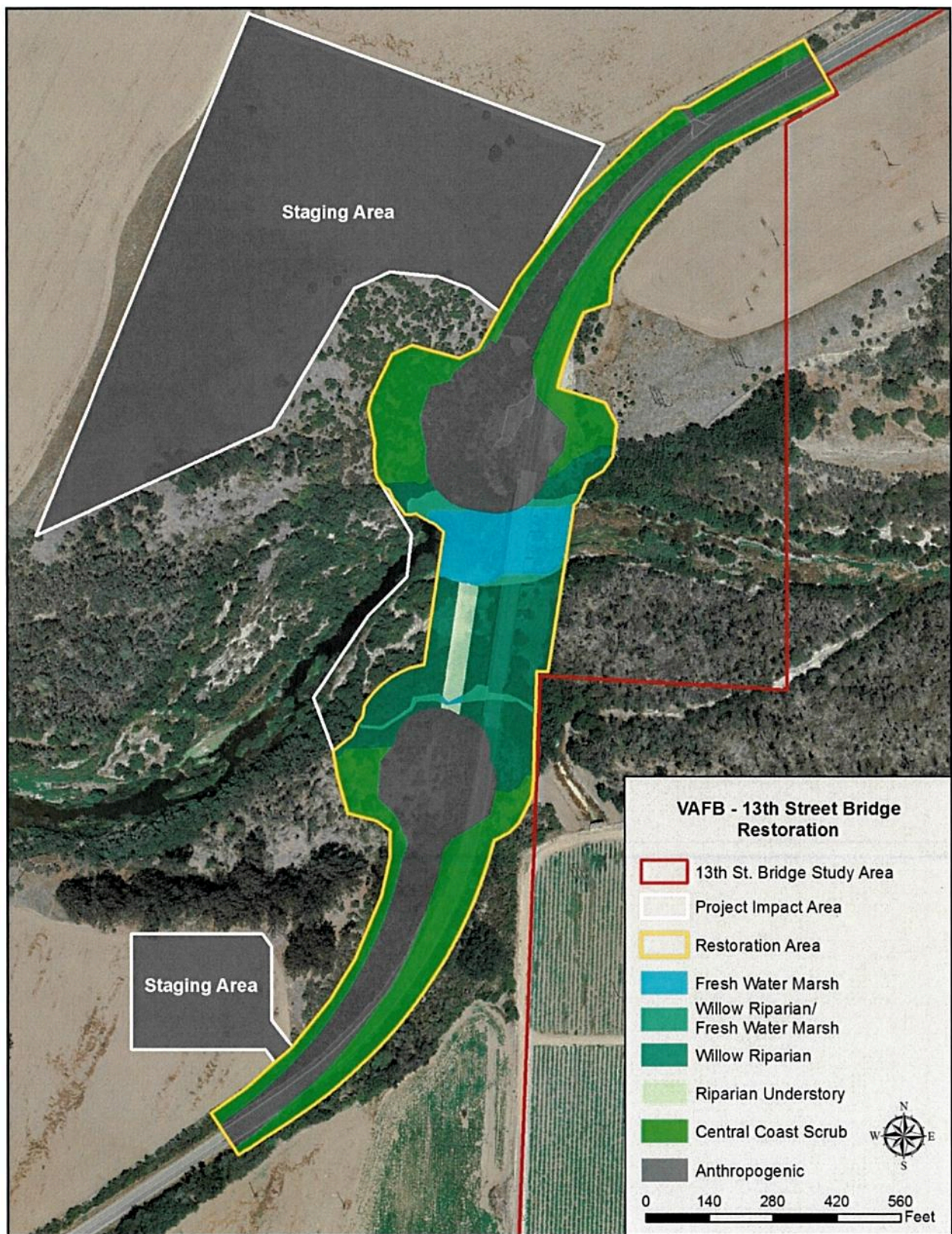
**Figure 3.** 13th Street Bridge Study Area habitat categories.





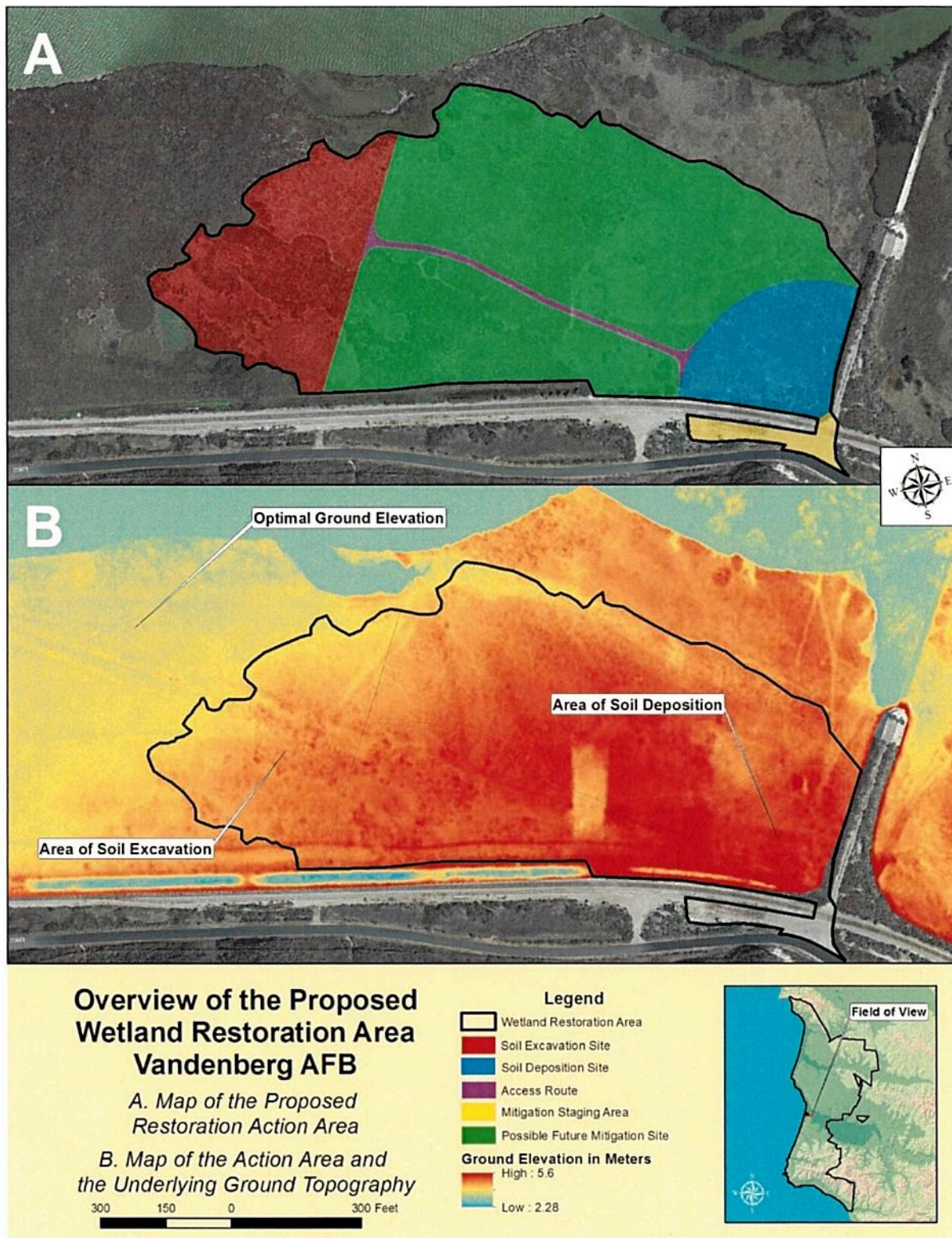
**Figure 7.** Construction impacts to Jurisdictional Wetlands, Waters of the United States, and Willow Riparian Habitats.





**Figure 8.** Proposed restoration areas.





**Figure 2-8.** Proposed Wetland Restoration Area and underlying topography.