Santa Barbara County Flood Control and Water Conservation District

Final Mitigated Negative Declaration
Santa Maria Airport Ditch Improvements Project

16NGD-00000-00014

February 15, 2017

Lead Agency and Project Proponent

County of Santa Barbara, Public Works Department, Flood Control and Water Conservation District
130 E. Victoria Street, Suite 200
Santa Barbara, CA 93101

Contact: Maureen Spencer
(805) 568-3440

Prepared by

RECON Environmental, Inc.
5951 Encina Road, Suite 104
Goleta, CA 93117

Contact: Bret McNulty
(805) 928-7907 x 187

Table of Contents

Figures

Tables

Photographs

1.0 REQUEST/PROJECT OVERVIEW

The Santa Maria Airport Ditch (SMAD) Improvements project (project) is a County of Santa Barbara Flood Control and Water Conservation District (District) project to repair erosion damage to an approximate 0.5-mile segment of the existing earthen flood channel located along the north side of Skyway Drive immediately southeast of the Santa Maria Public Airport (see Figure 1, Project Location Map below). The purpose of this project is to install drainage system improvements in the existing earthen and unlined portion of the trapezoidal drainage ditch to eliminate ongoing erosion that is threatening Skyway Drive. The proposed project will provide necessary improvements to the SMAD to improve the hydrology and drainage flow for future storm and flood events. The project encompasses reconstruction of the eroding 2,300-foot (0.5-mile) SMAD between the existing 60" cured-in-place pipe (CIPP) outfall at Auto Park Drive and the 10-foot-wide by 5-foot-high box culvert under Hagerman Drive located northeast of the Santa Maria Public Airport in northern Santa Barbara County (County).

1.1 PROJECT LOCATION

The project is located in the Fourth Supervisorial District, in the Orcutt Community Plan Area on the southern edge of Waller County Park, south of the City of Santa Maria, bounded by Skyway Drive and the Santa Maria Public Airport to the west.

The project site consists of the existing 2,300-foot (half-mile) SMAD earthen drainage channel segment, which runs southeast to northwest along the northern side of Skyway Drive between Auto Park Drive, and Hagerman Drive. The total project footprint is approximately five acres, bounded by Auto Park Drive to the east, Skyway Drive to the south, Hagerman Drive and a YMCA facility to the northwest, and Waller County Park to the north, as illustrated in Figure 1.

The Santa Maria Public Airport is located to the southwest across Skyway Drive and Airpark Drive. Two contractor staging areas totaling approximately one acre will be established within the project footprint, located adjacent to the northwest corner of the intersection of Skyway Drive and Auto Park Drive. Table 1 provides a summary of the project site information.

Map Source: County of Santa Barbara Public Works Flood Control and Water Conservation District (2016)

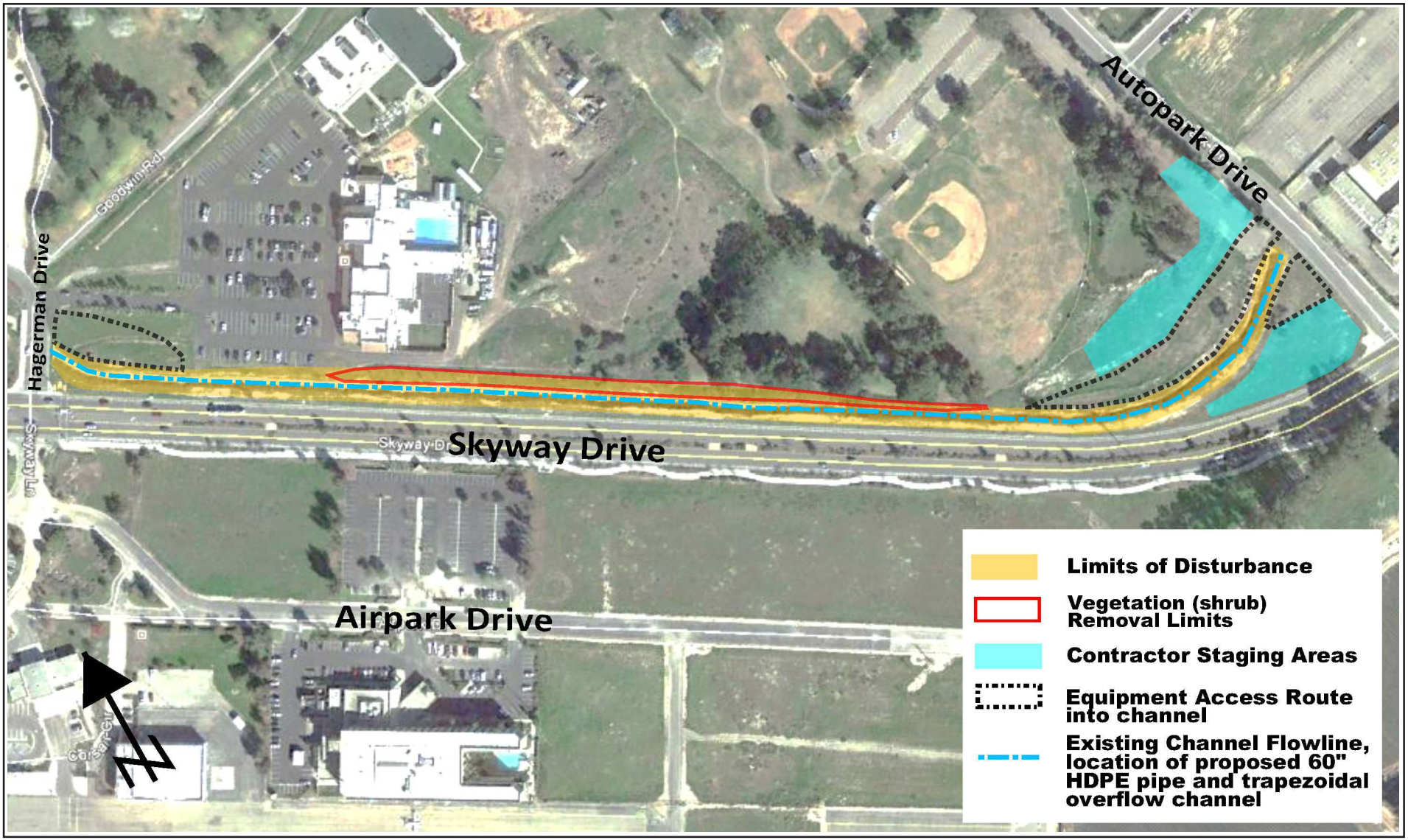


FIGURE 1

Santa Maria Airport Ditch Improvement Project

RECON

M:\JOBS4\7797\env\graphics\mnd\fig1.ai 08/03/2016 sab

Table 1 **Project Site Information**	
Comprehensive Plan Designation	County of Santa Barbara: Urban Area, Orcutt Community Plan Area, Existing Public or Private Park/Recreation and/or Open Space
Zoning District, Ordinance	County of Santa Barbara: Land Use Development Code Chapter 35 Section 35-1, (REC) Recreation
Site Size	Existing Channel: Approximately 2,300 feet (0.5 mile) Proposed Project: Approximately 2,300 feet (0.5 mile) Proposed Project Temporary Overall Disturbance Area – 5 Acres
Present Use & Development	Santa Barbara County Flood Control District – flood control channel/drainage ditch
Surrounding Uses/Zoning	North: County of Santa Barbara: Waller County Park (REC) South: City of Santa Maria: Airport Service III (AS-III) East: City of Santa Maria: General Commercial (C-2)/High Density Residential (R-3) with Planned Development Overlay West: City of Santa Maria: Airport Service III (AS-III)
Access	Auto Park Drive, Skyway Drive, and Hagerman Drive (Skyway Lane)
Public Services	Water Supply: Golden State Water Sewage: Laguna County Sanitation District Fire: County of Santa Barbara Fire Department Law Enforcement: County of Santa Barbara Sheriff's
2006 Orcutt Community Plan Zoning Overlays. 2014 Orcutt Community Plan Land Use Designations	

1.2 PUBLIC COMMENTS AND MND REVISIONS

In compliance with Section 15073 of the State Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines), the Santa Barbara County Flood Control & Water Conservation District accepted written comments on the adequacy of the information contained in the Draft Mitigated Negative Declaration (MND) during the public review period for 30 days beginning September 16, 2016, and ending on October 17, 2016.

CEQA Guidelines section 15074(b), requires the decision-making body to consider comments received on the Draft MND when approving the project. Copies of the comment letters are provided as Attachment G and the Notice of Availability as Attachment H.

Comment letters were received from the following parties:

- Governor's Office and Planning and Research, State Clearinghouse and Planning Unit (10/18/16);
- Santa Barbara County Air Pollution Control District (Comment letter dated 10/13/16);
- Santa Barbara County Air Pollution Control District (Suggested Conditions letter dated 10/13/16); and
- Native American Heritage Commission (10/17/16).

Revisions addressing comments received were made to sections 4.3 Air Quality, 4.4 Biological Resources, 4.5 Cultural Resources, and 4.9 Greenhouse Gas Emissions. Additional revisions adding project information were made to sections 3.0 Environmental Setting and 4.6 Energy. Revisions were also made to address non-substantive typographical errors in sections 4.5, 4.11, and 4.17. Revisions to the MND are shown in underline and ~~strikeout~~.

2.0 PROJECT DESCRIPTION

The SMAD is an earthen, District-maintained stormwater conveyance ditch designed to carry runoff and storm flows from a series of storm drains located in the unincorporated community of Orcutt. Currently, the SMAD has ongoing erosion exacerbated during storm and flood events which if left uncorrected may affect Skyway Drive and surrounding lands. The existing half-mile drainage channel is earthen with steep side slopes and is sparsely vegetated with ruderal plants. Unstable soils and a lack of infrastructure or stabilizing vegetation have resulted in areas of erosion within the SMAD channel. Photographs 1 through 8 show existing conditions at the project site.

Downstream of this half-mile portion of the earthen channel, the channel becomes concrete lined and eventually drains into a regional basin in the Betteravia sub-basin. Sediment deposition from channel bank erosion in the reach just upstream of the bridging culvert at Hagerman Drive impairs the channel's stormwater conveyance capacity and requires regular clearing. Continued erosion along the SMAD could lead to increased maintenance costs and hazardous conditions that could necessitate more intensive reconstruction efforts. Thus, the improvements are needed to reduce the potential risk of road and property damage and eventual overtopping of the channel.

Although a U.S. Army Corps of Engineers Hydrology Engineering Center River Analysis System (HEC-RAS) analysis of the existing system shows the channel has capacity to convey Q_{100}, the channel is actively degrading and sediment is being deposited in the relatively flat reach just upstream of the reinforced concrete box (RCB) (invert is buried). The HEC-RAS analysis shows velocities upstream of the RCB averaging 4.6 feet per second (fps) (9.1 fps maximum) and 6.4fps (12.3 fps maximum) in the unimproved reach downstream of the RCB. Background hydrology information from the Orcutt Drainage Master Plan (July 1992) and the Federal Emergency Management Agency Letter of Map Revision (FEMA LOMR) (Order No. 11024.01, Nov. 1194) indicates that the Q_{100} flows in the channel run between 292 cubic feet per second (cfs) to 334 cfs.

The specific project components include the following:

Channel Improvements. The District is proposing to construct a combination buried pipe and trapezoidal overflow channel for the SMAD. Specifically, the proposed combination system consists of a 60-inch high-density polyethylene (HDPE) storm drain overlain by a 8-to-16-foot-wide by 2-to-3-foot-high earthen trapezoidal channel with 3H:1V (horizontal: vertical) side slopes. Both the pipe and trapezoidal channel will outfall just upstream of the existing box culvert under Hagerman Drive. A minor vegetated overflow swale is proposed at the ground surface above the pipe.

PHOTOGRAPH 1
Views of SMAD Looking East Towards Waller County Park

PHOTOGRAPH 2
Views of Erosion of Bank at SMAD Curve

PHOTOGRAPH 3
Views of SMAD and Skyway Drive Looking Southeast

PHOTOGRAPH 4
Views of SMAD Along Skyway Drive Looking Northwest Toward Hagerman Drive (Santa Maria Public Airport Located to the Left and the YMCA to the Right and is visible between the trees)

PHOTOGRAPH 5
Views of SMAD Inlet Looking South Towards Staging Area

PHOTOGRAPH 6
Views of Project Staging Area Looking East

PHOTOGRAPH 7
View Looking West Across SMAD and
Skyway Drive Toward Santa Maria Airport

PHOTOGRAPH 8
Views of Hagerman Drive Bridge Over SMAD Looking
Northwest Near YMCA Entrance and Monument Sign

As the District proposes to allow pipe flows to overflow into the trapezoidal SMAD open channel, the 60-inch reinforced concrete pipe (RCP) was not designed to carry capacity flows, but instead carry partially surcharged flows to the extent where when discharge reaches the ground surface and spills into the trapezoidal channel. In this configuration, the 60-inch RCP will convey 150 cfs to 210 cfs, and the trapezoidal channel carries 90 cfs to 150 cfs. The hydraulics of the storm drain and SMAD channel are currently being analyzed such that Q_{100} remains in the combined system with 1-foot freeboard.

All proposed excavation and construction of the new pipe and overflow channel will occur within the Limits of Disturbance along the 2,300-foot stretch of SMAD improvements between Auto Park Drive and Hagerman Drive, as depicted in Figure 1. Construction equipment will access the SMAD via earthen ramps excavated adjacent to the staging areas. Typical heavy construction equipment will be used to accomplish the work, including excavators, backhoes, compactors, front-end loaders, concrete trucks, and dump trucks.

Project Site Grading and Restoration. The proposed project will include the excavation and grading of approximately 225 cubic yards (cy) within the channel, removal of up to approximately 0.5 mile of vegetation north of the channel (predominately ice plant or bare ground with an occasional coyote brush), installation of the HDPE pipe, backfill and compaction around the pipe, and concrete work to construct the trapezoidal drainage ditch atop the buried HDPE pipe. Construction is scheduled for approximately 40 working days beginning in July or August 2017.

Once construction in the drainage channel concludes, the next phase of the project includes restoration of native plants along the northern side of the SMAD channel along the Waller Park boundary. Restoration will be facilitated by removal of the non-native and ruderal species in that location as shown in Figure 1.

Construction Fleet and Personnel. Table 2 shows the estimated construction equipment and dump truck trips, personnel, and days necessary to complete the project.

Table 2
Estimated Construction Equipment and Personnel

Equipment	Quantity	Hours/Day	Number of Days	Total Hours
Hydraulic Tracked Excavators	2	6	31	372
Backhoes	2	6	32	384
Roller Compactors	2	6	10	120
Sheep's Foot Compactor	1	8	10	80
Loaders (Frontend)	2	8	5	80
Concrete Pouring Equipment	1	8	2	16
Pickup Trucks	3	2	40	240
Truck Trailer	1	8	2	16

Table 2
Estimated Construction Equipment and Personnel

Equipment	Quantity	Hours/Day	Number of Days	Total Hours
Hand Compactors	2	8	7	112
Pumps	2	8	35	560
Chain Saws	2	8	2	32
Sawcutter	1	8	5	40
Total	**-**	**84**	**181**	**2,052**
Dump Truck(s) 225 cubic yard (cy) excavation at 10 cy/trip capacity	23 trips	8	3	24
Personnel	Quantity	Hours/Day	Number of Days	Total Hours
Foreman	1	8	40	320
960 Equipment Operators	3	8	40	960
Laborers	4	8	40	1,280
Total	**-**	**24**	**120**	**2,560**
Source: Santa Barbara County Flood Control and Water Conservation District				

3.0 ENVIRONMENTAL SETTING

3.1 PHYSICAL SETTING

Slope/Topography. The project site is relatively flat and the existing SMAD channel bottom ranges between 5 to 10 feet below the elevation of the pavement surface along Skyway Drive. The existing side slopes are typically inclined at approximately 1H:1V (horizontal:vertical) and locally inclined near vertical (Fugro 2015). The site elevation ranges between 250-255 feet above mean sea level (asml).

Fauna and Flora. The habitats within the immediate project site vicinity are barren and/or ruderal lands, non-native grasslands, coastal scrub, and landscaped/developed. The habitats within 2 kilometers (1.2 miles) of the project site include those within the project site, with the addition of irrigated row and field crops, landscaped closed-cone pine-cypress woodland, eucalyptus woodland, wetland/marsh, vernal pool, streams and stock ponds.

Along the 1.3-meter buffer on both sides of the SMAD, the flora consists of ruderal, annual grassland and eucalyptus woodland habitats. Three moderately-sloped drainages into the ditch were observed along the northwestern SMAD wall where ingress/egress by small terrestrial animals were observed and rodent burrows are present in both walls of the ditch in high densities (Sequoia 2016). The project site is disturbed from surrounding urban development and periodic maintenance of the SMAD. A historically recorded breeding pond for California tiger salamander (CTS; *Ambystoma californiense*) Santa Barbara Distinct Population Segment (DPS), is located approximately 200 meters south-southeast of the Santa Maria Public Airport, and approximately 890 meters south-southwest of the project. Consequently, a site assessment for the species was

conducted according to the *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (USFWS 2003). See Attachment A for the report and details of the site assessment.

Archaeological and Historical Sites. The nearby Santa Maria Public Airport was constructed in the early 1940s, during World War II and was then known as the Santa Maria Army Base. A record search revealed that no records of known resources exist on the SMAD project site (Attachment B).

***Soils*.** Soils along the existing SMAD channel alignment generally consist of slightly to highly cemented silty and clayey sands (Fugro 2015). Near Auto Park Drive, the existing channel slopes/walls consist of approximately 3 to 5 feet of alluvium or possible artificial fill overlying older alluvium sand dune deposits (Fugro 2015). The thickness of possible artificial fill material increases along the SMAD moving towards Skyway Drive approximately 2 to 3 feet below the existing channel bottom elevation and most soils encountered onsite exhibit a degree of cementation (Fugro 2015) (Attachment C).

Surface Water Bodies. No surface water bodies are located within the immediate project vicinity, including wetlands, riparian areas, ponds, springs, creeks, rivers, lakes, and estuaries. The existing SMAD channel is not environmentally sensitive as it was built to convey floodwaters. The District maintains the SMAD, including removing debris, and sediment buildup. The nearest surface water bodies are small ponds located over 0.6 mile north and south of the project site.

Surrounding Land Uses. The YMCA and Waller County Park and baseball fields are located immediately north of the SMAD project site. To the south and southwest are Skyway Drive and the Santa Maria Public Airport. To the east are Auto Park Drive and commercial and residential land uses. Agricultural fields are located southeast across Skyway Drive.

Waller Park Master Plan. The Waller Park Master Plan (Park Master Plan) was approved by the County Board of Supervisors in 2011. The Park Master Plan calls for construction of a new park entrance road to be constructed along the north side of the SMAD. Implementation of the Park Master Plan has not been scheduled and no funds have been allocated for construction of the new entrance road. Future Park Master Plan improvements will be reviewed for CEQA compliance when funding is available and project plans are prepared prior to construction.

Existing Structures. The existing SMAD channel is currently unlined and earthen. The SMAD is approximately 2,300 feet long with an existing 10-foot-wide by 5-foot-high box culvert under Hagerman Drive (Waller County Park entrance) and a 60-inch CIPP outfall near the intersection of Skyway Drive and Auto Park Drive. The existing channel bottom ranges from approximately 5 to 10 feet below the elevation of the pavement surface along Skyway Drive. Existing slide slopes are typically inclined at 1H:1V (horizontal:vertical) but are locally inclined near vertical. Portions of the channel walls have been undercut by scour resulting in significant erosion and sloughing (Fugro 2015). In some areas of the channel, walls have been undercut by erosion resulting in a cut-bank condition with up to 1 to 2 feet of erosion beyond the face of the channel (Fugro 2015). Remnants of concrete of unknown purpose are located in the channel.

3.2 OTHER PENDING AND APPROVED PROJECTS

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

3.2.1 Santa Barbara County

The following list in Table 3 details similar projects recently approved or under review by the County of Santa Barbara located within the Orcutt Community Plan area and region.

Table 3
County of Santa Barbara – Cumulative Public Works Projects List

	Project Name	Status	Description
Santa Maria			
1	Blosser Basin	Future Pending	This project consists of constructing a pipeline to drain the Blosser Basin. The Blosser Basin is currently drained and dried out by either percolation through its earthen bottom or by pumping water out of the Basin and into the Blosser Ditch, an earthen channel that takes drainage towards the Santa Maria River. Water introduced into the Blosser Ditch tends to promote vegetation that must be continually maintained. The constructed pipeline will take water from the Basin to the Santa Maria River without allowing the water to flow within the Blosser Ditch.
2	Unit Two Channel Improvements	Future Pending-2017	This project is intended to increase the hydraulic capacity of the Unit 2 (earthen) channel by realigning the channel to remove a sharp S curve "kink" and widening approximately 5000 linear feet of channel. The section of channel considered for widening varies in existing bottom width of 8 to 12 feet and is preliminarily planned to be increased to a bottom width of 20 feet. This project will require real property acquisition from, and coordination with, adjacent farmland property owners.
3	West Green Canyon 72" Extension	Future Pending-2017	This project will complete the construction of a 72" diameter reinforced pipe culvert through the Santa Maria River levee at the Unit II channel.
4	Santa Maria River Levee Reinforcement	Completed 2010-2014	Phases 1 & 2 Completed 2010, Phase 3 Completed 2014 This project reinforced the Santa Maria River levee against levee failure. The first two phases of this project consisted of reconstructing the face of the levee with soil cement reinforcement and/or sheet pile the length of the levee from Bradley Canyon to just west of Blosser Road (approximately 6.3 miles). The third phase of the project reinforced the Bradley Canyon levee upstream of the Santa Maria River.

Table 3 **County of Santa Barbara – Cumulative Public Works Projects List**			
5	Santa Maria River Riparian Enhancement	Completed 2008	This project consisted of planting willows along sections of the levee vulnerable to river erosion, thus helping to protect the levee while creating valuable riparian habitat. This was a cooperative project between the Flood Control District, the Cachuma Resource Conservation District and the National Fish and Wildlife Foundation administering the grant funding which was part of the UNOCAL Guadalupe settlement
Orcutt			
1	RB7 Outlet Works	Future Pending	This project consists of acquiring permanent easements and constructing a storm drain under Blosser Road south of Foster Road. The new storm drain will be approximately 300 feet long and will discharge flow from a future retention basin (RB7) to be built by the Santa Maria Airport District. The existing drainage facilities are inadequate for the amount of stormwater runoff received. During storm events, excess storm water runoff inundates Blosser Road and adjacent properties. Construction of this culvert will reduce flooding impacts.
2	Mud Lakes Basin Siphon Improvement	Completed 2014	This project upgraded an existing 12" diameter siphon pipe outlet works at the Mud Lake Basin by replacing it with approximately 1,300 linear feet of new 18" gravity draining pipe.
Source: County of Santa Barbara Public Works Department. Accessed at http://cosb.countyofsb.org/pwd/default.aspx?id=3676			

3.2.2 City of Santa Maria

The list in Table 4 details similar projects recently approved or under review by the City of Santa Maria.

Table 4 **City of Santa Maria – Cumulative Public Works Projects List**			
	Project Name	Status	Description
Santa Maria			
1	Blosser Road Bioretention Project	Ongoing	Provide matching grant funds for the Blosser Road Bioretention Project to enhance the flood control channel in this area. The City was successful in passing Round 1 of the State Water Resources Control Board process and is seeking $1.9 million in grant funding.
2	Storm Drain Improvements	Ongoing	Improvements and repairs to various storm drain systems including the intersections of Western and Cook, Broadway and Betteravia, and various cross gutters throughout the City
3	Percolation Pond Expansion	Ongoing	Fund the planning, design, and construction of new percolation ponds on previously acquired land to the east of the Wastewater Treatment Plant, along with the purchase of equipment to transport the flow from the secondary clarifiers to the new percolation pond site, to be installed within a previously constructed percolation pond pump station.
Source: City of Santa Maria. Accessed at: http://www.cityofsantamaria.org/home/showdocument?id=6169			

3.3 ENVIRONMENTAL BASELINE

The environmental baseline from which the project's impacts are measured consists of the physical environmental conditions in the vicinity of the project, as described above. Additional baseline information is included as appropriate in the issue area discussions within Sections 4.1 to 4.17 below.

4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

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

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

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

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

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

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

4.1 AESTHETICS/VISUAL RESOURCES

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

Existing Setting: The SMAD project site is located approximately 1,000 feet southeast of the Santa Maria Public Airport terminals, in an urban area bounded by the intersection of Skyway Drive and Hagerman Drive entrance to the YMCA and the Auto Park Road entrance to the 153-acre Waller Park. Waller Park contains onsite visual resources with paved and natural trails that afford public views of two lakes, fountains, areas of open grassland, mature trees, ball fields, volleyball courts, playgrounds, and picnic areas.

The site is located within an urban area, primarily surrounded by developed recreational, residential, and commercial buildings in both the City of Santa Maria and County. Skyway Drive runs along the southern edge of the SMAD channel and serves as an arterial road connecting commercial, industrial, and business parks around the airport. The proposed project site is an existing drainage ditch with no improvements along its existing 2,300-foot (half-mile) channel. Haggerman Drive marks the westernmost extent of the project crossing the SMAD via an existing rectangular concrete bridging culvert. The SMAD's easternmost extent is marked by a buried pipe that conveys floodwater onto channel. The channel is dry except during storm events and very little vegetation grows within the channel itself. The existing SMAD has steeply erosive sides with vegetation (ice plant, coyote bush, and ruderal vegetation) along the north side of the ditch. The project site contains no structures other than the bridging culvert and pipe, except for the parking area at the easternmost side of Waller Park that will be a part of the project staging area.

County Environmental Thresholds. The County's Visual Aesthetics Impact Guidelines classify coastal and mountainous areas, the urban fringe, and travel corridors as "especially important" visual resources. A project may have the potential to create a significantly adverse aesthetic impact if (among other potential effects) it would impact important visual resources, obstruct public views, remove significant amounts of vegetation, substantially alter the natural character of the landscape, or involve extensive grading visible from public areas. The guidelines address public, not private views.

Impact Discussion:

a). Less than Significant with Mitigation. The approximately half-mile-long project construction and staging areas would be a highly visible from public roads and both sides of the SMAD due to the project's location along the south side of Waller County Park and the YMCA, and along the north side of Skyway Drive between the road and Waller Park. The construction and staging areas would also be visible from Autopark Drive on the east, where it travels past the east parking lot and the construction staging area and from Hagerman Drive on west where it crosses the SMAD at the Waller Park/YMCA entrance. Although construction on the project site is temporary and anticipated to last approximately 40 days, debris and trash associated with construction and demolition could accumulate onsite in areas visible to the public from roadways, Waller Park, and the YMCA, potentially creating an aesthetically offensive site open to public view. As such, debris and trash collected at the project site during construction may cause a public nuisance, litter public lands, and affect public views of the adjacent Waller County Park if it is allowed to accumulate onsite or blow offsite.

Implementation of **Mitigation Measure MM-AES-1**, requiring onsite management and removal of construction debris and trash, would ensure that this impact would be reduced to **less than significant with mitigation**.

b, d). Less than Significant. Public views in the project area predominately consist of flat, open space along roadways, trees and native/non-native grasses and vegetation. Views to the west of the SMAD and Skyway Drive include flat expanses of grassland and the Santa Maria Public Airport runway and facilities.

Views of Waller County Park located north of the project site are considered public and project related changes could potentially have a significant impact if views of the park were permanently altered from public areas. The project includes two temporary equipment staging areas totaling approximately 1 acre located immediately adjacent to the park's ballfields. The linear construction area itself will be approximately 5 acres.

The 0.5-mile construction and staging areas will temporarily change and potentially impact views of Waller County Park from the Skyway Drive travel corridor between Auto Park Drive and Hagerman Drive. Limited access to the SMAD by construction equipment from designated contractor staging areas adjacent to the intersection of Auto Park Drive and Skyway Drive would limit the visual impact of construction equipment. Following project construction, views of the area would be similar to those currently existing at the project site.

As shown in Figure 1 above, vegetation removal would be limited to an approximately 800-foot portion along the middle stretch of the channel. Specifically, the project would include excavation within the existing channel, removal of vegetation along the middle of the channel (predominantly ice plant or bare ground with occasional coyote brush).

Public views of the existing channel are available from the YMCA building, Waller Park, and vehicles traveling on Skyway Drive and Auto Park Drive; however, no official State or County designated scenic highways or scenic vistas are located in the project vicinity. Public views of the Pacific Ocean are not visible as it is located over 11 miles west from the project site, and public views of the Santa Ynez Mountains to the far east would not be obstructed as the project improvements are below ground-level.

The SMAD grading and improvements would be contained within the existing channel limits, which is located at or beneath ground level. The project is not expanding onto new land or constructing new structures above ground level and therefore would not alter the existing visual character of the site. Permanent channel structures and reconstruction of the SMAD would remain as part of the existing visual character of the area. As such, the improvements to the SMAD would appear as minor structural enhancements, and would be consistent with the surrounding low-lying development and urban neighborhood. The SMAD would not create an aesthetically offensive site by changing the visual character of the project site, or introduce visually incompatible structures. The proposed project would not introduce new structures that would intrude into the skyline or obstruct public views of the surrounding area. Other improvements to the existing channel include adding natural drainage swales, which may help improve the overall aesthetics of the SMAD and remove non-native plants. The project includes

restoration of native plants along the northern SMAD boundary with Waller Park which would result in an improved visual effect over the existing condition in that location.

As discussed in the project description, the project involves a combination of buried pipes, designed to flow into a trapezoidal overflow channel that would improve the eroded visual condition of the SMAD. The finished design would make the SMAD improvements appear subordinate, open, and would be located primarily below ground level. Therefore, the proposed project would have a **less than significant** impact on aesthetics and visual resources. No mitigation measures would be required.

c). No Impact. Project construction would occur during daytime hours only, and no additional lighting is proposed. The SMAD is a drainage channel and does not contain or propose any lighting features. As such, no glare or nighttime lighting from the proposed project would affect adjacent properties. Therefore, **no impact** from glare or night lighting would result.

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

MM-AES-1: Construction Site Debris Clean-up and Trash and Recycling Storage Containment

The developer shall clear the project site of all excess construction debris and trash daily to keep the site visually presentable throughout the construction phase of the project. In addition, a trash and recycling storage area shall be installed within the project staging area. The trash and recycling storage area shall be enclosed with temporary fencing of sufficient height and materials to screen the collection area from views from Waller Park, the YMCA, and adjacent roads. The debris, trash, and recycling storage area shall also be gated and all materials bins covered. The debris, trash, and recycling storage area shall be maintained in good repair, and shall be transferred to a solid waste facility on a weekly basis.

Plan Requirements and Timing: This requirement shall be noted on the final construction plans. The location(s) and design of trash and recycling storage area shall be denoted on project plans. The debris collection, trash and recycling storage area shall be installed prior to project construction and removed during Final Inspection Clearance.

Monitoring: The County project manager will ensure compliance with installation and that the site is inspected weekly ensure compliance with materials management requirements and removal from the site.

Cumulative Impacts: Considering the temporary and small-scale of the proposed project and that structural improvements of the SMAD are being located at, near, or below ground level, the project would not have significant cumulative impacts on aesthetics and visual resources. Temporary aesthetic construction impacts associated with trash, debris, and cleanup would be mitigated by **MM-AES-1**. Implementation of the project is not anticipated to result in a substantial change in the aesthetic character of the area since the proposed project involves improvements to stabilize an existing degraded drainage ditch and eliminate further degradation of the ditch. Therefore, the project combined with other similar projects or projects in the surrounding area would not result in any cumulatively considerable impacts on aesthetics or visual resources.

4.2 AGRICULTURAL RESOURCES

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

Existing Setting: The project site primarily consists of surrounding flat terrain with native and non-native vegetation and dirt shoulders. The State of California Farmland Mapping and Monitoring Program designates the area as "Urban and Built-Up Lands" (California Department of Conservation 2012). The immediate project area and adjoining areas are not used or suitable for agriculture. Agricultural operations are located approximately 450 feet south of the project site, but are separated from the project site by Skyway Drive.

County Environmental Thresholds: The County's *Environmental Thresholds and Guidelines Manual* (Revised July 2015b), Section 4 – "Agricultural Resource Guidelines," provides a methodology for evaluating agricultural resources. However, since there would be no potential for impacts to agricultural resources at the project site, these guidelines do not apply.

Impact Discussion:

***a, b). No Impact*.** The project site is identified as Urban and Built-up Land according to the California Department of Conservation Important Farmland Data Map (2012). The project site does not contain a combination of acreage and/or soils which render the site an important agricultural resource. The site adjoins agricultural land to the south that is separated by Skyway Drive. This separation of the project from the agricultural properties and the projects very limited scale would result in **no impact** to agricultural resources.

Cumulative Impacts: The project would have no direct or indirect impacts to adjacent agricultural operations or land that would not have a cumulatively considerable impact on agriculture when considered with cumulative projects in the region.

Mitigation and Residual Impact: No impacts are identified. Therefore, mitigation is not necessary and residual impacts would not occur.

4.3 AIR QUALITY

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?		X			
b. Excessive Long-term Operational Emissions?			X		
c. The creation of objectionable smoke, ash or odors?				X	
d. Extensive dust generation?		X			

Existing Setting: The project site is located in the South Central Coast Air Basin (SCCAB) which encompasses San Luis Obispo, Santa Barbara, and Ventura counties. The project is located just outside the City of Santa Maria City limits and in the Santa Barbara County portion of the SCCAB which periodically fails to meet air quality standards and has been designated a "non-attainment" area for the State 8-hour ozone standard and State particulate matter (PM_{10}) standard. On April 30, 2012, the County was designated unclassifiable/attainment for the 2008 Federal 8-hour ozone standard (the 1-hour Federal ozone standard was revoked for Santa Barbara County). The County is also considered in attainment for the State 1-hour standard for ozone as of June 2007. Ambient air quality monitoring indicates the County routinely exceeds the California 8-hour ozone standard and the California standard for PM_{10}. The County is unclassifiable/attainment for the Federal PM2.5 standard and unclassified for the California PM2.5 standard (based on monitored data from 2007 to 2009).

Air pollution control is administered on three governmental levels. The U.S. Environmental Protection Agency (EPA) has jurisdiction under the Clean Air Act, the California Air Resources Board (CARB) has jurisdiction under the California Health and Safety Code and the California Clean Air Act, and the Santa Barbara County Air Quality Pollution District (SBCAPCD) shares responsibility with the CARB for ensuring that all State and Federal ambient air quality standards are attained within the Santa Barbara County portion of the SCCAB.

The SBCAPCD and Santa Barbara County Association of Governments adopted the 2010 Clean Air Plan in January 2011, which was prepared to address the requirements of the California Clean Air Act. A 2013 Clean Air Plan was adopted on March 19, 2015 as a triennial update to the 2010 Clean Air Plan and indicates air quality is improving, and strategies for further air pollutant emissions reductions are focused on mobile sources, particularly marine shipping.

Overall, the project site is currently affected by emissions from existing mobile sources traveling on Auto Park Drive, Skyway Drive, and Hagerman Drive and from aircraft operations at the adjacent Santa Maria Public Airport.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 5 – "Air Quality Thresholds," address air quality, including thresholds for determining whether a proposed project would have a significant impact on air quality. The County has developed the following thresholds to determine the significance of long-term air emissions under the CEQA.

- Project emissions (mobile and stationary sources) greater than the daily trigger for offsets of 55 pounds per day for NO_X and ROC, and 80 pounds per day for PM_{10},
- Emit less than 25 pounds per day of NO_X or ROC from motor vehicle trips;
- Cause or contribute to a violation of any California or National ambient air quality standard (except ozone);
- Exceed the health risk public notification thresholds of the APCD; and
- Be inconsistent with the adopted 2013 Clean Air Plan.

No thresholds have been established for short-term impacts associated with construction activities. However, environmental documents must describe feasible mitigation measures to reduce or avoid potentially significant air quality impacts the SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents* has identified construction mitigation to address equipment emissions and site preparation.

~~The District employs standard dust control measures, including surface watering and limiting equipment speeds on unpaved areas during construction to prevent the generation of dust in a manner that would prevent air quality impacts. The County's *A Planner's Guide to Conditions of Approval and Mitigation Measures* includes dust control mitigation measures for all projects involving grading activities~~ Construction emissions for the project were estimated using the California Emissions Estimator Model (CalEEMod) (Attachment D). Long-term/operational emissions thresholds have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary source emissions (i.e., stationary boilers, engines, paints, solvents, and chemical or industrial processing operations that release pollutants).

Impact Discussion:

***a, d, c). Less than Significant with Mitigation*.**

Short Term Construction Emissions: The proposed project would require approximately 225 cy of earthwork in approximately 40 working days. Short-term construction activities would occur during grading and site preparation for SMAD improvements to the existing half-mile eroding channel.

The CalEEMod Version 2013.2.2 program calculated the worst-case scenario short-term construction emissions of 4.21 pounds per day of PM_{10} (Attachment D~~B~~). As shown in Table 5, earth-moving operations at the project site would not have the potential to result in significant

project-specific emissions of fugitive dust and PM_{10} with implementation of standard dust control measures that are required for all new development projects in the County.

Emissions of ozone precursors (NO_X and ROC) during project construction would result primarily from the onsite use of heavy earthmoving equipment. Using default values, the CalEEMod program calculated the worst-case scenario short-term construction emissions during summer of 61.42 pounds per day of NO_X and 6.99 pounds per day of ROC (Attachment DB). Due to the limited period that grading activities would occur on the project site of 40 approximate working days, construction-related emissions of NO_X and ROC would not be significant on a project-specific or cumulative basis.

However, due to the non-attainment status of the local air basin for ozone, the project would be required to implement measures recommended by the SBCAPCD to reduce construction-related emissions of ozone precursors to the extent feasible as detailed in **Mitigation Measure MM AQ-1**. Compliance with the equipment and vehicle exhaust reduction measure is routinely required for all new development in the County. The County does not have thresholds established for short-term construction emissions. However, the application of equipment exhaust reduction by the County and SBCAPCD would ensure potential air quality impacts from short-term construction emissions would be **less than significant with mitigation**

Airborne dust particles can be inhaled, and lodge deep in the lungs. Short-term respiratory problems can include pain, shortness of breath and difficulty breathing. Long-term problems can include decreased lung function, aggravated asthma, bronchitis, and other respiratory illnesses. Particle pollution can also impact the heart and cardiovascular system. Although particulate matter can cause health problems for everyone, certain people are especially vulnerable to adverse health effects. Sensitive populations include children, seniors, exercising adults, and those who already have respiratory or heart conditions (SBCAPCD 2016). Soil at the proposed project site has the potential to create an impact should it be disturbed during construction of the project and become airborne as dust. Since the potential for fugitive dust to create a health impact exists at the project site, the District will implement **Mitigation Measures MM-AQ-2** and **MM-AQ-3** that includes dust control measures from the County's *A Planner's Guide to Conditions of Approval and Mitigation Measures* and the SBCAPCD *Fugitive Dust Control Measures*. The dust control measures would include surface watering, use of soil binders, installation of grates at project entrances to catch mud and dirt from equipment and vehicles, rules for hauling, street sweeping, and limiting equipment speeds on unpaved areas during construction to prevent the generation of dust and resulting air quality impacts. Therefore, the potential for fugitive dust to impact air quality with implementation of **Mitigation Measures MM-AQ-2** and **MM-AQ-3** will be **less than significant with mitigation.**

~~However, the application of equipment exhaust reduction and standard dust control measures by the SBCAPCD would ensure potential air quality impacts from dust are minimized and short-term construction impacts would be **less than significant with mitigation**.~~

Table 5
Estimated Onsite and Offsite Construction Emissions

	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$	CO_2E
Onsite							
Fugitive Dust	0	0	0	0	0.00014	0.00014	0
Off-Road Equipment	6.838	60.997	43.409	0.0723	3.892	3.7218	131.2978
Total Onsite	6.838	60.997	43.409	0.0723	3.89214	3.72194	131.2978
Offsite							
Hauling	0.0147	0.1821	0.2072	0.00042	0.0122	0.00481	0.7722
Worker	0.1447	0.2371	2.0491	0.00318	0.3016	0.0815	4.814
Total Offsite	0.1594	0.4192	2.2564	0.0036	0.3138	0.08631	5.5862
TOTAL	6.9974	61.4162	45.6653	0.0759	4.2094	3.80825	136.884

CalEEMod Version 3013.2.2, Assumed all construction equipment working 40 days
Air quality emissions expressed in pounds/day, GHG Emissions expressed in total Metric Tons for the entire construction period.

b). Less than Significant. *Long Term Operation Emissions*: The proposed project consists of improvements and reconstruction of an existing County drainage channel and would not directly generate air pollutions emissions. The SMAD is not habitable space which would necessitate the daily use of energy, machinery, or automobiles. Routine maintenance of the SMAD would be required on an as needed basis; however, ongoing and existing maintenance at the SMAD already occurs from County staff and post-project maintenance requirements would be greatly reduced by the project. Emissions from maintenance vehicles would be minimal. As such, the long-term operational emissions from the proposed project would be **less than significant.**

~~d~~c). No Impact. The uses associated with the proposed project involve flood conveyance and drainage, and would not generate smoke, ash, or odors. As a result, **no impact** would occur.

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

MM-AQ-1: Equipment and Vehicle Exhaust

Particulate emissions from diesel exhaust are classified as carcinogenic by the State of California. The following is a list of regulatory requirements and control strategies that should be implemented to the maximum extent feasible. Measures shall be shown on grading and building plans, and shall be adhered to throughout grading, hauling, and construction activities.

The following measures are required by state law:

All portable diesel-powered construction equipment shall be registered with the State's portable equipment registration program or an APCD permit be obtained.

a) 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.
b) 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.

The following measures are recommended:

a) 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.
b) Diesel powered equipment should be replaced by electric equipment whenever feasible. 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.
c) Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
d) All construction equipment shall be maintained in tune per the manufacturer's specifications.
e) The engine size of construction equipment shall be the minimum practical size.
f) 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.
g) Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

MM-AQ-2: Dust Control

The County and project contractor shall comply with the following dust control components at all times including weekend and holidays, consistent with County standards and the SBCAPCD Fugitive Dust Control Measures:

a) Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site.
b) During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease.
c) During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site.
d) Wet down the construction area after work is completed for the day and whenever wind exceeds 15 mph at a minimum.
e) Whenever wind exceeds 15 mph, increased watering frequency should be required and ~~have~~ the site watered at least once each day including weekends and/or holidays.
f) Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
~~e)~~g) Minimize amount of disturbed area and reduce onsite vehicle speeds to 15 mph or less.
~~f)~~h) Order increased watering as necessary to prevent transport of dust offsite.
i) If importation, exportation, and stockpiling of fill material is involved, ~~Cover~~ 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. Soil binders should be ~~R~~reapplied~~y~~ as needed.
j) Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
~~g)~~k) After clearing, grading, earth moving, or excavation is completed, treat the disturbed area by watering, or revegetation, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
~~h)~~l) If the site is graded and left undeveloped for over four weeks, the Owner/Applicant shall immediately: (i) Seed and water to re-vegetate graded areas; and/or (ii) Spread soil binders; and/or; (iii) Employ any other method(s) deemed appropriate by P&D or APCD.

MM-AQ-3: Control of Fugitive Dust from Construction and Demolition Activities (SBCAPCD Rule 345)

The County and project contractor shall comply with the following applicable SBCAPCD Rule 345 requirements of and standards for control of fugitive dust at all times. Rule 345 standards for demolition are not included as the project does not include demolition of structures.

1. Visible Fugitive Dust Beyond the Property Line. No person shall engage in any construction or demolition activity or earth moving activities subject to this rule in a manner that causes discharge into the atmosphere beyond the property line visible dust emissions of 20% opacity or greater for a period or periods aggregating more than 3 minutes in any 60-minute period.

2. Truck Hauling. No person, including facility or site owner or operator of source, shall load or allow the loading of bulk materials or soil onto outbound trucks unless at least one of the following dust prevention techniques is utilized:

a. Use properly secured tarps or cargo covering that covers the entire surface area of the load or use a container-type enclosure.

b. Maintain a minimum of 6 inches of freeboard below the rim of the truck bed where the load touches the sides of the cargo area and ensure that the peak of the load does not extend above any part of the upper edge of the cargo area.

c. Water or otherwise treat the bulk material to minimize loss of material to wind or spillage.

d. Other effective dust prevention control measures approved in writing by the Control Officer.

3. Track-Out/Carry-Out. Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall be controlled as outlined below:

a. Visible roadway dust shall be minimized by the use of any of the following trackout/carry-out and erosion control measures that apply to the project or operations: trackout grates of gravel beds at each egress point, wheel-washing at each egress point during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and

b. Visible roadway dust shall be removed at the conclusion of each work day when bulk material removal ceases, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only a PM_{10}-Efficient Street Sweeper shall be used. The use of blowers for removal of track-out/carry-out is prohibited.

Plan Requirements and Timing: ~~The~~ All dust control requirements shall be included on noted on all grading and building plans prior to construction.

Pre-Construction Requirements: The contractor shall provide the Flood Control District monitoring staff and SBCAPCD with the name, telephone number, and contact information for an assigned onsite dust control monitor(s) prior to construction who has the responsibility to:

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

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

c. Attend the pre-construction meeting.

Timing: The dust monitor shall be designated prior to construction and duties shall include holiday and weekend periods when work may not be in progress. The dust control components apply from the beginning of any construction or grading throughout all development activities.

Monitoring: The County Flood Control District shall ensure dust control measures are on plans. The District assigned engineering inspector shall ensure compliance onsite. SBCPACD inspectors shall respond to nuisance complaints.

Cumulative Impacts: The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the significance criteria for air quality. Therefore, the project's contribution to regionally significant air pollutant emissions is not cumulatively considerable, and its cumulative effect is **less than significant.**

4.4 BIOLOGICAL RESOURCES

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

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
j. Introduction of barriers to movement of any resident or migratory fish or wildlife species?		X			
k. Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?		X			

Existing Setting: For this project, the *Santa Maria Airport Ditch Reconstruction California Tiger Salamander (Santa Barbara DPS) Site Assessment Report,* Sequoia Ecological Consulting, Inc. (January 2016) was prepared based upon the results of field surveys of the project site and records reviews (Attachment A). Additionally, a records review of the project site and CRLF spring season day and night surveys, including habitat evaluation of the nearest potential breeding ponds at Waller County Park were completed April 13, 2016 and April 19, 2016 (pers. comm., Raaf, County Resources Biologist 2016). These biological surveys inform this analysis.

Habitats. The existing habitats within the immediate project site vicinity are barren and/or ruderal lands, non-native grasslands, coyote bush, and landscaped/developed. The habitats within 2 kilometers (1.2 miles) of the project site include those within the project site, with the addition of irrigated row and field crops, landscaped closed-cone pine-cypress woodland, eucalyptus woodland, wetland/marsh, vernal pool, streams and stock ponds.

Along the 1.3-meter buffer on both sides of the SMAD, the flora consists of ruderal, annual grassland and eucalyptus woodland habitats. Three moderately-sloped drainages into the ditch were observed along the northwestern SMAD wall where ingress/egress by small terrestrial animals were observed and rodent burrows are present in both walls of the ditch in high densities (Sequoia 2016).

The project site south of the ditch adjacent to Auto Park Drive (including the potential staging area and access point) consists of flat terrain with barren, ruderal, and annual grassland vegetation types, and contains a high density of burrows, consisting predominately of Botta's pocket gopher and California ground squirrel (Sequoia 2016). Waller County Park is located immediately north of the central and easternmost SMAD extent and is home to a mix of annual grassland, coyote bush, ice plant, and maintained lawns (Sequoia 2016). Rodent burrows also exist in a high density within the annual grassland and coastal scrub habitat types north of the SMAD. Monterey pine trees, eucalyptus trees, and coyote brush shrubs are located around the margins of maintained lawns in Waller County Park adjacent to the project area (Sequoia 2016). Several landscaped palm trees line the driveway to the YMCA parking lot northeast of the project area.

Outside of the immediate project footprint, and within 2.0 kilometers of the project site, habitats and land uses are generally segregated by those northeast of Skyway Drive and east of Orcutt Parkway (State Route 135) ("Northern Portion"), and those southwest of Skyway Drive and west

of the Orcutt Parkway ("Southern Portion"). The Northern Portion of the biological report assessment area consists largely of suburban development and low-density commercial facilities, with fragmented open grassland and ruderal vegetation in vacant lots (Sequoia 2016). Scattered conifer and eucalyptus trees are present in fragmented patches in open space within developed areas, with larger and contiguous woodlands of both types present in Waller County Park. The Southern Portion of the area consists largely of unfragmented open grassland with occasional vernal pools, agricultural row crops, and the infrastructure of the Santa Maria Public Airport. See Figure 2 for habitat types associated with the project site (Sequoia 2016).

Wildlife species expected to inhabit the project site vicinity include common burrowing rodent species, primarily the Botta's pocket gopher, and the California ground squirrel (Sequoia 2016). No sensitive or rare plant species are known or expected to occur within the project boundaries. A complete list of plant and animal species identified in the California Natural Diversity Database (CNDDB) potentially associated with the project vicinity is in Attachment E.

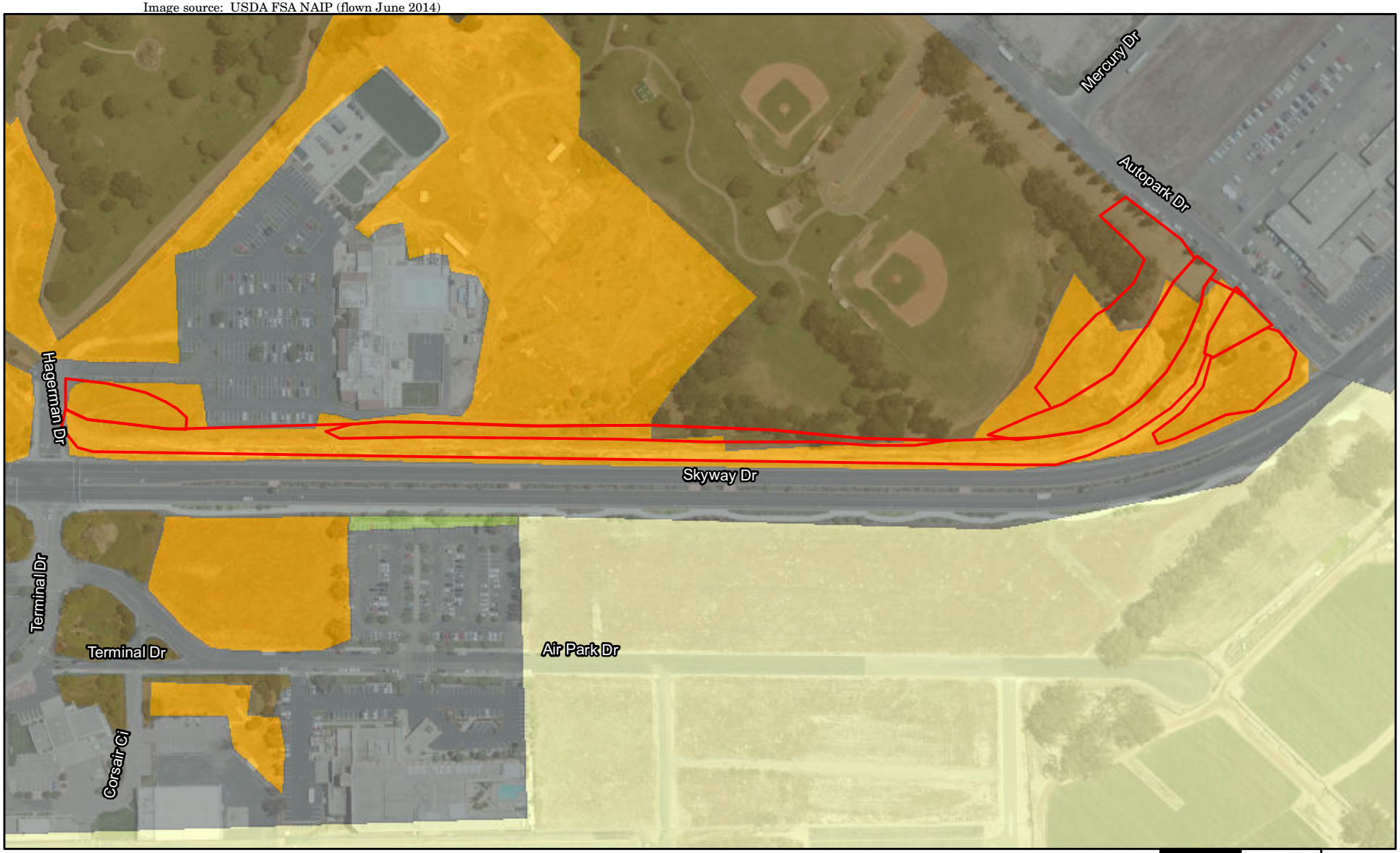
Two special status endangered wildlife species, the CTS and the CRLF, were identified to have historic traces of habitat and have the potential to occur in the project area. Potential threats to these special status species include elimination or degradation of habitat from land development and land use activities and habitat invasion by non-native aquatic species. Descriptions and summaries of the CTS and CRLF site assessment on the project site are provided below.

California Tiger Salamander (CTS)

The CTS is a large, stocky member of the mole salamander family (f. Ambystomidae) with a biphasic life cycle. Adults range from 6.0 to 8.6 inches, and typically have light spots and bars against a black background. Historically, CTS breeding in Santa Barbara County occurred in vernal pools and sag ponds with hydroperiods long enough to support larval recruitment. Current breeding habitat now includes fabricated stock ponds with suitable hydroperiod and aquatic communities devoid of predators (such as introduced warm-water fish), though these are typically found in impounded drainages at higher elevations than lowland sag ponds and vernal pools. Post-metamorphic CTS spend the majority of their lives underground in refugia to avoid desiccation, which predominately consists of small mammal burrows made by Botta's pocket gophers (*Thomomys bottae*) and California ground squirrel (*Otospermophilus beechyi*), though fissures in dry soil, leaf litter, and other natural man-made features may be used so long as they provide suitable microhabitat conditions.

The records review conducted for the CTS site assessment showed that a breeding pond for the CTS Santa Barbara DPS is located in the project vicinity, approximately 200 meters south-southeast of the Santa Maria Public Airport, and approximately 890 meters south-southwest of the project site. The biological report site assessment (Sequoia 2016) for the CTS was conducted according to the *Interim Guidance on Site Assessment for Determining Presence or a Negative Finding of the California Tiger Salamander* (USFWS 2003). See Figure 3 for the location of known and potential CTS breeding ponds in relation to the project site.

Image source: USDA FSA NAIP (flown June 2014)



Airport Ditch Project Location

Habitat Types

- Landscaped
- Landscaped -isolated
- Open Grassland, burrows present
- Open Grassland, burrows present, fragmented
- Urban

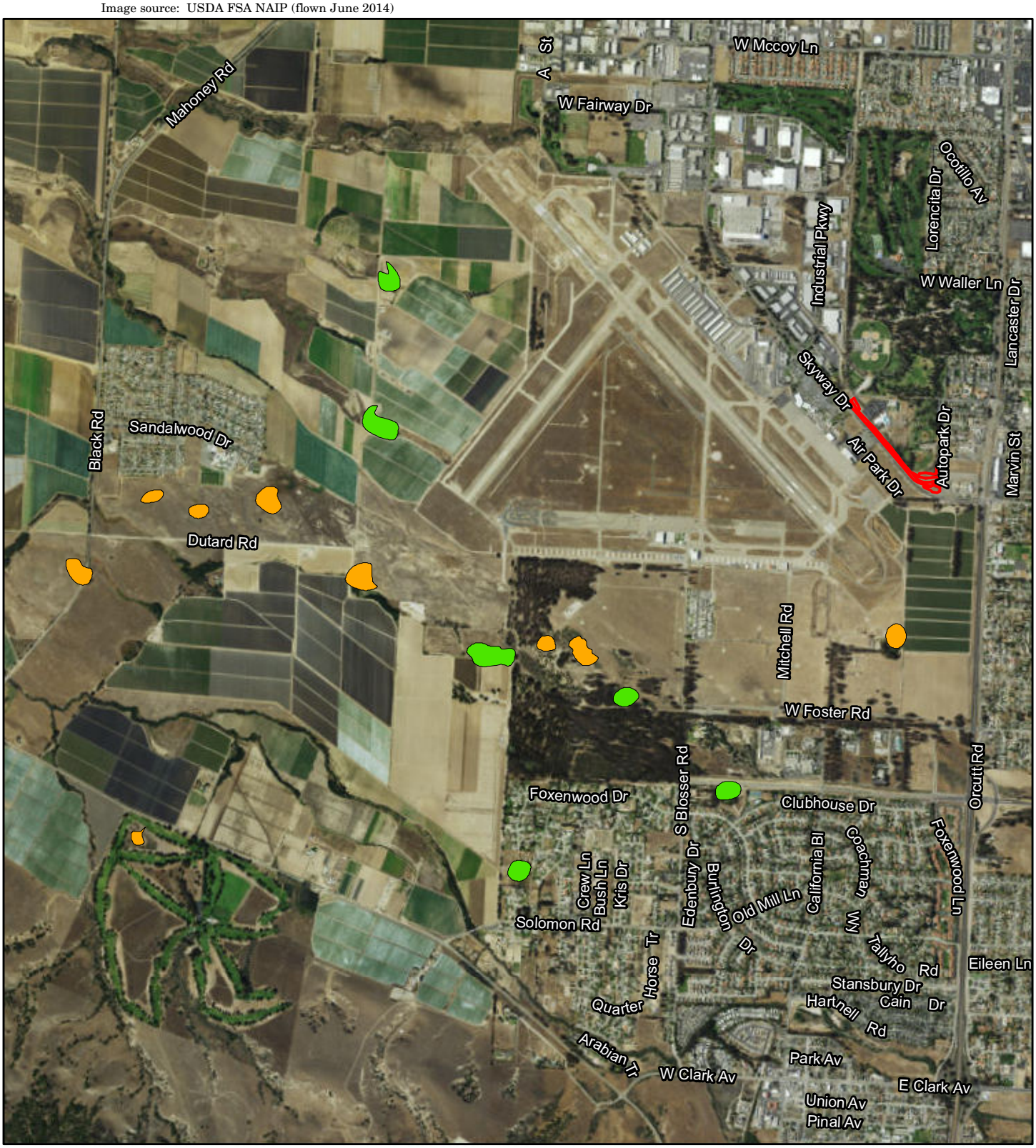
RECON

M:\JOBS4\7797\common_gis\Fig2_MND.mxd 8/3/2016 fmm

FIGURE 2

Biological Habitat

Image source: USDA FSA NAIP (flown June 2014)



Airport Ditch Project Location **California Tiger Salamander Ponds**

Known Breeding Pond

Potential Breeding Pond

FIGURE 3

California Tiger Salamander Known and Potential Breeding Ponds in Project Vicinity

RECON

M:\JOBS4\7797\common_gis\Fig3_MND.mxd 8/3/2016 fmm

California Red Legged Frog (CRLF)

The CRLF is endemic to California, found primarily in coastal drainages of central California from Marin County to Baja California. CRLF adults range from 2 to 5 inches long and have a red-like coloring on the underside of the legs and belly. The CRLF's head and back can range from red to brown and/or gray. The back and top of the legs are covered in small black spots and large dark blotches. The CRLF requires a variety of habitat elements with aquatic breeding areas embedded within a matrix of riparian and upland dispersal habitats.

The CRLF begins breeding around November and continues through April. Breeding sites of the CRLF are in aquatic habitats including pools, backwaters within streams/creeks, ponds, marshes, springs, sag ponds, dune ponds, and lagoons (USFWS 2002). Additionally, CRLF may breed in artificial impoundments such as stock ponds (USFWS 2002). Typically, CRLFs will consume invertebrates and occasionally smaller amphibians and mammals, and may live up to 10 years in the wild. The main CRLF predators are birds, raccoons, snakes, and the invasive American bullfrog. Post-metamorphic CRLFs seek shade away from high temperatures within tall grasses and reeds and are active at night and mainly solitary during the year (National Wildlife Federation 2016). The CDFW, CNDDB, and the Santa Barbara County Flood Control District indicated that the CRLF also has the potential to live or breed in the project area. Andrew Raaf, Resources Biologist from the Santa Barbara County Flood Control District, performed a day survey (April 13, 2016) and night survey (April 19, 2016) in the ponds at Waller County Park to detect CRLF and CRLF egg masses.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 6 – "Biological Resources," includes guidelines for the assessment of biological resource impacts. Disturbance to habitats or species may be significant if they substantially impact significant resources in the following ways:

- Substantially reduce or eliminate species diversity or abundance
- Substantially reduce or eliminate quantity or quality of nesting areas
- Substantially limit reproductive capacity through losses of individuals or habitat
- Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources
- Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes)
- Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends

Habitat-specific guidelines protect and preserve habitats such as wetlands, riparian areas, native grasslands, oak woodlands, and native trees. The following thresholds are applicable to the proposed project:

Other Rare Habitat Types: The Manual recognizes that not all habitat-types found in Santa Barbara County are addressed by the habitat-specific guidelines. Impacts to other habitat types or species may be considered significant, based on substantial evidence in the record, if they substantially: (1) reduce or eliminate species diversity or abundance; (2) reduce or eliminate the

quality of nesting areas; (3) limit reproductive capacity through losses of individuals or habitat; (4) fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources; (5) limit or fragment range and movement; or (6) interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Impact Discussion:

a-d, f). Less than Significant. The habitats located within the immediate project site are predominantly heavily disturbed, consisting of barren and/or ruderal lands, non-native grasslands including ice plant, coyote brush, and landscaped/developed habitats (Sequoia 2016). As shown in Figure 2, the habitat types located to the north of the project site are landscaped (isolated), to the east are urban, and to the south and west are open grasslands, separated from Skyway Drive by a 4-inch-wide and 7-inch-tall curb.

Construction of the SMAD improvements would result in the removal of existing vegetation, primarily of a half-acre area of ice plant with occasional coyote brush north of the mid-section of the channel. Ice plant is a common invasive non-native plant widely naturalized in the County and provides little habitat value for wildlife. Coyote brush scrub (Baccharis species) is considered a sensitive plant species; however, the proposed project includes restoration of removed vegetation using a mix of native plants and seed, including coyote brush and seeding of all disturbed areas with an erosion control seed mix that will also contain some native plant species. As discussed in Section 4.10 below, operation of the project does not involve the use of fertilizers and pesticides. Additionally, according to the Biological Resources Guidelines of the County Environmental Thresholds and Guidelines Manual (revised July 2015b), the removal of the invasive ice plant species can improve the quality of the remaining coyote brush scrub habitat (County of Santa Barbara 2015). As such, the removal of the existing ice plant species by the SMAD may improve the overall quality of the surrounding native habitat. Thus, impacts to coastal scrub/coyote brush scrub communities are expected to be **less than significant** because the project would not remove, cause a permanent loss, disturbance, or reduction of a substantial amount of threatened species of plants or rare plant communities.

e). No Impact. A few Monterey pine trees and eucalyptus trees are located around the margins of maintained lawns in by Waller County Park adjacent to the project area along the middle of the SMAD. The project does not anticipate or propose to need the removal of any trees for project construction. Therefore, **no impact** is anticipated related to the loss of healthy native specimen trees.

g~~f~~-k). Less than Significant with Mitigation. The proposed project is located in an area with historic and potential ~~California Tiger Salamander (~~CTS~~)~~ and ~~California red-legged frog (~~CRLF~~)~~ habitat and breeding habitat. These species may be impacted by grading, excavation, improvement, and remediation activities associated with the proposed project. In general, impacts could potentially include injury or mortality during excavation and remediation activities, the temporary removal and disturbance of suitable habitat, and fugitive dust and increased noise in habitats adjacent to the limits of work. These types of impacts would potentially affect all species occupying the site, including common and special-status species.

The proposed project could also result in a reduction in the diversity or numbers of animals onsite as a result of reduced vegetative cover, noise, and /or presence of humans during and post project construction and maintenance. A summary of the survey results conducted in 2015-2016 for the CTS and CLF in the project vicinity are discussed below:

California Tiger Salamander (CTS)

The Final Rule designating Critical Habitat for CTS Santa Barbara DPS (USFWS 2004) identifies three primary constituent elements (PCEs) essential for the conservation of the CTS:

1. Standing bodies of fresh water, including natural and man-made (e.g., stock) ponds, vernal pools, and dune ponds, and other ephemeral or permanent water bodies that typically become inundated during winter rains and hold water for a sufficient length of time (i.e., 12 weeks) necessary for the species to complete the aquatic portion of its life cycle.

2. Barrier-free uplands adjacent to breeding ponds that contain small mammal burrows. Small mammals are essential in creating the underground habitat that adult California tiger salamanders depend upon for food, shelter, and protection from the elements and predation.

3. Upland areas between breeding locations (PCE 1) and areas with small mammal burrows (PCE 2) that allow for dispersal among such sites.

All three PCEs were observed within the 2.0 kilometer CTS Site Assessment Report (Sequoia 2016) area around the project site, though the distribution of the PCEs was not homogeneous throughout the assessment area. The three combined PCEs, the combination of which is required for viable CTS habitat, were all found in the CTS Site Assessment Report to be located south of Skyway Drive (Sequoia 2016). Suitable upland refugia were observed within the project site; however, several formidable linear obstacles, which may act as complete physical barriers, were identified between the project site and potentially suitable breeding habitat, which precludes classifying the project footprint as PCE 2 or PCE 3 (Sequoia 2016). The obstacles were determined to have the potential to block or impede CTS movement by evaluating the heights of the obstacles relative to the body size of metamorphic and adult CTS, the lengths of the obstacles, and the locations of the obstacles relative to known CTS breeding ponds and suitable upland habitat containing small mammal burrows (Sequoia 2016).

No standing bodies of fresh water were observed within the project footprint during the CTS survey. Therefore, the project footprint was found in the CTS Site Assessment Report to not contain appropriate breeding habitat for CTS (PCE 1), and CTS breeding is not expected to occur within the project footprint (Sequoia 2016).

There are no physical barriers between the aquatic features in Waller Park, the golf course, and the project area, however these waters are not classified as potential CTS breeding ponds by the USFWS. All CTS breeding ponds north of Skyway Drive in western Santa Maria are considered to be removed (Sequoia 2016). Given the amount of research conducted on the species in the surrounding project area, the likelihood that CTS breeding has gone undetected in these waters is extremely low (Sequoia 2016). Therefore, the potential for CTS to disperse into the project area from the north is extremely low.

The only extant of ~~California Natural Diversity Database (~~CNDDB~~)~~ occurrences and known CTS breeding ponds (per the 2015 USFWS Draft Recovery Plan) are located south and west of the project footprint, with all records north and east of the project area determined to be extirpated (Sequoia 2016). The known and potential breeding ponds identified by the USFWS were located in the southern portion of the assessment area, approximately 0.9 to 2.0 kilometers south and southwest of the project site. Accordingly, the only potential avenue for CTS to disperse into the project footprint is by moving north from USFWS pond SAMA-10, located approximately 0.9 km to the south, or from the more distant pond approximately 2.0 km southwest of the project site (Sequoia 2016).

Though not explicitly stated in the 2004 Final Rule by USFWS, the CTS Site Assessment Report found that the nearest major roadways (Skyway Drive and Auto Park Drive) appear to constrain the boundaries of Critical Habitat Unit 1 due to the formidable, if not complete, physical barriers they pose to dispersing and/or migrating CTS (Sequoia 2016). Although the CTS survey identified the low likelihood or low potential for CTS habitat and breeding habitat, potentially significant impacts to CTS may still exist as a result of the construction of the proposed project. Therefore, with implementation of **Mitigation Measure MM-BIO-1** construction avoidance and minimization measures impacts would be **less than significant with mitigation**.

California Red-Legged Frog (CRLF)

Andrew Raaf, Resources Biologist from the Santa Barbara County Flood Control District, completed a spring season survey to examine for CRLF or CRLF egg masses in the potential breeding ponds at Waller County Park. A day survey was completed April 13, 2016 and a night survey on April 19, 2016. The two sites surveyed include the “monkey pond” in the interior of Waller County Park and the joined “duck-ponds” near the entry road at northern Auto Park Drive.

The monkey pond has a well-vegetated perimeter with non-native umbrella sedge, bulrush, and willows along the edges which provide good cover for amphibians, and has a small island in the center of the pond with willow branches hanging into the water (pers. comm., Raaf, County Resources Biologist 2016). The monkey pond is 5 to 6 feet deep at the deepest area. The surrounding habitat consists of manicured lawns, roads and parking lots, and groves of tall trees. While the habitat structure of the monkey pond was found by Raaf to be suitable for CRLF, the adjacent landscape would make dispersal and colonization difficult. Additionally, the surrounding land use, human activity/traffic, and extreme pressure from predators including dozens of mallards and domestic/non-native duck and goose species most likely makes the monkey pond unsuitable for colonization by the CRLF (pers. Comm., Raaf, County Resources Biologist). Raaf indicated the waterfowl species are highly active, several large (16-foot~~”~~+) fish are found in the pond, and Red-eared sliders and crawfish are common in the pond. Bullfrogs were also observed in the pond; however, no tadpoles or amphibian egg masses were located or observed during the survey (pers. Comm., Raaf, County Resources Biologist). As such, Raaf reports that the high level of predation most likely results in the unlikelihood of the any small aquatic animal to survive in the monkey pond.

The twin duck-ponds are constructed features and joined by a small riffle, encircled with concrete, the floors of which appeared to be mostly concrete covered with silt. No amphibians were observed during the day survey. Raaf indicated hundreds of mosquitofish, ducks, and geese are fed by park visitors. The twin duck-ponds also have fountains with water dyed green by the County Parks Department. Overall, Raaf indicated that the Waller Park twin duck-ponds to not provide typical CRLF habitat, other than the small surrounding areas with emergent vegetation. The night survey for the twin duck-pounds found no other amphibians with the exception of a few Baja California tree frog calls (pers. comm. Raaf, County Resources Biologist). Ultimately, the duck-ponds were found to be a manufactured habitat with a marginal CRLF habitat potential which also experiences high predation and localized human disturbances. Generally, both the monkey pond and duck-ponds were identified by Raaf to be unideal CRLF habitat and no CRLF were observed during the April 2016 surveys.

These two ponds at Waller Park are the nearest persistent water bodies in the project vicinity. Although the survey identified no CRLF or CRLF egg masses in Waller Park, and the potential for this species to be affected by the proposed project is extremely low, construction may potentially affect undetected CRLF. Therefore, with implementation of **Mitigation Measure MM-BIO-1** construction avoidance and minimization measures impacts to CRLF would be **less than significant with mitigation**.

Cumulative Impacts: Since the project would not significantly impact biological resources onsite after restoration and implementation of **Mitigation Measure MM BIO-1**, it would not have a less than significant cumulatively considerable effect on the County's biological resources.

Mitigation and Residual Impact:

MM-BIO-1: California Tiger Salamander (CTS) and Red-legged Frog (CRLF) Construction Avoidance and Minimization Measures

Although, the likelihood of encountering CTS or CRLF on the project site is extremely low, due to the project's proximity to the CTS Critical Habitat Units and known locations of CRLF, the following protective measures will be included in the project:

1. Biological Monitor: A qualified Biological Monitor, who may also be the County Flood Control District Biologist, will perform monitoring during construction. If a CTS or CRLF is found at any time, the work will cease and consultation with USFWS/CDFW will be initiated and the appropriate permits will be obtained to further protect CTS/CRLF. The project manager will work with the Designated Biological Monitor to site the least damaging temporary access routes and locations for staging and parking areas during construction.

2. Install Exclusionary Fencing: Prior to any site work, including debris removal, a solid barrier fence will be installed around the drainage ditch project site, staging area, and accessways, and will remain in place for the duration of the project. The Biological Monitor will survey and delineate the fence route. Exit funnels for CTS will be provided. The exclusion fence will be routinely inspected for good repair for the duration of construction for any damage, such as holes or gaps.

3. Linear Routes:

a) Before ground disturbance the Designated Biological Monitor will check for CTS/CRLF within the project site and immediately surrounding area.
b) Before the start of linear work each morning, the Designated Biological Monitor will check for CTS/CRLF under any equipment such as vehicles and stored pipes.
c) The Biological Monitor will check all excavated steep-walled holes or trenches each morning prior to construction for any CTS/CRLF.
d) All excavated holes or trenches deeper than 6 inches located outside the project site will be ramped at the end of the work day, or escape boards will be placed in the trench to allow the animals to escape.

4. Timing: Construction will be scheduled to occur during the dry summer months between June 15 and October 15 to avoid potential conflicts with CTS/CRLF dispersal. In the event of a 2" rainfall event between June 15-October 15, work will cease for 24 hours and the site will be thoroughly checked for CTS/CRLF prior to the start of work.

5. Environmentally Sensitive Areas (ESA): An ESA fence (for example, orange exclusion fence) will be installed as necessary along linear routes to protect offsite habitat. Construction personnel will not enter the ESAs.

6. Speed limit: A 10-mile-per-hour speed limit will be enforced at all construction sites, except on roads with a posted speed limit. On roads with posted speed limits, construction traffic will go the minimum safe speed.

7. Impoundment: Construction activities will be conducted to avoid impoundment of water.

8. The District will perform additional protocol level surveys for CRLF at the two ponds in Waller Park during the spring of 2017, prior to construction and if CRLF are found, the District will consult with USFWS to determine whether additional protection for CRLF is needed.

Since the project includes appropriate restoration of coyote scrub brush and while field surveys and records reviews determined that the potential for these species to be extremely low, implementation of **Mitigation Measure MM BIO-1** during construction will ensure avoidance and minimization of CTS and CRLF, and that residual impacts of the project would be less than significant.

4.5 CULTURAL RESOURCES

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

Existing Setting: Santa Barbara County is one of California's richest areas for archeological and ethnic resources. For at least the past 10,000 years, Chumash Indians and their ancestors have occupied parts of the County. Hundreds of archeological sites have been formally recorded throughout the County unknown and recorded sites are encountered on a regular basis. The analysis in this section is based on a records search at the Central Coast Information Center of the University of California, Santa Barbara (CCIC) (July 28, 2016).

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (revised July 2015), Section 8 – "Cultural Resources Guidelines Archaeological, Historical and Ethnic Elements," contains guidelines for identification, significance determination, and mitigation of impacts to important cultural resources. It specifies that if a cultural resource impact cannot be avoided, it must be evaluated for significance under CEQA.

A project that may cause a substantial adverse impact on an important cultural resource may have a significant effect on the environment.

On December 9, 2016, the County Public Works Department sent the Barbareño/Ventureño Band of Mission Indians letter notification of the opportunity to consult regarding the project pursuant to Public Resources Code (PRC) §21080.3.1 (AB 52 Gato 2014). No request for consultation regarding the proposed project has been received by the County to date from the Barbareño/Ventureño Band of Mission Indians or the tribes identified by the Native American Heritage Commission (NAHC). The County consults with local tribes per the County Cultural Resources Guidelines when requests are received.

Impact Discussion:

a-g). Less than Significant with Mitigation. Based on a records search at the CCIC, a map and records search at the CCIC (July 28, 2016), no cultural or archaeological resources were found within the project area of impact. As such, the potential for undiscovered cultural resources to exist onsite is low. However, in the event that previously unidentified archaeological or cultural resources are discovered during project construction, the standard archaeological discovery condition (Mitigation Measure MM-CUL-1) would mitigate impacts to undiscovered cultural resources to less than significant levels. As such, impacts would be **less than significant with mitigation.**

Mitigation and Residual Impact:

MM-CUL-1: Cultural Resources Discovered During Construction

The following mitigation measure would reduce the project's potential impacts to cultural resources discovered during construction to a less than significant level:

1. In the event archaeological remains are encountered during grading, construction, landscaping, or other construction-related activity, work shall be stopped immediately or redirected until a P&D qualified archaeologist and Native American representative are retained by the County to evaluate the significance of the find pursuant to the County Archaeological Guidelines. If resources or remains are found to be significant, they shall be subject to a phased mitigation program consistent with County Archaeological Guidelines and funded by the County.

   Plan Requirements and Timing: This condition shall be printed on all building and grading plans.

   Monitoring: The District appointed inspector shall check plans prior to construction and shall spot check daily for potential disturbance of cultural resources during grading and construction of the project.

With the incorporation of **Mitigation Measure MM-CUL-1**, residual impacts from construction of this project would be less than significant.

Cumulative Impacts: Since no record of important resources on the project site were identified and the project with mitigation implemented would not significantly impact cultural resources, it would not contribute to a cumulatively considerable effect on the County's cultural resources.

4.6 ENERGY

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

Existing Setting: Private electrical and natural gas utility companies provide service to customers in the unincorporated areas of Santa Barbara County. Inefficient use of energy has resulted in actions to increase the energy efficiency of appliances and buildings. The local efforts that support energy efficiency include the adoption of the Energy and Climate Action Plan (County of Santa Barbara Long Range Planning Division, 2015a) and the creation of the Energy and Sustainability Initiatives Division (2015a).

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b) does not identify significance thresholds for electrical and/or natural gas service impacts. CEQA Guidelines Appendix F requires a discussion of energy conservation and potential energy impacts of proposed projects, with a particular emphasis on avoiding or reducing the inefficient, wasteful, and unnecessary consumption of energy.

Impact Discussion:

~~a,b~~). ~~No Impact~~Less than Significant. The proposed project consists of improvements to an existing County flood control channel. The project's construction fleet~~During construction, the project would require the use of heavy construction equipment that~~ would be fueled by gas and diesel (see Table 2 for the estimated construction equipment and personnel and Table 5, Estimated Onsite and Offsite Construction Emissions). Using the EPA GHG Equivalences Calculator, the project's estimated fuel consumption would be approximately 13,314 gallons of oil and diesel (EPA 2016). However, ~~the~~ project construction is estimated to last approximately 40 days and ~~project~~ does not include any permanent components that would increase demand for existing sources of energy. Following construction, utilization, and maintenance of the Channel would not require utility service or cause the need for development of new sources of energy or the extension of energy sources. Mitigation Measure AQ-1 requires construction equipment and diesel vehicles limit engine idling time, use of electric equipment in place of diesel-powered equipment when feasible, and the use of catalytic converters that would reduce consumption of gas and diesel. Additionally, the County's Energy and Climate Action Plan

includes measures requiring reduced energy use in County projects, including Measure BE 10, Construction Equipment Operations, implementing best management practices for construction equipment. As such, ~~no significant impact~~impacts associated with ~~to~~ the demand of existing energy sources would be **less than significant.**~~**result.**~~

b). No Impact. The project does not include any permanent components that would increase demand for existing sources of energy. Following construction, utilization, and maintenance of the Channel would not require utility service or cause the need for development of new sources of energy or the extension of energy sources. Therefore, no impact would occur.

Cumulative Impacts: The project does not include any permanent components that would increase demand for existing sources of energy. Potential impacts to energy resources are therefore limited to temporary construction activities only when heavy construction equipment that would be fueled by gas and diesel energy resources. Based on the less than significant impact of project activities on existing energy resources, as well as the temporary nature of project activities, the project's contribution energy resource impacts is not cumulative considerable.

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be less than significant.

4.7 FIRE PROTECTION

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

Existing Setting: The County of Santa Barbara experiences annual cycles of elevated fire danger. Due to low annual precipitation, highly flammable vegetation, and high velocity "sundowner" and "Santa Ana" winds, the County has routinely experienced major wildfires which threaten residents' safety and may damage property.

The project area is located outside of any State or local High Fire Hazard Area (CalFire 2008).

All standard temporary construction traffic control measures would be established consistent with County of Santa Barbara Fire Department and Caltrans standards. The project site is readily accessible by the Santa Barbara County Fire Department (via Fire Station No. 22) and the City of Santa Maria (via Fire Station No. 2).

County Environmental Thresholds: The County Fire Department Standards do not apply to the proposed project. The proposed project does not include any structures over 5,000 square feet and would not include development of any new residential or access roads.

Impact Discussion:

a-e). No Impact. The proposed project involves improvements to an existing drainage channel and would not introduce new development or structures into an existing fire hazard area, and would not require or hamper fire protection services. The proposed project is not located within a High Fire Hazard Area, and/or does not involve new fire hazards. The project is located in an area with an adequate response time from fire protective services. In addition, project construction would not hinder existing fire department response times as the temporary construction staging areas do not interfere with roadway traffic (see Figure 2). Therefore, **no impact** would result.

Cumulative Impacts: As the proposed project would not have any impacts on fire protection, the proposed project combined with other similar projects would not result in any cumulatively considerable impacts on fire protection.

Mitigation and Residual Impact: As there are no potential impacts, mitigation is not necessary and residual impacts would not occur.

4.8 GEOLOGIC PROCESSES

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?			X		
b. Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?		X			
c. Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise?				X	

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

Existing Setting: The following discussion is based upon the Geotechnical Report for the Skyway Drive Drainage Ditch Improvements by Fugro Consultants, Inc. (Fugro 2015; Attachment C~~E~~). The project site is located within the Santa Maria basin, a transitional area between the Coast Ranges geomorphic province to the north, and the Transverse Ranges to the south. The onshore Santa Maria basin is a northwest oriented structural basin that could have been formed by a large tectonic depression originating during the Miocene as a result of extension related to the San Andreas Fault system (Fugro ~~2016~~2015). The result of that extension was rapid subsidence and accumulation of up to 15,000 feet Miocene- to Pleistocene period, the tectonic stress regime changed compression, as evidenced by Quaternary shortening and uplift of sediments in the region (Fugro ~~2016~~2015).

Soils beneath the project site are comprised primarily of Alluvium/Possible Artificial Fill (Q_{al}/af) as silty sand or clayey sand and Older Alluvium (Q_{os}) deposits. Based upon the materials encountered during the Geotechnical Report and hand augur drill holes and observations of exposed soil conditions along the existing channel slopes/walls, it is anticipated that the soils

along the alignment generally consist of slightly to highly cemented silty and clayey sands. Near Auto Park Drive, the existing channel/slopes generally consist of approximately 3 to 5 feet of alluvium or possible artificial fill overlying older alluvial sand dune deposits. The thickness of potential artificial fill material increases along the alignment moving towards Skyway Lane. In this area, the older alluvium outcrops along the channel slope adjacent to Skyway Drive but is not present along the northeast slope. Groundwater at the project site was not encountered at the ultimate depth of the deepest exploration (approximately 10 feet below the elevation of Skyway Drive) (Fugro 2015). The soils map of the project site is in Figure 4 below.

County Thresholds of Significance: Pursuant to the County's Adopted Thresholds and Guidelines Manual, impacts related to geological resources may have the potential to be significant if the proposed project involves any of the following characteristics:

1. The project site or any part of the project is located on land having substantial geologic constraints, as determined by P&D or PWD. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. "Special Problems" areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.

2. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical.

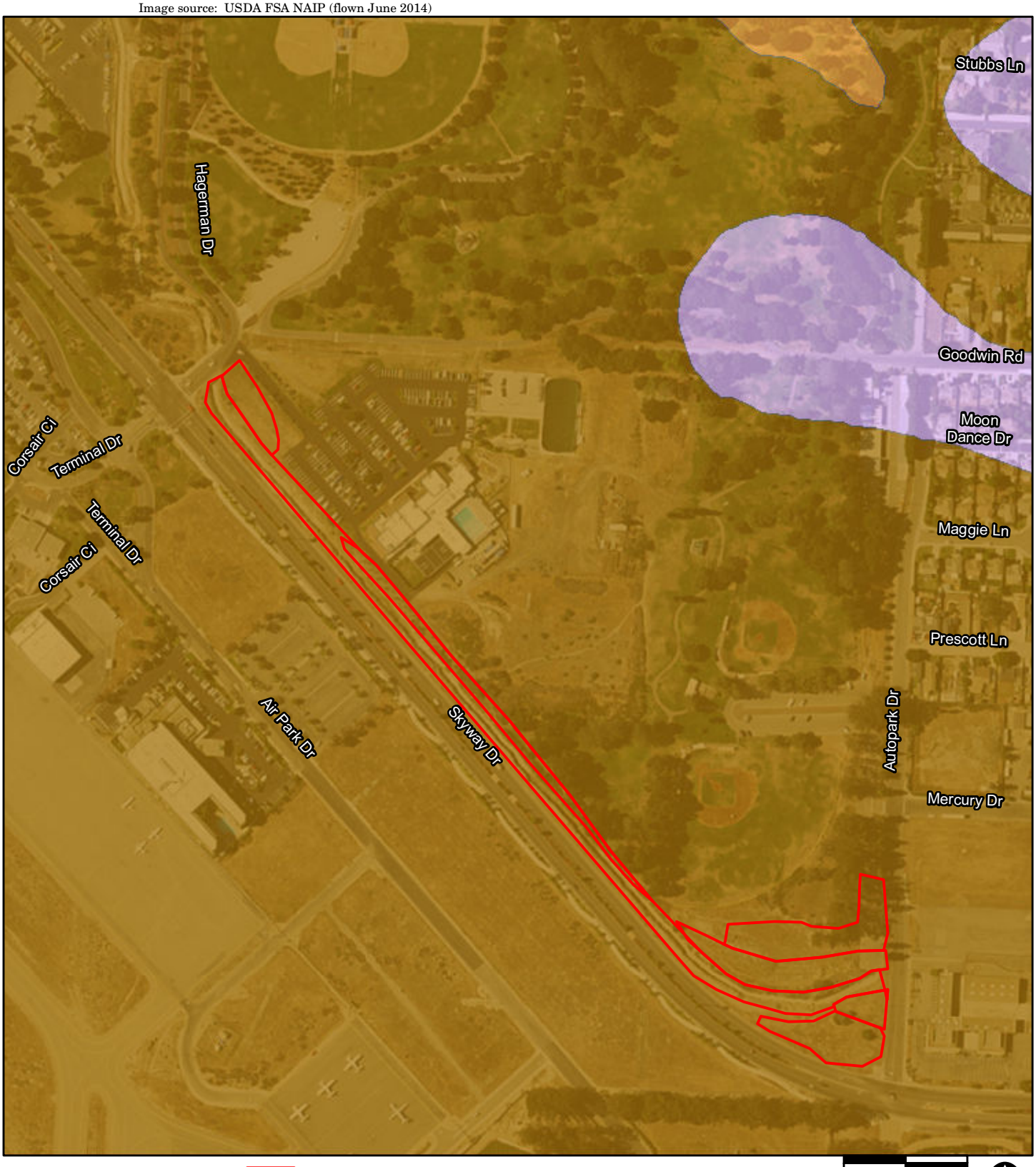
3. The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.

4. The project is located on slopes exceeding 20% grade.

Impact Discussion:

a). Less than Significant. According to the Santa Barbara County Comprehensive Plan, Seismic Safety and Safety Element (Santa Maria/Orcutt), the project site is located within an area that has a moderate potential for compressible-collapsible, and expansive soils (County 2015). The project site is also located within an area that has a low potential for liquefaction and slope creep. Based on the relatively flat topography within the project area, little to no potential exists for land sliding, and is rated as a low problem area for landslides.

Image source: USDA FSA NAIP (flown June 2014)



RECON

M:\JOBS4\7797\common_gis\Fig4_MND.mxd 8/3/2016 fmm

FIGURE 4
Soil Types

The project site is not underlain by any known fault. Compliance with existing construction regulations would reduce potential ground shaking impacts caused by movement along a distant fault to a less than significant level. Liquefaction and slope creep potential in the area has been determined to be low, and there is a moderate potential for compressible-collapsible and expansive soils. Any potential for expansive soils would be mitigated by the use of non-expansive engineered fill. All soils-related hazards would be reduced to a less than significant level through the normal and standard permit review, inspection process, and evaluation by the geotechnical engineer and contractor. Therefore, impacts would be **less than significant.**

c-d). No Impact. The proposed project is not located in proximity to coastal bluffs and would not be impacted by bluff retreat or sea level rise. In addition, the project would also not cause the destruction, covering, or modification of any unique geologic, paleontological, or physical features. Therefore, **no impact** would occur.

b, e, j). Less than Significant with Mitigation. Grading operations that would occur on the project site would remove portions of vegetative cover and disturb the ground and sub-ground surface, thereby increasing the potential for erosion and sedimentation impacts. As reported in the Geotechnical Report (Fugro 2015) for the project, while most of the materials encountered onsite exhibited some degree of cementation, the older alluvium is characterized by a stronger degree of cementation and darker yellowish brown coloring. Under saturated conditions, the overlying possible artificial fill retains little to no cohesive strength and is highly susceptible to sloughing and erosion during storm events or when exposed to other sources of runoff (Fugro 2015). The older alluvium exhibits a high degree of cemented strength under saturated conditions, providing more resistance to erosion (Fugro 2015). Despite the cemented nature of the alluvium, significant erosion and sloughing has occurred along the channel and the bottom has filled with loose redeposited granular sediment (Fugro 2015). Hand probing of the channel bottom during the geotechnical investigation indicated that the thickness of loose sediment generally ranges from less than a foot to approximately 2-3 feet in thickness; however, some areas may have experienced deeper scour, resulting in additional thickness of loose sediment (Fugro 2015).

During construction, cut/fill and grading would occur in order to complete the proposed SMAD improvements. Overall grading would be minimal (approximately 225 cy) as the existing channel has been previously excavated and would be primarily limited to the reconstruction of the channel and buried pipes in the SMAD. Application of standard County grading, erosion control mitigation measure (MM-GEO-1) and the Geotechnical Report (MM-GEO-2) recommendations would ensure that the potential for the project to cause substantial erosion, sloughing, and sediment impacts would be reduced to **less than significant with mitigation.**

f). No Impact. The project would not result in changes in deposition or erosion in beach sands or dunes, or changes in siltation, deposition or erosion of which may modify the channel of a river, stream, or the bed of the ocean, or any bay, inlet or lake. Therefore, **no impact** is expected.

g) No Impact. The project would not create a structure for human use or habitation. The proposed project involves the improvement and reconstruction to an existing flood control drainage channel, and would not result or necessitate the need of the placement or use of

septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent. Therefore, **no impact** would result.

h). No Impact. The project would not involve mining for minerals or ores as the proposed project includes improvements to the existing SMAD drainage channel. Thus, **no impact** would result.

i). Less than Significant. Grading work to the project site would occur on steep slopes (>20%) of the sides of the SMAD and channel bottom. However, this grading is appropriate for the purpose of the proposed project to grade the channel bottom and sides for the buried pipeline reconstruction to provide necessary improvements for the drainage channel. No new structures would be constructed or inhabited above or on high slopes as the proposed project consists of a combination of buried pipe and trapezoidal overflow improvements, and no residential, industrial, or commercial facilities are being constructed. In addition, all grading would be conducted according to plans designed by a licensed geotechnical engineer and based upon the Geotechnical Report recommendations (MM-GEO-2). As such, impacts would be **less than significant.**

k). Less than Significant. Any vibrations from construction work that would affect adjoining areas are likely to be short term, occur during daylight hours, and be similar or minimal in comparison to the vibrations from the airport operations opposite from the project site. Project construction is anticipated to occur for 40 working days and the project site is not located in the immediate vicinity of any residences. The nearest residences are approximately 0.20 miles northeast of the project site and are separated by Auto Park Drive. Waller County Park and baseball fields are located north of the project site but are separated by expansive open space, and would have low potential for vibration to affect uses of the recreational uses. Any vibration impacts from construction would be temporary. Long-term operation of the project would not cause any vibrations that would affect adjoining areas. Therefore, impacts would be **less than significant.**

l). No Impact. The proposed project does not include any activity that would result in excessive spoils, tailings or over-burden during construction or post-construction operation. Therefore, **no impact** would occur.

Cumulative Impacts:

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

Mitigation and Residual Impact:

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

MM-GEO-1: Erosion and Sediment Control Plan

Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP) and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the project. Grading and erosion and sediment control plans shall be

designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until re-graded acres have been stabilized by structures, long-term erosion control measures or permanent landscaping. The District shall submit the SWPPP, SWMP or ESCP using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments onsite. The SWPPP shall be submitted to the State Water Resources Control Board for approval

Plan Requirements and Timing: The SWPPP shall be submitted for review and approved by the State Water Resources Control Board. The plan shall be designed to address erosion, sediment and pollution control during all phases of development of the site until all disturbed areas are permanently stabilized.

The SWPPP requirements shall be implemented prior to commencement of grading throughout the year. The ESCP/SWMP requirements shall be implemented fall and spring of each year as recommended by licensed geologists or engineers, except pollution control measures shall be implemented year round.

Monitoring: The District designated inspector shall perform site inspections throughout the construction phase.

MM-GEO-2: Foundation and Structural Design Criteria

The applicant shall follow all recommendations contained in the Geotechnical Engineering Letter-Report prepared by Fugro Consultants, Inc. (August 2015) prepared for the project. Compliance with the report would ensure proper foundational design and structural design criteria for the Santa Maria Airport Ditch Improvements project is met, including but not limited to: (1) site grading; (2) fill materials; (3) pipe loads; (4) slope inclinations; (5) armoring; (6) trenching and temporary excavations; (7) dewatering (8) soil chemistry and corrosion. The recommendations would minimize impacts to unstable soils, steep slopes, and erosion.

Plan Requirements and Timing. Elements of the report shall be reflected on grading and construction plans as recommended. Plans shall reflect required structural design criteria prior to construction of development.

Monitoring. The contractor and District shall demonstrate that submitted plans conform to the required recommendations of the Geotechnical Engineering Letter-Report. Grading and construction inspectors and/or engineers shall ensure compliance in the field.

4.9 GREENHOUSE GAS EMISSIONS

Greenhouse Gas Emissions	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X		

Existing Setting: Greenhouse gases include carbon dioxide (CO_2), methane (CH^4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The largest source of greenhouse gas emissions from human activities in the United States is from fossil fuel combustion for electricity, heat, and transportation. Specifically, the Inventory of U.S. Greenhouse Gas Emissions and Sinks (U.S. Environmental Protection Agency, April 2015) states that the primary sources of greenhouse gas emissions in 2013 included electricity production (31%), transportation (27%), industry (21%), commercial and residential (12%), and agriculture (9%). This release of gases creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as "the greenhouse effect," there is strong evidence to support that human activities have accelerated the generation of greenhouse gases beyond natural levels. The overabundance of GHGs in the atmosphere has led to a warming of the earth and has the potential to severely impact the earth's climate system.

Climate change results from GHG emissions "*…generated globally over many decades by a vast number of different sources*" rather than from GHG emissions generated by any one project (County of Santa Barbara Planning and Development 2015). As defined in CEQA Guidelines Section 15355 and discussed in Section 15130, "…a cumulative impact consists of an impact which is created as a result of the combination of the [proposed] project…evaluated…together with other projects causing related impacts." Therefore, by definition, climate change under CEQA is a cumulative impact. The County of Santa Barbara's *Final Environmental Impact Report for the Energy and Climate Action Plan* (EIR) contains a detailed description of the proposed project's existing regional setting as it pertains to GHG emissions.

County Environmental Thresholds: CEQA Guidelines Section 15183.5(a) states,

> Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in…a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from…that existing programmatic review…a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively

> considerable if the project complies with the requirements in a previously adopted plan…

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

The ECAP included a GHG emissions forecast for unincorporated Santa Barbara County to 2020. The growth estimates used in the emissions forecast came from the Santa Barbara County Regional Growth Forecast 2005–2040 (Santa Barbara County Association of Governments 2007) and incorporated 2010 U.S. Census data where available. The estimates were based on factors such as population projections, vehicle trends, and planned land uses. The sources of GHG emissions included various sectors, such as transportation, residential energy, commercial energy, off-road, solid waste, agriculture, water and wastewater, industrial energy, and aircraft. As a result, most residential and commercial projects that are consistent with the County's zoning (in 2007) were included in the forecast. However, certain projects were not included in the emissions forecast, such as stationary source projects (e.g., large boilers, gas stations, auto body shops, dry cleaners, oil and gas production facilities, and water treatment facilities), Comprehensive Plan amendments, and community plans that exceed the County's projected population and job growth.

A proposed project that was included in the ECAP's emissions forecast may tier from the ECAP's EIR for its CEQA analysis of GHG emissions. A project that tiers from the ECAP's EIR is considered to be in compliance with the requirements in the ECAP and, therefore, its incremental contribution to a cumulative effect is not cumulatively considerable and less than significant.

Impact Discussion:

a, b). Less than Significant. The CalEEMod Annual Report prepared for the project (Attachment ~~B~~D) identifies the annual CO_2E total ~~as below 1,150 metric tons/year,~~ at 136.884 ~~MT~~ metric tons of CO_2E/year from the use of equipment and heavy-duty vehicles used to construction for the SMAD. The continuing use of the SMAD as a flood control channel is a permitted use for the project site's County Comprehensive Plan land use designation and Land Use Development Code (LUDC) zone district for recreational open space. The proposed project would not generate substantial GHG emissions from mobile emissions (vehicle trips) after construction, as the only mobile trips that are anticipated to occur at the project site post-construction are for periodic maintenance. Attachment D~~B~~ shows the complete calculations for the project. Emissions of heavy equipment to be used to construct the project are included in the off-road equipment sector of the ECAP's GHG inventory and forecast, and vehicle

emissions including materials and worker transportation are included in the transportation sector of the forecast (County of Santa Barbara 2015a). Therefore, the proposed project–'s GHG emissions were included in the ECAP's GHG emissions forecast and would not conflict with the ECAP. While climate change impacts cannot result from a particular project's GHG emissions, the project's incremental contribution of GHG emissions combined with all other sources of GHGs may have a significant impact on global climate change. For this reason, a project's cumulative contribution to GHG emissions is analyzed below under "Cumulative Impacts." As such, impacts would be **less than significant.**

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

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

Mitigation and Residual Impact: As potential impacts are less than significant, no additional mitigation is necessary. Therefore, residual impacts would be less than significant.

4.10 HAZARDOUS MATERIALS/RISK OF UPSET

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

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

Existing Setting: The County contains various sources of hazardous waste/materials, such as industrial facilities, landfills, mineral extraction facilities, and gas stations. A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR) for the Santa Maria Airport Ditch project site. The resulting report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate. The SMAD Waller-Skyway Channel, EDR Radius Map with GeoCheck Report is Attachment F to this document. Records located in the EDR report are mapped in Figure 5.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (revised July 2015b), Section 15 – "Public Safety Thresholds," addresses involuntary public exposure from projects involving significant quantities of hazardous materials. The threshold addresses the likelihood and severity of potential accidents to determine whether the safety risks of a project exceed significant levels.

Map Source: Environmental Data Resources Inc.

FIGURE 5

Hazards Materials Radius Map

RECON

M:\JOBS4\7797\env\graphics\mnd\fig5.ai 08/03/2016 sab

Impact Discussion:

a). No Impact. The project site consists of an existing County drainage channel surrounded by open grassland south of the Waller County Park. The project is located in a surrounding area that was previously developed as the Santa Maria Army Airfield, Hancock Airfield, and Semco Twist Drill all within 0.5 mile of the project site. The Santa Maria Army Airfield is identified by the California Department of Toxic Substances Control Envirostor Database as a historic military evaluation cleanup site for lead from leaking underground storage tanks (Envirostor 2016). However, this site is located approximately 0.076 miles away from the project site northwest of Hagerman Drive at 3217 Skyway Drive across the Santa Maria Public Airport. The existing SMAD channel is not affected by these existing hazardous cleanup sites and the SMAD is not inhabited by humans.

The EDR records search found No mapped sites were found in EDR's search of available ("reasonably ascertainable ") federal, state, local, and tribal government records either on the target property or within the search radius around the target property. Several mapped sites located immediately adjacent to the project site were found where records of hazardous materials use were found include Community Volkswagen, YMCA, the Santa Barbara County Fire Department Station 21, and Avis Car Rental. There is no evidence that hazardous materials were used, stored, or spilled on the project site in the past, and construction of the project would not involve hazardous materials at levels that would constitute a hazard to human health or to the environment. No significant traffic would be generated by the project and the proposed project would not interfere with emergency response capabilities to the project site or to other properties in the project area. Therefore, **no impact** would occur.

b-h). Less than Significant ~~Impact~~. Construction on the project site necessitates use and storage of diesel fuel, oils, pesticides and herbicides, release, or mishandling, or improper storage of which could lead to ground or water contamination, fire, injury and/or explosion resulting in loss of life or property. The California Certified Unified Program and Aboveground Petroleum Storage Act is administered by CAL FIRE and prescribes spill protection requirements designed to protect human health and the environment. The use, storage, transport, and disposal of hazardous materials at the project site would be carried out in accordance with federal, state, and local regulations (CAL FIRE 2008).

Construction of the Project would require the limited use of hazardous materials that could result in potential adverse health and environmental impacts if these materials were used, stored, or disposed of improperly, causing accidents, spills, or leaks. Prior to construction, in order to comply with Santa Barbara County's Municipal Storm Water Permit, BMPs must be employed at municipal facilities. BMPs may be selected from the options listed in or developed on a case-by-case basis as appropriate. Facilities with a Water Quality Protection Protocol (WQPP) follow the BMPs stated in that protocol. The County as lead agency and project proponent in charge of construction keeps an updated facility-specific spill response plan with procedures identified for reporting, and cleaning up liquids and solids. Spill response information is detailed in the County's Hazardous Materials Business Plan, Hazardous Materials Management Plan, and/or Spill Prevention Countermeasure and Control Plans.

The EDR report identified two underground pipelines bisecting the project site. During construction, additional undocumented subsurface utilities or structures might also be encountered and damaged. The potential for such incidents would be reduced by thoroughly screening for subsurface structures in areas prior to commencement of any subsurface work, as required under California Government Code section 4216. Construction of the Project would not pose a risk to students, faculty, or staff from hazards or hazardous materials. Therefore, construction impacts would be **less than significant.**

Cumulative Impacts: As the proposed project would not have any impacts related to hazardous materials, the proposed project combined with other similar projects would not result in any cumulatively considerable impacts related to hazardous materials.

Mitigation and Residual Impact: As there are no potential impacts, mitigation is not necessary and residual impacts would not occur.

4.11 HISTORIC RESOURCES

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

Existing Setting: The County of Santa Barbara contains numerous historic structures and properties, some of which date back to Spain's colonization of Alta California in the 1700s. Within the unincorporated county, the County has designated some of these resources as Historic Landmarks or Places of Historic Merit. Currently, 50 Historic Landmarks and 21 Places of Historic Merit exist within the unincorporated county. The analysis in this section is based on a records search at the CCIC (July 28, 2016).

County Environmental Thresholds: Historic resources are evaluated and addressed in a manner similar to archaeological and ethnic resources. (For more details, see Subsection 4.5, "Cultural Resources," above). Any structure or formal landscape feature 50 years or older is considered potentially significant and is subject to a formal evaluation of significance using the criteria in the County's Environmental Thresholds and Guidelines Manual (revised July 2015b), Section 8 – "Cultural Resources Guidelines Archaeological, Historical and Ethnic Elements," and CEQA Guidelines Section 15064.5 (Determining the Significance of Impacts to Archeological and Historical Resources). Structures and properties determined to be significant are considered a "historical resource" under CEQA.

Impact Discussion:

a-b). No Impact. No potentially architectural historic structures or formal landscape features currently exist within the project site. The proposed project does not include the demolition or alteration of structures in excess of 50 years in age. Nor would the project alter the contextual nature of the site in a manner which would significantly degrade the historical significance of existing structure(s). As a result, **no impacts** to historic resources are anticipated.

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

Mitigation and Residual Impact: As there are no potential impacts, mitigation is not necessary and no residual impacts would occur.

4.12 LAND USE

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Structures and/or land use incompatible with existing land use?				X	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X	
c. The induction of substantial growth or concentration of population?				X	
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				X	
e. Loss of existing affordable dwellings through demolition, conversion or removal?				X	
f. Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X	
g. Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
h. The loss of a substantial amount of open space?				X	
i. An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)				X	
j. Conflicts with adopted airport safety zones?				X	

Existing Setting: The project site consists of the existing unlined SMAD drainage channel. The surrounding land uses include recreational use (Waller County Park) to the north, commercial and residential uses to the east, and roadways and the Santa Maria Public Airport facilities to the south and west.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (revised July 2015b) contains no specific thresholds for land use. Generally, a significant impact may occur if a proposed project would be potentially inconsistent with policies and standards adopted by an agency for the purposes of environmental protection or would result in substantial growth inducing effects.

Impact Discussion:

***a-j). No Impact*.** The proposed project would not cause a significant physical change that would conflict with adopted environmental policies or regulations. The proposed project does not require demolition of structures. The project does not propose residential development or other type of development that could result in growth of population, loss of affordable housing, loss of open space, or displacement of people. The proposed project does not involve eth extension of a sewer trunk line, and does not conflict with any airport safety zones. The project is compatible with existing land uses and involves the improvement of an existing County flood control structure. Therefore, **no impact** would occur related to land use.

Cumulative Impacts: As the proposed project would not have any land use impacts, the proposed project combined with other similar projects would not result in any cumulatively considerable land use impacts.

Mitigation and Residual Impact: As there are no potential impacts, mitigation is not necessary and residual impacts would not occur.

4.13 NOISE

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

Existing Setting: The project site is located within a 55 to 59 decibel (dB) noise contour for the existing community noise environment in Orcutt (County of Santa Barbara 1997). Noise near the project site is generated by vehicles on Skyway Drive, Auto Park Drive, and Hagerman Drive and aircraft at the Santa Maria Public Airport. The project site is located outside the Santa Maria Public Airport noise contours in both the adopted 1993 Airport Land Use Plan and the draft 2012 County Airport Land Use Compatibility Plan (Santa Barbara County Association of Governments, 1993, 2016).

Noise sensitive receptors in the immediate vicinity of the project site include single-family residences located along Auto Park Drive, YMCA visitors adjacent northwest of the project site, and users of the recreational baseball fields at Waller County Park. The nearest residential dwellings are located over 850 feet northeast of the project site.

County Environmental Thresholds: Noise is defined as unwanted or objectionable sound that is measured on a logarithmic scale and commonly expressed in decibels (dB). For example, a soft whisper measures at 30 dB(A) and a lawn mower measures at 100 dB(A) at five feet. The letter "A" refers to noise levels that are "A-weighted" to correlate fairly the subjective assessments of noise level and annoyance. In noise-sensitive settings, the sounds generated at night are often more intrusive than sounds generated during the day. This is the case because outdoor background noise levels and indoor household activities are lower at night, making individual noise events stand out more sharply. Community Noise Equivalent Level (CNEL) is a noise index that attempts to take into account differences in intrusiveness between daytime and nighttime noises.

The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 13 – "Noise Thresholds," specifies that a proposed project that would generate noise levels in excess of 65 dB(A) CNEL for exterior exposure and 45 dB(A) CNEL for interior exposure may have a significant impact on surrounding noise sensitive land uses. The thresholds identify noise-sensitive land uses to include residential dwellings.

Impact Discussion:

a). Less than Significant. The proposed project is limited to improvements to an existing County drainage channel which would not generate any noise post-construction. The improved SMAD would not contain any features that would generate noise. Regular maintenance would be required periodically; however, noise associated with maintenance vehicles or equipment would be minimal and would not contribute significantly to long-term exposure of people to noise levels exceeding the County's thresholds. Therefore, impacts would be **less than significant.**

b-c). Less than Significant with Mitigation. Heavy equipment activity would occur at various times at the project site over the anticipated 40-day construction period with the equipment and vehicles identified in Table 2 above. Noise generated by project construction activities were estimated using reference levels from the Federal Transit Authority's (FTA) guidance manual (FTA 2006) and standard noise propagation algorithms. Table 6 summarizes typical construction equipment noise levels.

As shown in Figure 1, project construction would cause a potential temporary impact to sensitive receptors at the south side of the YMCA building which is located immediately adjacent to the project, with exterior noise levels up to 75 dB. Sensitive receptors using the recreational baseball fields at Waller County Park would potentially be affected by construction noise. However, practice and games are expected to be played on evenings and weekends and generally outside of typical construction hours.

Single-family residences along Auto Park Drive are not anticipated to be adversely affected by the temporary project construction noise. Additionally, project construction staging areas are located away from direct proximity to sensitive receptors and residential dwellings. Implementation of **Mitigation Measure MM NOS-1** during construction of the project would ensure short-term noise impacts are reduced to **less than significant with mitigation.**

Table 6 **Typical Construction Equipment Noise Levels**	
Equipment	L_{eq} at 50 feet [dB(A)]
Air Compressor	76
Backhoe	76
Compactor	73
Concrete Mixer Truck	81
Crane,	77
Dozer	81
Dump Truck	80
Front End Loader	76
Grader	81
Jack Hammer	78
Paver	82
Pump	74
Roller	78
Scraper	81
Source: FTA 2006. Notes: Noise Levels are adapted from maximum noise level and acoustical use factors. This is an abbreviated list of common equipment.	

Mitigation and Residual Impacts:

MM-NOS-1: Construction Noise Limitations.

All contractors and subcontractors shall limit construction activity, including equipment maintenance and site preparation to the hours between 7:30 AM and 4:00 PM Monday through Friday. No construction shall occur on weekends or State holidays. Any subsequent amendment to the Comprehensive Plan, applicable Community or Specific Plan, or Zoning Code noise standard upon which these construction hours are based shall supersede the hours stated herein.

Plan Requirements and Timing: The County or contractor shall provide and post a sign stating these restrictions at all construction site entries. Signs shall be posted prior to commencement of construction and maintained throughout construction.

Monitoring: The District designated inspector shall ensure compliance prior to grading and construction activities.

With incorporation of MM-NOS-1, residual impacts would be less than significant.

Cumulative Impacts: Full implementation of Mitigation Measure MM-NOS-1 would reduce potential short-term noise impacts caused by construction to a less than significant level. The proposed project combined with other similar projects would not result in any cumulatively considerable noise impacts on sensitive receptors.

4.14 PUBLIC FACILITIES

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

Existing Setting: Major public services include emergency services, law enforcement, fire protection, schools, library, solid waste management, water, wastewater, and specialized facilities such as landfills and jails. Fire Protection is addressed in section 4.7, "Fire Protection." Recreation and transportation-related impacts are addressed in sections 4.15, "Recreation," and 4.17, "Transportation/Circulation," respectively.

County Environmental Thresholds: According to the CEQA Guidelines, ~~Attachment~~ Appendix G, a project may have significant environmental impacts associated with public services if it creates a need for new construction or physical alteration of governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 18 – "Solid Waste Thresholds," includes thresholds for schools and solid waste as follows:

Schools: A significant level of school impacts is generally considered to occur when a project would generate sufficient students to require an additional classroom.

Solid Waste: A project is considered to result in significant impacts to landfill capacity if it would generate 196 tons per year of solid waste. This volume represents 5% of the expected average annual increase in waste generation, and is therefore considered a significant portion of the remaining landfill capacity. In addition, construction and demolition waste from remodels and rebuilds is considered significant if it exceeds 350 tons. A project which generates 40 tons per year of solid waste is considered to have an adverse effect on solid waste generation, and mitigation via a Solid Waste Management Plan is recommended.

Impact Discussion:

a-d). No Impact. The proposed project involves reconstruction and improvements to an existing drainage ditch. Therefore, the proposed project would not result in any increase of new buildings, residents, or students within the area and therefore, would have no impact one existing police, health, or education services or capacity. Existing service levels would be sufficient to serve the proposed project. In addition, the proposed project would not generate solid waste after construction or require the use of existing or new water facilities. The construction waste generated from the project would be minimal and would not exceed the County threshold of 350 tons. Improvements to the SMAD would also not generate the need for any new wastewater treatment facilities. Therefore, the project would have **no impact** to public facilities.

e). Less Than Significant. The proposed SMAD improvements would increase the flood control capacity of the Waller-Skyway Channel and prevent future erosion and sloughing problems. No additional water quality control facilities would be necessary to serve the project. Impacts associated with drainage are, by project design, an improvement over existing conditions. Impacts would be **less than significant**.

Cumulative Impacts: As the proposed project would not have any public facilities impacts, the proposed project combined with other similar projects would not result in any cumulatively considerable public facilities impacts.

Mitigation and Residual Impact: As there are no potential impacts, mitigation is not necessary and residual impacts would not occur.

4.15 RECREATION

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

Existing Setting: The project site area is located on County zoned Recreational land use. Waller Park and public use baseball fields are located north of the project site. No official trails are established in or around the project site. The existing half-mile SMAD drainage channel runs parallel to the edge of Skyway Drive (see Figure 1) and does not extend through recreational parks or trails.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b) does not identify any thresholds for park and recreation impacts. Therefore, the three factors listed above (a,b, and c) are used to analyze a project's potential impacts on recreation.

Impact Discussion:

a-c). No Impact. The proposed project would provide improvements to the existing eroding SMAD drainage channel. Project construction and construction staging areas would occur in areas that would not impede on the recreational and sports use of the public facilities and parks located north of the project site (see Figure 1). As such, the project would not conflict with the established recreational uses of the area, including the park, YMCA, or sports field activities. Additionally, the project site is not near any established biking, equestrian, or hiking trails. The proposed project would also not result in any population increase and would have no adverse impacts on the quality or quantity of existing recreational opportunities, either in the project vicinity or countywide. Therefore, the project would not result in any substantial impacts on the quality or quantity of existing recreational opportunities.

Cumulative Impacts: As the proposed project would not have any recreation impacts, the proposed project combined with other similar projects would not result in any cumulatively considerable recreation impacts.

Mitigation and Residual Impact: As there are no potential impacts, mitigation is not necessary and residual impacts would not occur.

4.16 WATER RESOURCES/FLOODING

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?				X	
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?			X		
c. Change in the amount of surface water in any water body?			X		
d. Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc.) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?			X		
e. Alterations to the course or flow of flood water or need for private or public flood control projects?			X		
f. Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion?				X	
g. Alteration of the direction or rate of flow of groundwater?				X	
h. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?				X	
i. Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?				X	
j. The substantial degradation of groundwater quality including saltwater intrusion?				X	

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
k. Substantial reduction in the amount of water otherwise available for public water supplies?				X	
l. Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?		X			

Existing Setting: The SMAD does not currently use, require, or have any need for water or groundwater supply and demand. The SMAD is an earthen unlined trapezoidal shaped drainage channel designed to convey runoff and storm flows connected from a series of storm drains from the unincorporated community of Orcutt. The FEMA FIRM map of the project area is shown in Figure 6.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 17 – "Surface and Storm Water Quality Significance Guidelines," identifies project-specific impacts that would be considered significant. In part, a project's effect on water quality and hydrology are considered significant if the project:

- Increases the amount of impervious surfaces on a site by 25% or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native
- vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands; or
- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit.

Water Resources Thresholds:

- A project is determined to have a significant effect on water resources if it would exceed established threshold values which have been set for each over drafted groundwater basin. These values were determined based on an estimation of a basin's remaining life of available water storage. If the project's net new consumptive water use [total consumptive demand adjusted for recharge less discontinued historic use] exceeds the threshold adopted for the basin, the project's impacts on water resources are considered significant.
- A project is also deemed to have a significant effect on water resources if a net increase in pumping from a well would substantially affect production or quality from a nearby well.

Image source: USDA FSA NAIP (flown June 2014)

Airport Ditch Project Location

FEMA Flood Zone

100-year floodplain

RECON

M:\JOBS4\7797\common_gis\Fig6_MND.mxd 8/3/2016 fmm

FIGURE 6

FEMA Flood Zones

Impact Discussion:

a). No Impact. The SMAD is an unlined drainage channel, located inland in the community of Orcutt by the City of Santa Maria. No fresh water bodies or marine waters are located in the project vicinity. Therefore, the project would not result in changes in currents, or the course or direction of water movements, in either marine or fresh waters. **No impact** would occur.

b). Less than Significant. The purpose of the proposed project is to improve the existing unlined portion of the SMAD to eliminate ongoing erosion of the channel by improving the capacity and rates of drainage and runoff. The proposed project would not cause a negative change in percolation rates, drainage, or runoff as the project aims to provide short and long-term structural enhancements to preclude additional damage, increased maintenance costs, and more intensive reconstruction efforts to the SMAD if left untreated. Construction activities such as grading could also potentially create temporary runoff and erosion problems. Application of standard County grading, erosion, and drainage-control measures would ensure that no significant increase of erosion or storm water runoff would occur. Therefore, impacts would be **less than significant.**

c-d). Less than Significant. The project would not negatively harm or impact the amount of surface water in any water body, discharge directly into surface waters, or alter surface water quality. The SMAD is an existing unlined drainage channel below ground level and leads to a concrete lined channel, eventually draining into a regional basin in the Betteravia sub-basin. The amount of surface water in the drainage channel would vary and be dependent on future storm and flood conditions. No other surface water bodies are located in the project vicinity that is affected by the SMAD. Therefore, impacts would be **less than significant.**

e). Less than Significant. The proposed project will improve the overall flow of flood water, and was identified by the County Flood Control District as a necessary improvement project to the currently eroding SMAD. The proposed project involves structural reconstruction to the existing County flood control channel to preclude the future potential risks of property damage, overtopping of the SMAD, and additional degradation from erosion which may eventually lead to increased maintenance costs and hazardous conditions to the surrounding area if left unimproved. The course and flow of flood water and length of the channel would remain the same as the existing condition. Thus, impacts would be **less than significant.**

***f-k). No Impact*.** The project would not expose people or property to water related issues such as flooding or sea level rise, alter the direction or rate of flow of groundwater, or require water supply. The existing channel and proposed project does not use or require a connection to groundwater or water supply. As such, the potential for substantial degradation of groundwater quality including saltwater intrusion would not occur or cause an impact on groundwater supply. The SMAD serves as a drainage channel that will receive structural improvements to improve drainage flow for future storm and flood events. Thus, the project involves beneficial improvements to an existing and eroding County flood control channel to improve capacity that would not be impacted by water hazards, groundwater, or water. **No impact** would occur.

l). Less than Significant with Mitigation. The proposed project is not increasing the volume or decreasing stormwater runoff quality. Rather, the project will simply put future stormwater flows

into a pipe to safely convey them through the project site. While the proposed project will improve the flow and rate of stormwater or flood water through reconstruction of an existing County drainage channel it that would not directly cause an adverse impact on surface water quality by increasing sediment or nutrient loads in stormwater. Rather, the project would protect the quality of stormwater by eliminating sedimentation that would be exacerbated by continued erosion along the SMAD. Operation of the project does not involve the use of fertilizers, pesticides, and household cleaners and chemicals, nor would it introduce oil and other hydrocarbons into drainage facilities. Minor amounts of storm water pollutants and hazardous materials from upstream urban uses in Orcutt may continue to flow through the site after construction. Such household hazardous materials that have drained into the SMAD would not present a significant potential for release of waterborne pollutants and would be highly unlikely to create a public health hazard. However, during construction, as discussed above, the project has the potential to release storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, etc.) into surface water. Therefore, **Mitigation Measure MM-GEO-1** (above) requiring preparation of erosion and/or sediment control plans, implemented along with the spill response detailed in the County's Hazardous Materials Business Plan, Hazardous Materials Management Plan, and/or Spill Prevention Countermeasure and Control Plans, impacts to surface and groundwater from the project would be **less than significant mitigation.**

Cumulative Impacts: As the proposed project would not have any water resources/flooding impacts, the proposed project combined with other similar projects would not result in any cumulatively considerable impacts.

Mitigation and Residual Impact: Implementation of **Mitigation Measure MM-GEO-1** above would reduce residual project related impacts to water quality to less than significant.

4.17 TRANSPORTATION/CIRCULATION

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a. Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system?			X	~~X~~	
b. A need for private or public road maintenance, or need for new road(s)?			X	~~X~~	
c. Effects on existing parking facilities, or demand for new parking?			X	~~X~~	
d. Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods?			X	~~X~~	

Will the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
e. Alteration to waterborne, rail or air traffic?			X	~~X~~	
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)?			X		
g. Inadequate sight distance?			X	~~X~~	
ingress/egress?			X	~~X~~	
general road capacity?			X	~~X~~	
emergency access?			X	~~X~~	
h. Impacts to Congestion Management Plan system?			X	~~X~~	

Existing Setting: The public roadways surrounding the project site include Auto Park Drive, Skyway Drive, and Hagerman Drive. The surrounding regional transportation uses include the Orcutt Expressway (State Route 135) and Highway 101 to the east, and State Route 1 to the south and west.

County Environmental Thresholds: The County's Environmental Thresholds and Guidelines Manual (Revised July 2015b), Section 19 – "Thresholds of Significance for Traffic Impacts and Contents of a Traffic Study," indicates that a significant traffic impact would occur when:

- An addition of project traffic to an intersection increases the volume to capacity ratio by a specific value;
- Project access to a major road would require a driveway that would create an unsafe situation or a new traffic signal or major revisions to an existing traffic signal;
- A project adds traffic to a roadway that has design features or receives use which would be incompatible;
- Project traffic would utilize a substantial portion of an intersection capacity where the intersection is currently operating at an acceptable level of service but with cumulative traffic would degrade to unacceptable level of service.

Impact Discussion:

a-h). Less than Significant. The proposed project is limited to improvements to an existing County drainage channel and, as such, during operation would not increase vehicular traffic to or from the site nor would it affect roadways; parking facilities; pedestrian, bicycle, or transit access; or any other type of transportation facility. The proposed project would not alter affect air traffic operations at the adjacent Santa Maria Public Airport. No railway or navigable waterways are located on or adjacent to the project site.

The project includes a standard construction traffic safety management plan that ensures that construction staging areas are well marked with temporary signs on adjacent roads to alert drivers to planned construction dates and any expected speed limit reductions. During construction, flaggers and appropriate signs and speed reductions will be used if necessary to implement any necessary lane closures. Construction equipment use of roads will be limited and warning signs alerting drivers to potential for construction vehicles entering and exiting adjacent roadways will be posted. Traffic associated with construction equipment trucks and haulers would be temporary and cease upon project completion. The proposed project with construction traffic safety management plan would not have any adverse impacts on transportation and circulation. Therefore, the project would result in **less than significant** transportation and circulation impacts.

Cumulative Impacts: As the proposed project would not have any significant transportation/circulation impacts, the proposed project when considered with other similar infrastructure improvement projects in the area would not result in any cumulatively considerable transportation/circulation impacts.

Mitigation and Residual Impact: No mitigation is required. Residual impacts would be less than significant.

5.0 INFORMATION SOURCES

5.1 County Departments Consulted

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

5.2 Comprehensive Plan (check those sources used):

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

5.3 Other Sources (check those sources used):

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

_____

6.0 MANDATORY FINDINGS OF SIGNIFICANCE

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

1) Mitigation measures applied to this project would ensure that the project would not substantially degrade the quality of the environment. The proposed project would not contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory. Site assessments for potential endangered CRLF and CTS habitat and breeding habitat were conducted for the project site by Andrew Raaf, County Resources Biologist, and Sequoia Ecological Consulting, Inc. Both site assessments indicated an extremely low likelihood for CRLF and CTS habitat and breeding habitat within the project vicinity due to human induced barriers, distance, and disturbance (i.e. roadways and maintenance) or predators within

potential breeding grounds. Although the CRLF and CTS assessments indicated a low likelihood for both species to be affected by the proposed project, the project description incorporates standard CTS and CRLF construction avoidance measures into and would ensure appropriate protective measures are integrated to address potential CTS and CRLF impacts. Therefore, impacts to the quality of the environment would be **less than significant.**

2) The proposed project would not result in any short-term environmental goals to the disadvantage of long-term environmental coals. The SMAD improvements aim to achieve both beneficial short-term and long-term environmental goals by avoiding future floodwater damage to Skyway Drive and surrounding properties, the project avoids additional increased maintenance costs and reconstruction if the SMAD is left unimproved as further degradation of the SMAD would be avoided. Construction of the project would have **no impact** as it would implement both short-term and long term environmental goals.

3) Mitigation measures applied to the proposed project would ensure that the project would not result in any cumulatively considerable impacts. The proposed project is a small-scale project involving improvements to an existing County-engineered structure within the SMAD footprint and would not require expansion or intrusion onto additional land. Thus, impacts would be **less than significant.**

4) Mitigated measures applied to the proposed project would ensure that the project would not result in any environmental effects that would cause substantial adverse effects on human beings. In addition, the SMAD does not involve habitable structures for human beings. The SMAD serves as a half-mile County flood control drainage channel intended to convey water in the event of a future storm event. Therefore, impacts would be **less than significant.**

5) There is no disagreement of the significance of an effect that would warrant investigation in an EIR. Technical studies conducted for the proposed project have been included in the attachments of this MND. Additionally, consistent correspondence with staff from the County Flood Control District and with the County Resources Biologist occurred throughout preparation of this document to ensure appropriate mitigation measures were established for the proposed project. As such, impacts would be **less than significant.**

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

The proposed project would result in project-specific impacts that are potentially significant but mitigatable in the following issue areas: aesthetics, air quality, biological resources, cultural resources, geology, noise, and water quality. The proposed project involves reconstruction to an existing County drainage channel, which is intended improve hydrologic flow and capacity of the SMAD. Mitigation measures applied to the project would ensure that the project would not result in any significant cumulative impacts.

8.0 PROJECT ALTERNATIVES

Pursuant to the 2016 CEQA Statute and Guidelines, project alternatives are only required for projects which would result in significant and immitigable impacts to the environment. Any potentially significant impacts resulting from the proposed SMAD improvements could be mitigated to less than significant impacts. Therefore, no project alternatives were considered.

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

County Inland Land Use Development Code (LUDC): The REC zone is applied to provide public or private open space areas appropriate for various forms of outdoor recreation. Under Table 2-25 of Section 35.26.030 of the LUDC, the drainage channel is a permitted use in the REC zone district. Therefore, the proposed project is consistent with the LUDC, would not interfere with the adjacent recreational uses at Waller Park.

Orcutt Community Plan:

Policy SO-O-R: Development adjacent to, or within designated open space areas, shall be sited and designed to protect and enhance the natural resources of these areas, and accommodate appropriate recreation opportunities as identified in the Parks, Recreational & Trails section of the Orcutt Community Plan. The proposed project is consistent with this policy as it will ensure continued flood control along the southernmost portion of Waller County Park.

DevStd SO-O-4.3: No structures shall be located within a designated open space area with the exception of: related structures necessary for the provision of active and passive recreational opportunities that would not adversely affect open space areas, and flood control projects where no other method for protecting foisting structures in the floodplain is feasible and where such protection is necessary for public safety (including retention basins). Culverts, crossings, roads, pipelines, fences, and bridges may be permitted when no alternative route or location is feasible, or where other constraints or site design considerations (e.g., public safety) would require such structures. The proposed project involves repair of an existing County flood control project therefore, it is consistent with this development standard.

DevStd RR-O-1.4: Developers shall provide recycling bins at all construction sites, where collection of currently acceptable recyclable construction materials could be accommodated.

The proposed project is consistent with this policy with implementation of mitigation measure MM-AES-1.

Policy AQ-O-2: Significant fugitive dust and PM_{10} emissions shall be reduced through implementation of appropriate construction restrictions and control measures, consistent with standards adopted by the Board. The project is consistent with this policy with implementation of mitigation measures MM-AQ-1 and MM-AQ-2.

Policy FLD-O-1: Flood risks in the Orcutt planning area shall be minimized though appropriate design and land use controls. The proposed project is consistent with this policy as it involves improvements to a County-maintained flood control channel to minimize erosion and flood risks to the surrounding area.

DevStd NSE-O-2.1: Standard construction working hours (i.e., 7 A.M. TO 4 P.M. MONDAY-FRIDAY) shall be required for development activities. Flexibility to allow extended hours on weekdays and/or occasional working hours on Saturday should be determined on a case-by-case basis. The proposed project is consistent with this policy with incorporation of MM-NOS-1.

Policy VIS-O-4: Public and private stormwater systems (recharge, retention, and retardation basins, culverts, channels, etc.) shall be designed and maintained to be visually attractive. The proposed project would improve the existing public stormwater drainage system through structural and design enhancements to the eroding SMAD channel.

10.0 RECOMMENDATION BY P&D STAFF

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

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

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

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

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

Potentially significant unavoidable adverse impact areas:

_____ With Public Hearing ___X___ Without Public Hearing

PROJECT EVALUATOR: _____ DATE:_____

11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

__X__ I agree with staff conclusions. Preparation of the appropriate document may proceed.

_____ I DO NOT agree with staff conclusions. The following actions will be taken:

_____ I require consultation and further information prior to making my determination.

SIGNATURE:_____ INITIAL STUDY DATE: _____

SIGNATURE:_____ NEGATIVE DECLARATION 9/7/16

SIGNATURE:_____ REVISION DATE: _____

SIGNATURE:_____

FINAL NEGATIVE DECLARATION DATE: 2/15/17

12.0 ATTACHMENTS

A. Santa Maria Airport Ditch Reconstruction California Tiger Salamander (Santa Barbara DPS) Site Assessment Report, Sequoia Ecological Consulting (January 2016).

B. Central Coast Information Center Records Search Results Letter, Alicia Gorman, (July 28, 2016).

C. Geotechnical Engineering Letter-Report, Skyway Drive Drainage Ditch Improvements, Santa Maria, CA, Fugro Consultants (August 2015).

D. Air Quality: Project Modeling Results Summary Tables – CalEEMod (July 2016).

E. California Natural Diversity Database Species Occurrence within a Three-mile Radius of the Project Site.

F. Santa Maria Airport Ditch Waller-Skyway Channel, EDR Radius Report with Geocheck, EDR (July 28. 2016).

G. Public Comment Letters

G1. Governor's Office and Planning and Research, State Clearinghouse and Planning Unit (10/18/16);

G2. Santa Barbara County Air Pollution Control District (Comment letter dated 10/13/16);

G3. Santa Barbara County Air Pollution Control District (Suggested conditions letter dated 10/13/16); and

G4. Native American Heritage Commission (10/17/16).

H. Notice of Availability of the Draft Mitigated Negative Declaration for the Proposed Santa Maria Airport Ditch Improvement Project 16NGD-00000-00014.

I. Letter to the Barbareño/Ventureño Band of Mission Indians from the County of Santa Barbara Public Works Department (12/9/16).

13.0 REFERENCES CITED

California Department of Conservation

2012 Farmland Mapping and Monitoring Program. Accessed online at http://www.conservation.ca.gov/dlrp/fmmp

California Emissions Estimator Model (CalEEMod)

2016 Santa Maria Airport Ditch. Santa Barbara County Air Pollution Control District. CalEEMod Version 2013.2.2.

California Department of Forestry & Fire Protection (CAL FIRE)

2008 Fire and Resource Assessment Program. Santa Barbara County. Very High Fire Hazard Severity Zones in LRA. Accessed online at:http://frap.fire.ca.gov/webdata/maps/santa_barbara/fhszl_map.42.pdf

Central Coast Information Center (CCIC)
2016 Santa Maria Airport Ditch Records Search. July 28, 2016.

County of Santa Barbara (County)
1997 Orcutt Community Plan Noise Levels. Accessed online at: http://sbcountyplanning.org/PDF/maps/Community%20Plan%20Maps/Orcutt%20Community% 20Plan%20Maps/OrcuttNoise.pdf

2006 Orcutt Community Plan Zoning Overlay Districts. Accessed online at: http://sbcountyplanning.org/PDF/maps/Community%20Plan%20Maps/Orcutt%20Community%20Plan%20Maps/OrcuttZoningOverlay.pdf

2014 Orcutt Community Plan Land Use Designations. Accessed online at: http://sbcountyplanning.org/pdf/maps/Community%20Plan%20Maps/Orcutt%20Community%20Plan%20Maps/OrcuttLandUseColor_2014_02_13.pdf

2015a Energy and Climate Action Plan. Accessed online at: http://longrange.sbcountyplanning.org/programs/climateactionstrategy/docs/BOS051915/Attachment%20B_ECAP.pdf

2015b Environmental Thresholds and Guidelines Manual. Planning and Development Department. July

2016 Orcutt Community Plan Zoning. Accessed online at: http://sbcountyplanning.org/pdf/maps/Community%20Plan%20Maps/Orcutt%20Community%20Plan%20Maps/OrcuttZoningColor_2016_02_08.pdf

2016 Andrew Raaf. Santa Barbara County Flood Control District. Resources Biologist. Personal Communication. Email. April 20, 2016.

Santa Barbara County Association of Governments (SBCAG)
1993 Santa Barbara County Airport Land Use Plan. Accessed online at http://www.sbcag.org/uploads/2/4/5/4/24540302/draft_airport_land_use_compatibility_plan.pdf
2012 Draft Santa Barbara County Airport Land Use Compatibility Plan. Accessed online at:http://www.sbcag.org/uploads/2/4/5/4/24540302/draft_airport_land_use_compatibility_plan.pdf

EDR
2016 EDR Radius Map Report for the Santa Maria Airport Ditch.

Fugro Consultants, Inc. (Fugro)
2015 Geotechnical Engineering Letter-Report, Skyway Drive Drainage Ditch Improvements, Santa Maria, California. August 6, 2015.

Federal Transit Administration (FTA)

2006 Transit Noise and Vibration Impact Assessment. May 2006. Accessed online at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

National Wildlife Federation

2016 California Red-Legged Frog. Accessed online at: https://www.nwf.org/Wildlife/Wildlife-Library/Amphibians-Reptiles-and- Fish/California-Red-Legged-Frog.aspx

Santa Barbara County Air Pollution Control District (SBCAPCD)

2016 Dust Control. Accessed online at https://www.ourair.org/dust-control/#Health Effects,

Sequoia Ecological Consulting, Inc. (Sequoia)

2016 Santa Maria Airport Ditch Reconstruction. California Tiger Salamander (Santa Barbara DPS). Site Assessment Report. January 2016.

U.S. Environmental Protection Agency (EPA)

2016 Greenhouse Gas Equivalencies Calculator. U.S. Environmental Protection Agency. Accessed online at https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

U.S. Fish & Wildlife Service (USFWS)

2002 Recovery Plan for the California Red-legged Frog. Accessed online at http://www.amphibians.org/wp-content/uploads/2013/07/California-Red-legged-rog-Recovery-Plan.pdf

2004 Final Rule designating Critical Habitat for CTS Santa Barbara DPS

2003 Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander. USFWS and California Department of Fish and Wildlife. Accessed online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83915.

Federal Transit Administration (FTA)

2006 Transit Noise and Vibration Impact Assessment. May 2006. Accessed online at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

National Wildlife Federation

2016 California Red-Legged Frog. Accessed online at: https://www.nwf.org/Wildlife/Wildlife-Library/Amphibians-Reptiles-and- Fish/California-Red-Legged-Frog.aspx

Santa Barbara County Air Pollution Control District (SBCAPCD)

2016 Dust Control. Accessed online at https://www.ourair.org/dust-control/#Health Effects,

Sequoia Ecological Consulting, Inc. (Sequoia)

2016 Santa Maria Airport Ditch Reconstruction. California Tiger Salamander (Santa Barbara DPS). Site Assessment Report. January 2016.

U.S. Environmental Protection Agency (EPA)

2016 Greenhouse Gas Equivalencies Calculator. U.S. Environmental Protection Agency. Accessed online at https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

U.S. Fish & Wildlife Service (USFWS)

2002 Recovery Plan for the California Red-legged Frog. Accessed online at http://www.amphibians.org/wp-content/uploads/2013/07/California-Red-legged-rog-Recovery-Plan.pdf

2004 Final Rule designating Critical Habitat for CTS Santa Barbara DPS

2003 Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander. USFWS and California Department of Fish and Wildlife. Accessed online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83915.

ATTACHMENTS

THIS PAGE IS INTENTIONALLY BLANK

ATTACHMENT A

Santa Maria Airport Ditch Reconstruction California Tiger Salamander (Santa Barbara DPS)
Site Assessment Report, Sequoia Ecological Consulting (January 2016).

THIS PAGE IS INTENTIONALLY BLANK

Santa Maria Airport Ditch Reconstruction
California Tiger Salamander (Santa Barbara DPS)
Site Assessment Report

Prepared for: RECON Environmental, Inc.

Project Name: Santa Maria Airport Ditch Reconstruction

Project Proponent: Santa Barbara County Flood Control District

Prepared by: Sequoia Ecological Consulting, Inc.

Project Manager: Brett Hanshew, Senior Biologist

Date: January 2016 (Final)

Prepared For:

RECON Environmental, Inc.
5951 Encina Road, Suite 104, Goleta, CA 93117

Prepared By:

Sequoia Ecological Consulting, Inc.
319 Diablo Road, Suite 220, Danville, CA 94526

TABLE OF CONTENTS

APPENDICES

1.0 Introduction

The Santa Barbara County Flood Control and Water Conservation District (Flood Control District) operates under the Water Resources Division of the County Public Works program. The Water Resources Division's mission is "to provide flood protection and water conservation, and to promote an adequate water supply for the residents of Santa Barbara County" (County of Santa Barbara 2008). The Flood Control District is tasked with providing flood protection and conserving flood, surface, and storm waters for beneficial public use. The Flood Control District operates under Chapter 74 of the California Water Code to perform its mission, which includes the maintenance of flood control facilities (County of Santa Barbara 2008).

The Flood Control District proposes to perform a reconstruction of approximately 2,300 linear feet of the eroding Airport Ditch Project (Project). The project location is parallel to and northeast of Skyway Drive in Santa Maria, Calif., adjacent to and northeast of the Santa Maria Public Airport. The project is bounded on the southeast by Autopark Drive and on the northwest by Hagerman Drive.

The Project includes reconstruction of the eroding channel between the existing 60" cured-in-place pipe (CIPP) outfall at Autopark Drive and the 10' wide by 5' high box culvert under Hagerman Drive. Background hydrology information from the Orcutt Drainage Master Plan and the Federal Emergency Management Agency (FEMA) Letter of Map Revision (LOMR) (Order No. 11024.01, Nov. 1194) indicates that the anticipated 100-year flows (Q_{100}) in the channel run between 292 cubic feet per second (cfs) to 334 cfs.

Although a Hydrologic Engineering Centers River Analysis System (HEC-RAS) analysis of the existing system shows the channel has capacity to convey Q_{100}, the channel is actively degrading and sediment is being deposited in a relatively flat reach just upstream of the nearest rectangular box culvert, located under Hagerman Drive immediately northeast of the Project area. The District is proposing to construct a combination buried pipe and trapezoidal overflow channel to reconstruct the existing facility. The combination system consists of a 60" high-density polyethylene (HDPE) storm drain overlain by a 8-16' wide by 2-3' high trapezoidal concrete channel with 3H:1V side slopes. Both the pipe and trapezoidal channel will outfall to a location just upstream of the existing box culvert under Hagerman Drive.

The project footprint will be approximately five acres, bounded by Autopark Drive to the east, Skyway Drive to the southwest, Hagerman Drive to the northwest, Waller Park to the north and east, and a YMCA facility to the north and northeast, as described above and illustrated in Figures 1, 2, and 3. Two staging areas totaling approximately one acre will be established within the project footprint (Figure 3). All excavation and construction of the new pipe and overflow channel will occur within the Limits of Disturbance indicated shown in Figure 3. Construction equipment will access the ditch via earthen ramps excavated adjacent to staging areas. Typical heavy construction equipment will be used to accomplish the work, including excavators, backhoes, compactors, front-end loaders, concrete trucks, and dump trucks. The project will include excavation within the channel, removal of vegetation north of the channel (predominately ice plant and coyote brush), installation of the HDPE pipe, backfill and

compaction around the pipe, and concrete work to construct the trapezoidal drainage ditch atop the buried HDPE pipe.

During California Environmental Quality Act (CEQA) review, the Flood Control District identified that a breeding pond for California tiger salamander (CTS; *Ambystoma californiense*) Santa Barbara Distinct Population Segment (DPS) is located in the general vicinity, approximately 200 meters south-southeast of the Santa Maria Airport, and approximately 890 meters south-southwest of the Project. Consequently, a site assessment for the species was conducted according to the *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (USFWS and CDFW 2003). This report documents the results of the site assessment.

2.0 Survey Methods

2.1 Desktop and Literature Review

Sequoia Ecological Consulting biologist Brett Hanshew (USFWS Recovery Permit TE-67570A-0, CDFW SCP & MOU SC-9343) reviewed the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB 2015) (including Critical Habitat designations), the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (2014), the Draft Recovery Plan for the Santa Barbara County Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*) (USFWS 2015), available aerial photography, and relevant literature on CTS prior to conducting a field-based habitat assessment survey. The biologist digitized the map of the West Santa Maria/Orcutt Metapopulation Area (which delineates the metapopulation area, known breeding ponds, potential breeding ponds, and removed breeding ponds) from the USFWS Draft Recovery Plan (2015). The biologist established assessment boundaries of 5.0 kilometers and 2.0 kilometers around the project location per USFWS and CDFW guidance (2003) to identify habitat types and potential for CTS occurrence during a field-based site assessment. Known localities of CTS within 5.0 kilometers of the project site provide a regional context as to the current and historic abundance of the species. Habitats within the project site and a 2.0 kilometer buffer are evaluated for species-specific suitability based on the known mobility of the species – if potential breeding habitat and suitable upland habitat is present within the assessment area, then the project must be evaluated to determine the likelihood CTS occurring within the project footprint throughout its life cycle (i.e., dispersal, foraging, migration, breeding).

2.2 Field-based Site Assessment

Sequoia Ecological Consulting biologist Brett Hanshew conducted a field survey at the project location and surrounding area on November 17, 2015 between 1030 and 1630 to determine if suitable aquatic and/or upland habitat for CTS was present at the project site and the surrounding environs. The biologist conducted the survey by walking meandering transects throughout the project footprint and potentially suitable habitat within potential dispersal distance (2.0 km) of known CTS breeding pond locations. The project footprint is entirely within potential dispersal distance of a known breeding pond (CNDDB occurrence 526/USFWS pond SAMA-10, Figures 1 and 2). The project footprint is located

approximately 890 meters north-northeast of the pond at its nearest extent, and approximately 1,350 meters north-northwest from the pond at its farthest extent (Figures 1 and 2).The biologist identified topography, plant communities, current land uses within and adjacent to the project site, potentially suitable underground refugia in upland habitat, aquatic habitats, sources of fragmentation (e.g., urban/developed areas, roadway), and obstacles to post-metamorphic CTS movement (e.g., curbs, roadways, fences). Results were documented with photographs, field notes, and GPS.

3.0 Overview of CTS Biology and Habitat

The California tiger salamander is a large, stocky member of the mole salamander family (f. Ambystomidae) with a biphasic life cycle (Stebbins 2003). Adults range from 6.0-8.6 inches, and typically have light spots and bars against a black background. Historically, CTS breeding in Santa Barbara occurred in vernal pools and sag ponds with hydroperiods long enough to support larval recruitment (approximately 9-16 weeks; Stebbins 2003, USFWS 2015). Current breeding habitat now includes man-made stock ponds with suitable hydroperiod and aquatic communities devoid of predators (such as introduced warm-water fish), though these are typically found in impounded drainages at higher elevations than lowland sag ponds and vernal pools (USFWS 2015). Post-metamorphic CTS spend the majority of their lives underground in refugia to avoid desiccation, which predominately consists of small mammal burrows made by Botta's pocket gophers (*Thomomys bottae*) and California ground squirrel (*Otospermophilus beechyi*), though fissures in dry soil, leaf litter, and other natural man-made features may be used (Stebbins 2003, USFWS 2015) so long as they provide suitable microhabitat conditions.

Typical upland habitat for CTS Santa Barbara DPS includes grassland, oak savannah, and coastal scrub plant communities (USFWS 2015), though they have potential to occur in other non-developed habitat types and on the margins of developed habitats within dispersal distance of breeding ponds, provided suitable refugia are present. During heavy fall/winter rains, adult CTS migrate from upland habitat to breeding ponds to reproduce (Stebbins 2003). Adults are capable of making long-distance movements overland – up to 2.0 kilometers – when migrating to breeding habitats (USFWS 2000). After metamorphosis, juveniles disperse into upland habitat to complete their life history. Dispersal distances are variable, with a maximum of 2.2 kilometers reported by Orloff (2011). Searcy and Shaffer (2008), Searcy (2013), and USFWS (2015) reported that 95 percent of post-metamorphic salamanders are found within 1.7 kilometers of breeding ponds. Obstacles to overland movement, such as vertical topography or manmade features, can limit the distance at which salamanders are able to disperse.

4.0 Results of CTS Habitat Assessment

4.1 USFWS Element 1. Is the project site within the range of the CTS?

The project site is located within the historic range of the CTS Santa Barbara DPS. The project is located in Santa Maria, Calif., immediately north of the Santa Maria Public Airport. Based on the maps provided in the USFWS 5-year review (2009) and the Draft Recovery Plan (2015), the project is not within the

projected current range of the species. The CTS Santa Barbara DPS currently exists in six metapopulations, which are larger than but fully inclusive of six USFWS Critical Habitat units (USFWS 2004). The project site is approximately 50 meters north of Critical Habitat Unit 1: West Santa Maria/Orcutt and approximately 36 meters north of the West Santa Maria/Orcutt CTS Metapopulation Area (USFWS 2004, USFWS 2015), both of which are bounded on the northeast extent by the Orcutt Expressway (CA-135) and Skyway Drive (Figure 2).

4.2 USFWS Element 2. What are the known localities of CTS within the project site and within 3.1 miles (5.0 kilometers) (km) of the project boundaries?

Known localities of CTS within 5.0 km of the project boundaries were evaluated to provide a regional context – in terms of abundance, habitat types, and spatial distribution – for the species. There are no known extant localities of CTS within the project site (Figure 3). There are six extant CNDDB occurrences and zero extirpated or presumed extirpated records of CTS within 5.0 kilometers of the project site (Table 1, Figure 1). There are nine known breeding ponds, six potential breeding ponds, and ten removed ponds associated with the West Santa Maria Metapopulation within 5.0 kilometers of the project site (USFWS 2015, Figure 1). The nearest breeding pond to the project site is USFWS SAMA-10/CNDDB 526, which is located approximately 0.9 km south of the project site, opposite and south of the four-lane Skyway Drive.

Table 1. CNDDB Occurrences of CTS Santa Barbara DPS within 5.0 km of Airport Ditch Project Site.

CNDDB Occurrence Number	USGS 7.5' Quad	Distance (km) & Bearing
977	Orcutt	4.1 km SW
246	Santa Maria	4.4 km E
527	Santa Maria	1.9 km WSW
528	Santa Maria	3.0 km W
526	Santa Maria	0.9 km S
335	Santa Maria	3.8 km W

At its nearest extent, the CTS Santa Barbara DPS West Santa Maria/Orcutt Metapopulation boundary (USFWS 2015) is approximately 36 meters south of the eastern end of the project site at the intersection of Autopark Drive and Skyway Drive. At its nearest extent, he boundary for CTS Santa Barbara DPS Critical Habitat Unit 1: W. Santa Maria/Orcutt is 50 meters south of the project site, south of the intersection of Autopark Drive andSkyway Drive, (Figures 1 and 2). The area encompassed by West Santa Maria/Orcutt Metapopulation and Critical Habitat Unit 1 approximately overlap, and is located generally south and southwest of the project area (Figures 1 and 2).The CTS Santa Barbara DPS East Santa Maria Metapopulation boundary (USFWS 2015) is approximately 2.3 kilometers east of the project site, east of the 101 Highway (US-101). The boundary for CTS Santa Barbara DPS Critical Habitat Unit 2: East Santa

Maria is approximately 3.5 kilometers east of the project site, east of the 101 Highway (US-101). Both the West Santa Maria/Orcutt Metapopulation (Critical Habitat Unit 1) and the East Santa Maria Metapopulation (Critical Habitat Unit 2) are separated from the project area by large public roadways. Additionally, developed infrastructure associated with the Santa Maria Airport lies between the majority of the West Santa Maria/Orcutt Metapopulation and the project area, and extensive urban/suburban development lies between the East Santa Maria Metapopulation and the project area. The roadways and developments represent significant, if not impassible, physical obstacles to CTS movement.

4.3 USFWS Element 3. What are the habitats within the project site and within 1.24 miles (2 km) of the project boundaries?

The habitats within the project site are barren and/or ruderal lands, non-native grasslands, coastal scrub, and landscaped/developed. The habitats within 2 kilometers of the project site include those within the project site, with the addition of irrigated row and field crops, landscaped closed-cone pine-cypress woodland, eucalyptus woodland, wetland/marsh, vernal pool, streams and stock ponds.

The project site is located within an area of relatively flat topography at 250-255 feet above sea level, interrupted by the drainage ditch. The project site consists of an existing drainage ditch, approximately 4.5 meters wide by 2.5 meters deep, a 1-3 meter buffer on either side of the ditch, access points into the ditch on the northwest and southeast ends of the project, and staging areas at the southeast end of the project west of Autopark Drive on both sides of the ditch in ruderal, annual grassland and eucalyptus woodland habitats. The southwest wall of the drainage ditch is nearly vertical, and the northeast wall of the drainage ditch is steep-sided (60-75 degrees). Three moderately-sloped drainages into the ditch were observed along the northwestern wall where ingress/egress by small terrestrial animals were observed (Figures 2e and 3). Rodent burrows are present in both walls of the ditch in high densities. The project site south of the ditch (including a potential staging area and access point) consists of flat terrain with barren, ruderal, and annual grassland vegetation types, and contains a high density of burrows (predominately those of Botta's pocket gopher, though California ground squirrel burrows are present as well). The project site north of the ditch consists of annual grassland, coastal scrub, a long patch of ice plant, and maintained lawns in Waller Park. Monterey pine trees, eucalyptus trees and *Baccharis* sp. shrubs are located around the margins of maintained lawns in Waller Park adjacent to the project area. Several landscaped palm trees line the driveway to the YMCA parking lot at to the northeast of the project area. Rodent burrows exist in a high density within the annual grassland and coastal scrub habitat types north of the ditch. The project footprint, which includes all work, access, and staging areas, is approximately 5.0 acres (Figure 3).

Outside of the immediate project footprint, and within 2.0 kilometers of the project site, habitats and land uses are generally segregated by those northeast of Skyway Drive and east of Orcutt Parkway ("Northern Portion"), and those southwest of Skyway Drive and west of the Orcutt Parkway (CA-135) ("Southern Portion"). The Northern Portion of the assessment area consists largely of suburban development and low-density commercial facilities, with fragmented open grassland and ruderal vegetation in vacant lots. Scattered conifer and eucalyptus trees are present in fragmented patches in open space within developed areas, with larger and more contiguous woodlands of both types present

in Waller Park and the golf course. The Southern Portion of the assessment area consists largely of unfragmented open grassland with occasional vernal pools, agricultural row crops, and the infrastructure of the Santa Maria Public Airport.

Northern Portion of Assessment Area

A large public park (Waller Park) is coterminous with a portion of the northern boundary of the project footprint and extends north approximately 1.0 kilometer. Several athletic fields are located within the boundaries of Waller Park. A YMCA facility and parking lot is located immediately northeast of the northeastern portion of the project footprint, and is bounded on the north and east by Waller Park. Waller Park largely consists of maintained grass lawn on flat topography, and is interspersed with sandy hummocks supporting large conifers. Gopher burrows observed in lawns were typically occluded, either by backfill from the rodents or being run over by lawn maintenance equipment. California ground squirrel burrows were observed in low densities in the conifer-dominated hummocks, and were generally located at the bases of trees. Waller Park contains two permanent ponds, however neither are known to support CTS. One pond, located approximately 800 meters north-northeast of the project site, is classified as an excavated, permanently flooded palustrine system with an unconsolidated bottom, and a relatively open canopy. A majority of the perimeter of the pond is surrounded by a vertical step that could act as an obstacle to CTS egress, should they happen into the pond. A fountain is present in the center of the pond, and a shallow, anthropogenic flowing water feature feeds the pond from the east. A stand of cattails on the northern edge represents the only aquatic vegetation present within this pond. The second pond in Waller Park, approximately 800 meters north of the project site, is an excavated, permanently flooded palustrine system with an unconsolidated bottom. This second pond appears to be relatively deep, and is surrounded by cattails and willows. The shoreline of the pond is gradual. A large stand of conifers surrounds the pond, and as a result, the canopy closure over the pond is high. Though both permanent ponds have a hydroperiod that would support larval CTS recruitment, neither pond represents typical breeding habitat for CTS due to the fragmented surrounding upland habitat (which is generally devoid of suitable small mammal burrows) and the potential for ponds to support fish that may prey upon CTS larvae.

A private golf course is coterminous with the northwest boundary of Waller Park, which extends north approximately 0.8 kilometers and then west approximately 0.7 kilometers (Figures 2a and 2b). Residential housing is located north and east of Waller Park and the golf course. Commercial and industrial facilities are located west and south of the golf course, and east of Skyway Drive (Figures 2a, 2b, 2c, 2d, 2e, 2f, and 2i). The grounds of the private golf course were not surveyed on foot due to access issues, however the typical habitat of the grounds was assessed from the perimeter visible from public roadways. Scattered rodent burrows were observed in low densities adjacent to fairways. Five water features were identified via aerial photography, the National Wetlands Inventory (NWI), and field reconnaissance. Four features are water hazards, consisting of permanent, palustrine waters with unconsolidated bottoms. One feature identified in the NWI as a permanent palustrine feature appears to have been backfilled and no longer qualifies as aquatic habitat.

Open lots with annual grassland and ruderal vegetation were observed haphazardly interspersed in the industrial and commercial area west of Waller Park and the golf course in the Northern Portion of the

assessment area (Figures 2a, 2d). The open lots had low to high densities of fossorial mammal burrows, however the lots represent highly fragmented habitat due to the configuration of adjacent developed infrastructure.

Southern Portion of Assessment Area

Skyway Drive, located immediately southwest and bordering the project site, is a heavily-traveled, four-lane divided road. The exterior curbs are seven inches high, and the interior (island) curbs are four inches high. Skyway Drive separates the project site from the Southern Portion of the assessment area, which consists of open grasslands with rodent burrows, irrigated row crops, eucalyptus trees for wind breaks, and the Santa Maria Public Airport and associated infrastructure. Open grasslands between the Santa Maria Public Airport and Skyway Drive were accessed on foot and determined to have a high density of rodent burrows. All open grasslands within and south of the Santa Maria Public Airport, and agricultural lands south of Skyway Drive and west of Orcutt Parkway were not surveyed on foot due to private property access restrictions. Habitat assessment for this area within the Southern Portion was performed by reviewing aerial imagery. Habitat types detected through aerial imagery (Figures 2d, 2e, 2g, and 2h) include annual grassland, eucalyptus woodland, vernal pool, stock pond, ruderal, and developed infrastructure. However, the presence of known and potential breeding habitat, the presence of suitable and potentially suitable upland habitat type, the inferred presence of fossorial mammal burrows (based on the density of fossorial mammal burrows in adjacent, contiguous habitat), the designated USFWS Critical Habitat, and the delineated USFWS boundary to the West Santa Maria/Orcutt Metapopulation indicates that habitat suitable for CTS is present south of Skyway Drive. A geotextile fence surrounds the north and east edges of the strawberry fields (irrigated row crops) located south of Skyway Drive and adjacent to CTS breeding pond SAMA-10 (Figure 2 and 2g).

5.0 Discussion

The Final Rule designating Critical Habitat for CTS Santa Barbara DPS (USFWS 2004) identifies three primary constituent elements (PCEs) essential for the conservation of the species:

1. Standing bodies of fresh water, including natural and man-made (e.g., stock) ponds, vernal pools, and dune ponds, and other ephemeral or permanent water bodies that typically become inundated during winter rains and hold water for a sufficient length of time (i.e., 12 weeks) necessary for the species to complete the aquatic portion of its life cycle.
2. Barrier-free uplands adjacent to breeding ponds that contain small mammal burrows. Small mammals are essential in creating the underground habitat that adult California tiger salamanders depend upon for food, shelter, and protection from the elements and predation.
3. Upland areas between breeding locations (PCE 1) and areas with small mammal burrows (PCE 2) that allow for dispersal among such sites.

All three primary constituent elements were observed within the 2.0 kilometer assessment area around the project site, though the distribution of the PCEs was not homogeneous throughout the assessment area. The combined three PCEs – the combination of which are required for viable CTS habitat - were all located south of Skyway Drive. Suitable upland refugia were observed within the project site, however

several formidable linear obstacles, which may act as complete physical barriers, were identified between the project site and suitable breeding habitat, which precludes classifying the project footprint as PCE 2 or PCE3. The obstacles were determined to have the potential to block or impede CTS movement by evaluating the heights of the obstacles relative to the body size of metamorphic and adult CTS, the lengths of the obstacles, and the locations of the obstacles relative to known CTS breeding ponds and suitable upland habitat containing small mammal burrows.

No standing bodies of fresh water were observed within the project footprint. Therefore, the project footprint does not contain appropriate breeding habitat for CTS (PCE 1) and CTS breeding is not expected to occur within the project footprint.

There are no physical barriers between the aquatic features in Waller Park and the golf course and the project area, however these waters are not classified as potential CTS breeding ponds by the USFWS (2015). All CTS breeding ponds north of Skyway Drive in western Santa Maria are considered to be removed (USFWS 2015). Given the amount of research conducted on the species in the area, the likelihood that CTS breeding has gone undetected in these waters is extremely low. Accordingly, the potential for CTS to disperse into the project area from the north is extremely low.

The only extant CNDDB occurrences and known CTS breeding ponds (per the 2015 USFWS Draft Recovery Plan) are located south and west of the project footprint, with all records north and east of the project area determined to be extirpated. The known and potential breeding ponds identified by the USFWS were located in the Southern Portion of the assessment area, approximately 0.9-2.0 kilometers south and southwest of the project site. Accordingly, the only potential avenue for CTS to disperse into the project footprint is by moving north from USFWS pond SAMA-10, located approximately 0.9 km to the south, or from the more distant pond approximately 2.0 km southwest of the project site.

. Though not explicitly stated in the 2004 Final Rule (USFWS), the major roadways appear to constrain the boundaries of Critical Habitat Unit 1 due to the formidable, if not complete, physical barriers they pose to dispersing and/or migrating CTS.

6.0 CTS dispersing northward from pond SAMA-10 (the closest breeding pond) towards the project site would first encounter a nearly-continuous geotextile fence surrounding the strawberry fields on the north and east sides. The fence is backfilled, and only three breaches in the fence were observed during the field assessment. Based on review of aerial imagery, the fence appears to be a permanent installation dating back to at least May 31, 2006 (Google 2015). If dispersing CTS were able to move north of the fence, they would encounter Skyway Drive. If dispersing CTS were able to traverse the busy roadway without experiencing direct mortality from vehicular strike, they would encounter several long, uninterrupted curbs in the process (Figures 2 and 3). The curbs along the island are approximately four inches tall and may not present a complete barrier for adult CTS movement, though it is not anticipated that a small juvenile would be able to climb over curbs of this height. The exterior curbs of Skyway Drive are seven inches tall and represent a formidable obstacle for adult CTS, given that the total length of an adult is a maximum of 8.6 inches (Stebbins 2003sion, the project footprint does not possess any of the PCEs required for suitable CTS habitat: there are no suitable aquatic features within the project footprint, there are numerous linear obstacles between known breeding ponds and the project footprint, and the small mammal burrows present in the project footprint are isolated from PCEs 1 and 2 by development associated with the Santa Maria Airport, multiple curbs, a heavily-traveled public roadway, and silt fence. Accordingly, the likelihood of encountering CTS within the project footprint is extremely low. The project is likely to either not affect CTS, or not likely to adversely affect CTS. References

California Natural Diversity Database (CNDDB). 2015. [Internet]. California Department of Fish and Wildlife November 2015.

County of Santa Barbara. 2008. Santa Barbara County Public Works Water Resources Mission. http://cosb.countyofsb.org/pwd/pwwater.aspx?id=3602. Date of electronic access: 19 November, 2015.

Orloff, S.G. 2011. Movement patterns and migration distances in an upland population of California tiger salamander (*Ambystoma californiense*). Herpetological Conservation and Biology 6:266-276.

Searcy, C.A., and H. B. Shaffer. 2008. Calculating biologically accurate mitigation credits: insights from the California tiger salamander. Conservation Biology 22:997-1005.

Searcy, C.A., E. Gabbai-Saldate, and H.B. Shaffer. 2013. Microhabitat use and migration distance of an endangered grassland amphibian. Biological Conservation 158:80-87.

Searcy, C.A., L.N. Gray, P.C. Trenham, and H.B. Shaffer. 2014. Delayed life history effects, multilevel selection, and evolutionary trade-offs in the California tiger salamander. Ecology 95:68-77.

Stebbins, R.C. 2003. A field guide to western reptiles and amphibians. Third edition. Houghton Mifflin Company, New York, New York. 533 pp.

USFWS. 2004. Endangered and threatened wildlife and plants; Designation of critical habitat for the California tiger salamander (*Ambystoma californiense*) in Santa Barbara County. Federal Register 69:68568.

USFWS. 2009. California tiger salamander (*Ambystoma californiense*) Santa Barbara County Distinct Population Segment 5-year review: Summary and evaluation. U.S. Department of the Interior, Ventura, California.

U. S. Fish and Wildlife Service. 2014. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

USFWS. 2015. Draft Recovery Plan for the Santa Barbara County Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region , Ventura, CA. vi + 76pp.

U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW). 2003. Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander. U.S. Fish and Wildlife Service, Sacramento, California. 8 pp. http://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/cts_survey_protocol.pdf. Date of electronic access: 10 November, 2015.

APPENDIX A

FIGURES

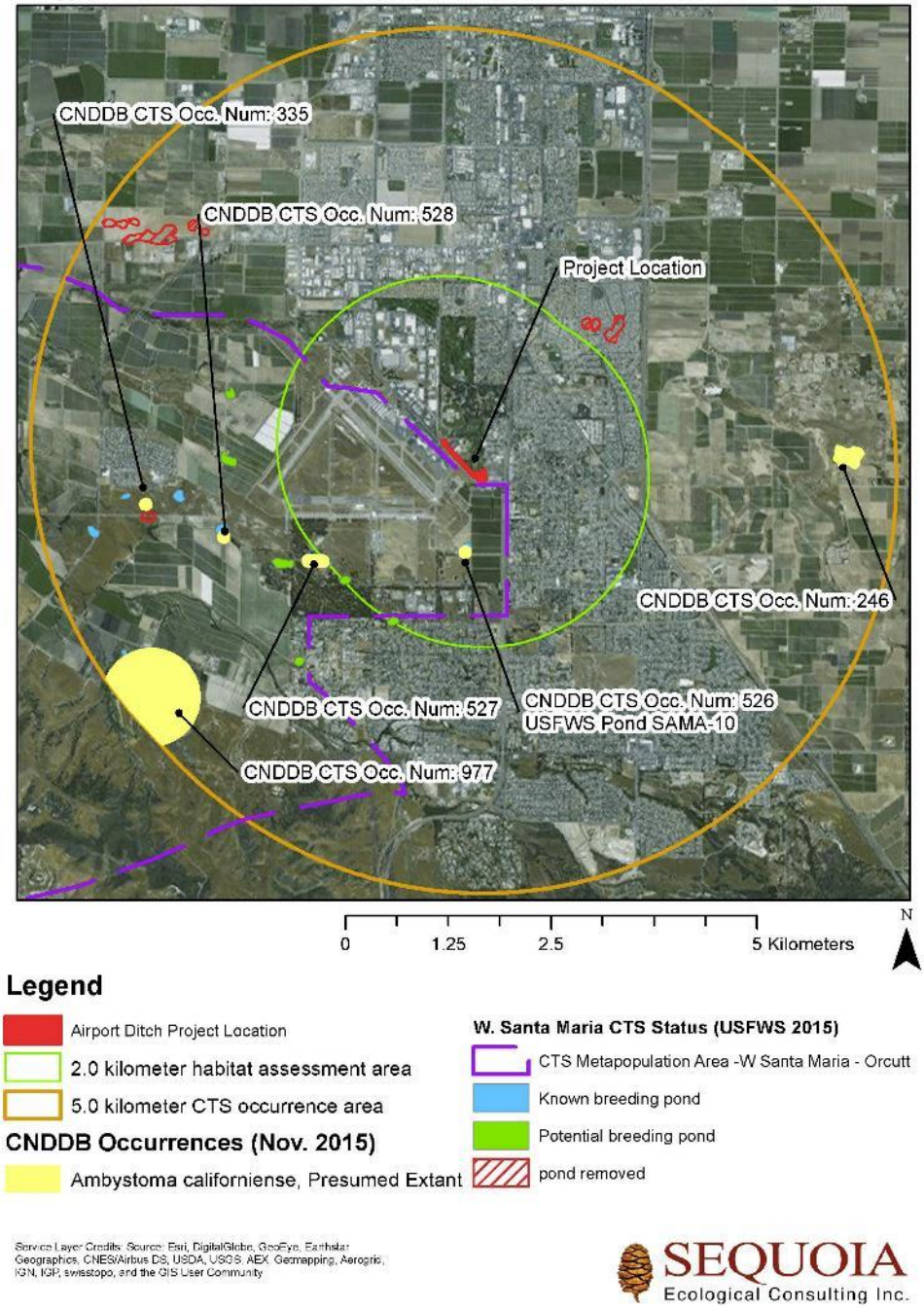


Figure 1. Overview of California tiger salamander occurrences within 5.0 kilometers of Santa Maria Airport Ditch project area.

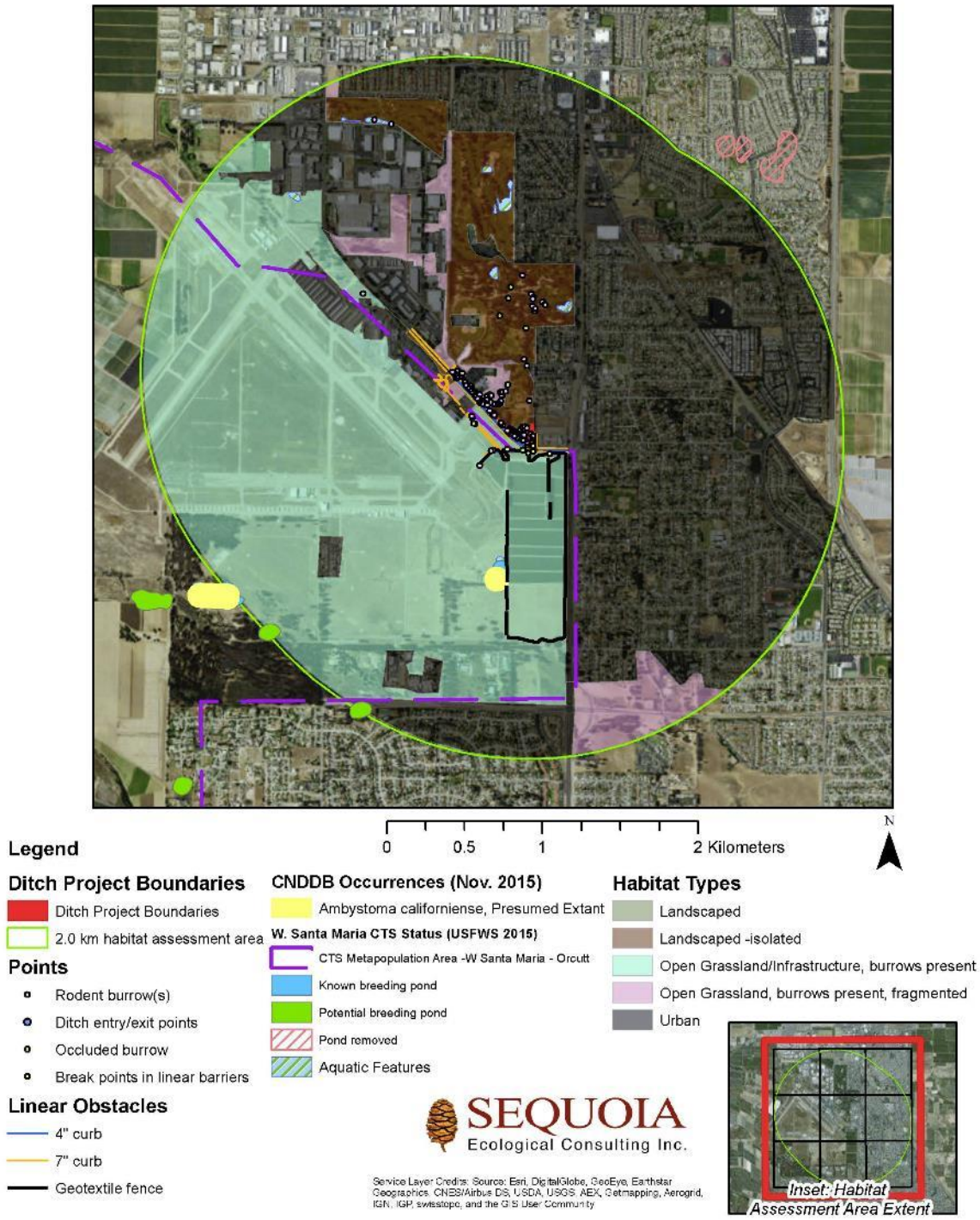


Figure 2. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site.

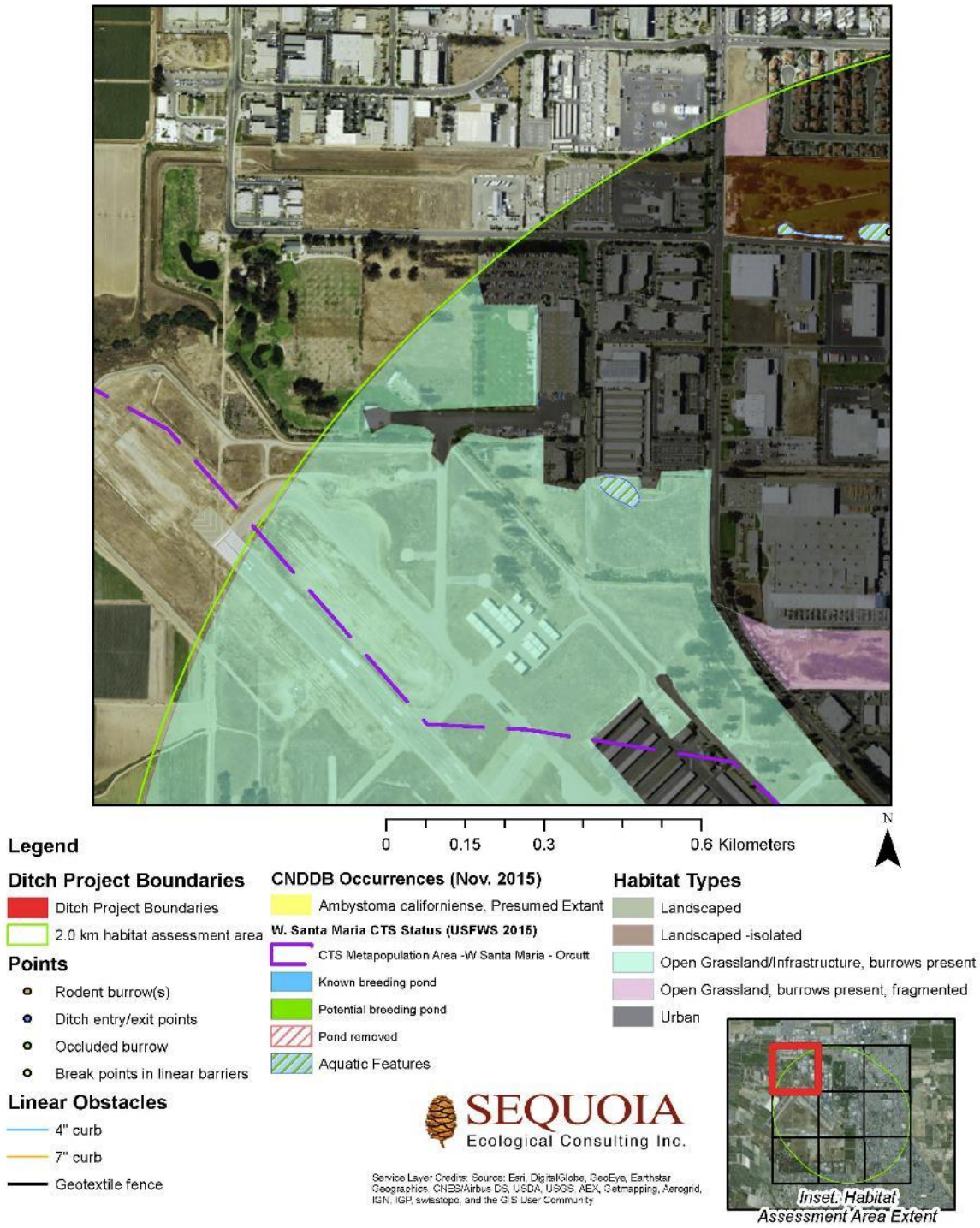


Figure 2a. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 1 of 9 (northwest).

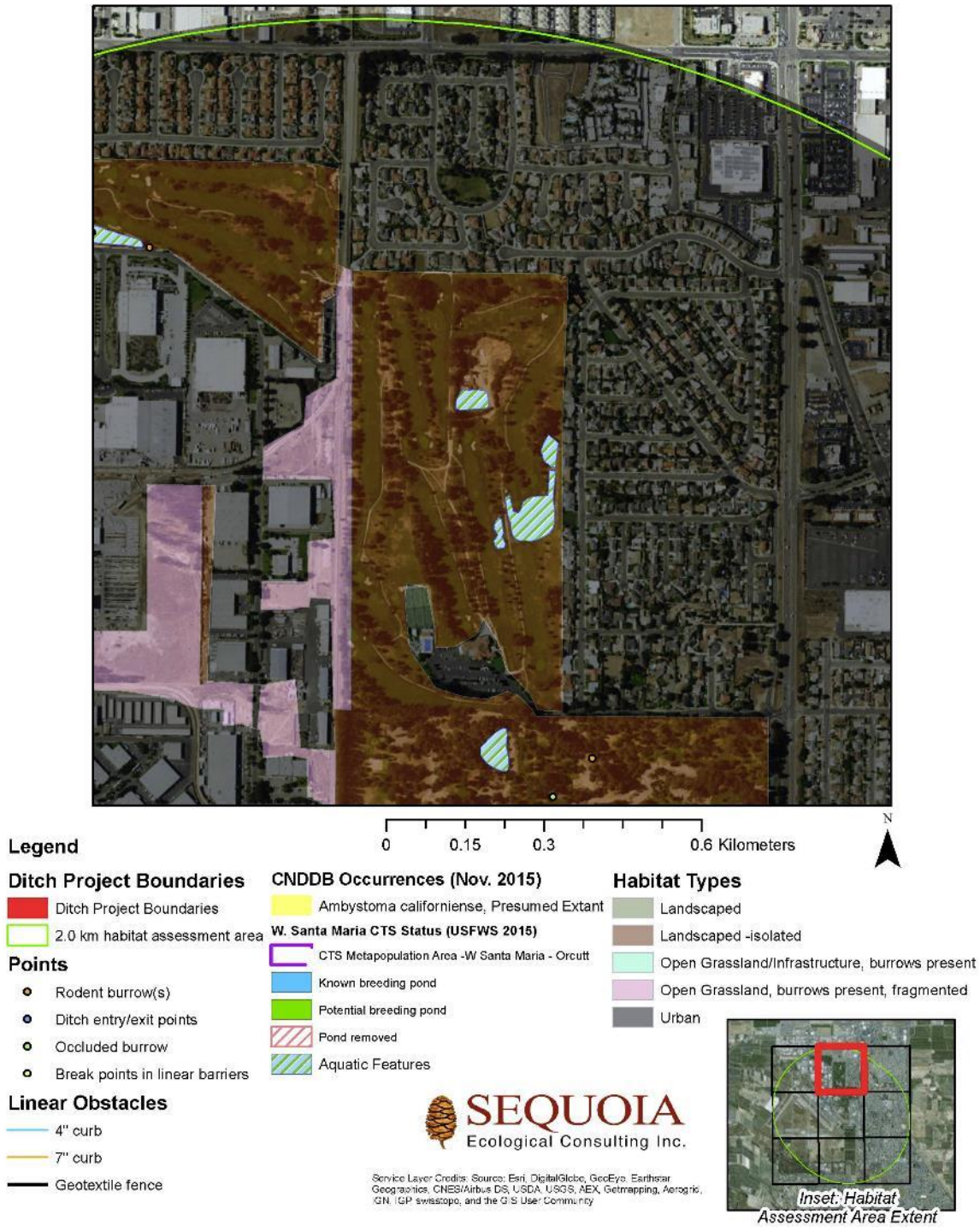


Figure 2b. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 2 of 9 (north).

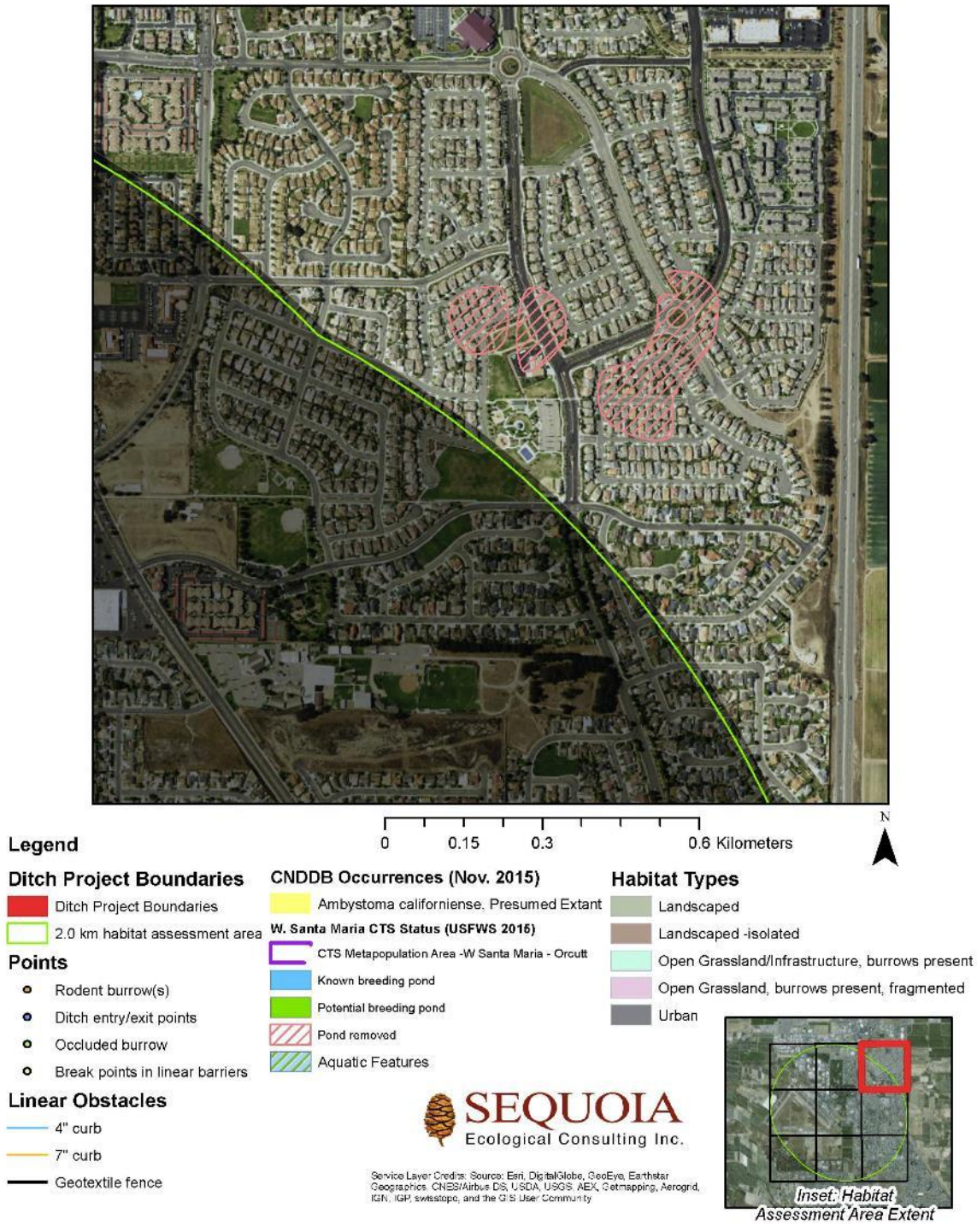


Figure 2c. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 3 of 9 (northeast).

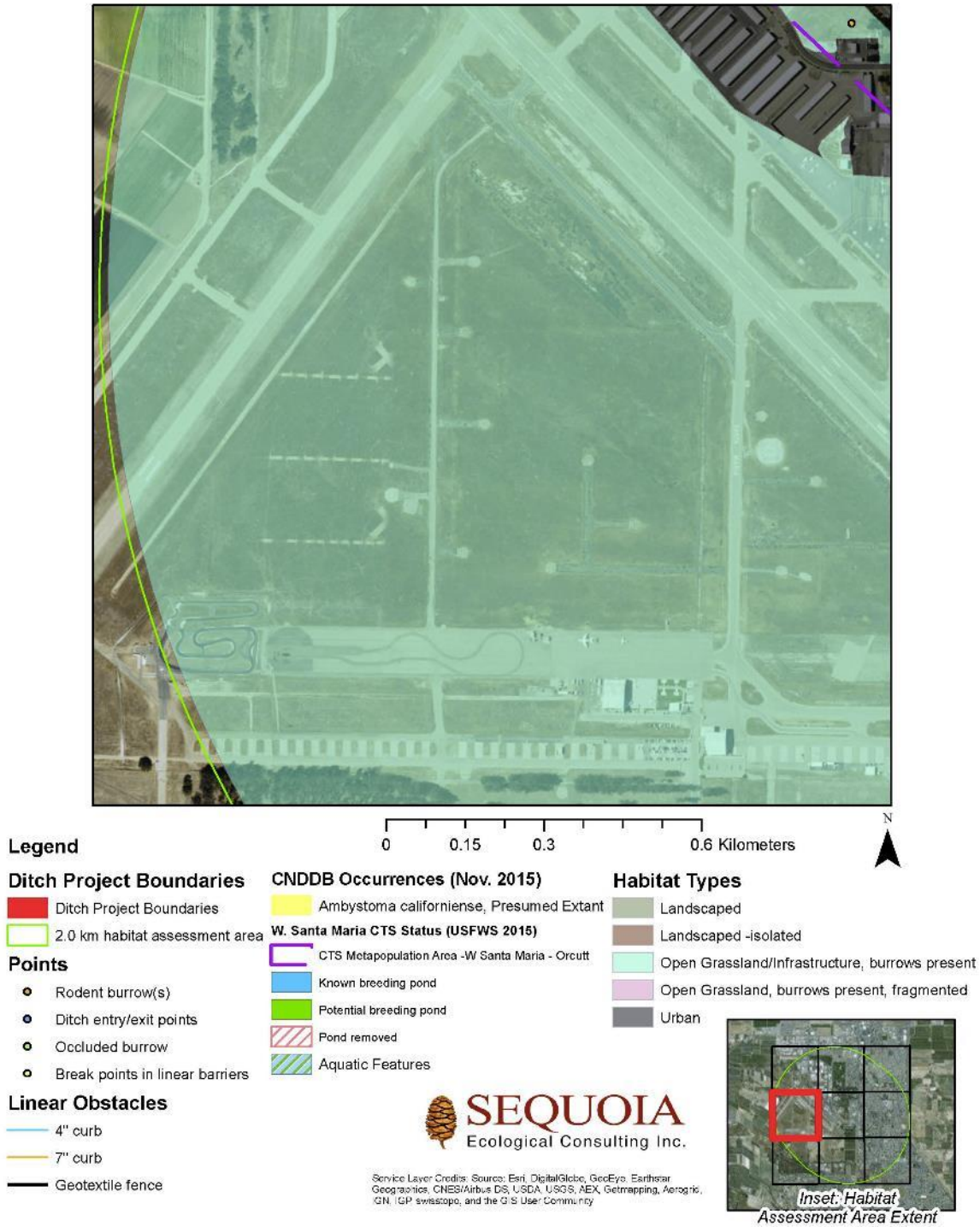


Figure 2d. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 4 of 9 (west).

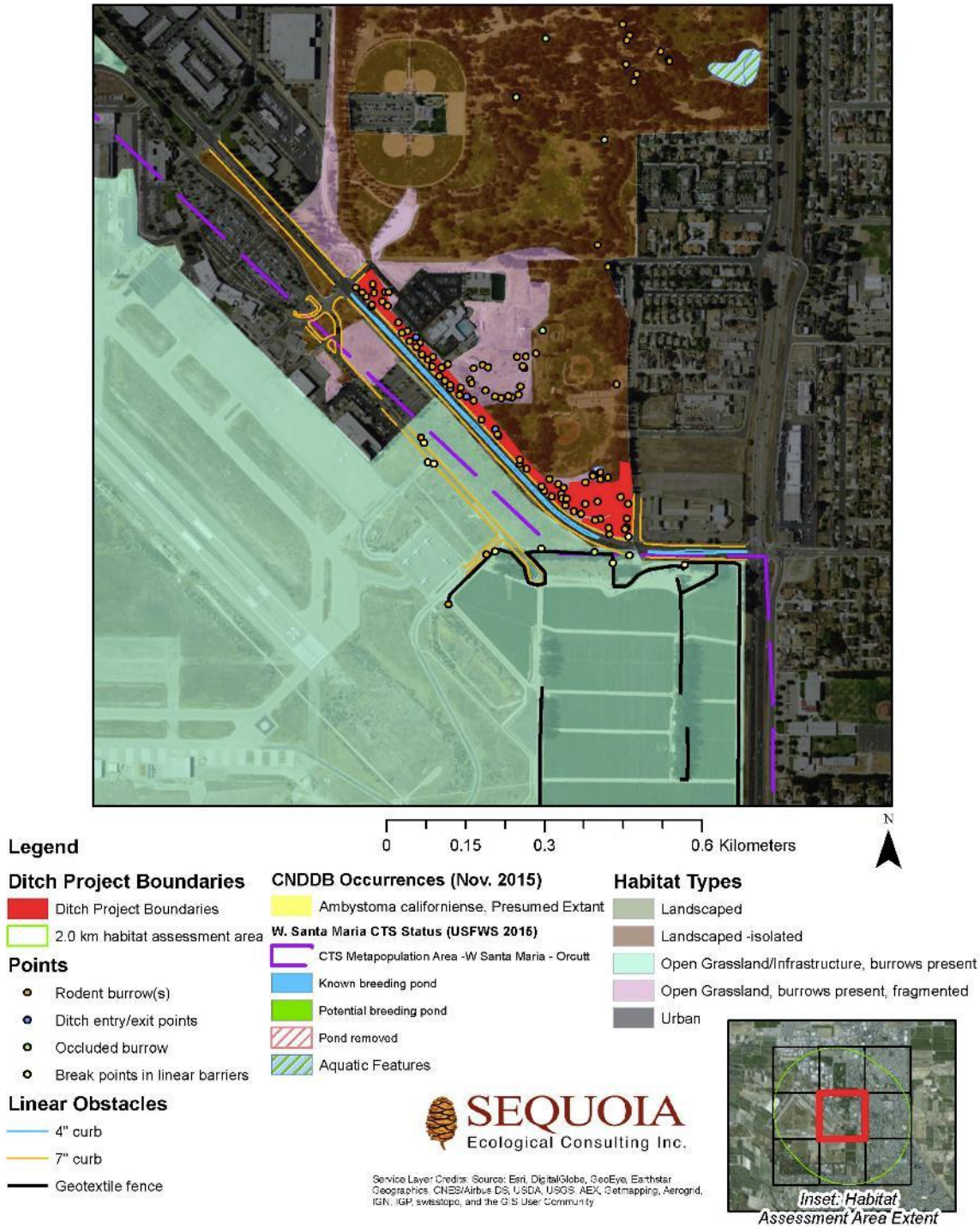


Figure 2e. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 5 of 9 (central).

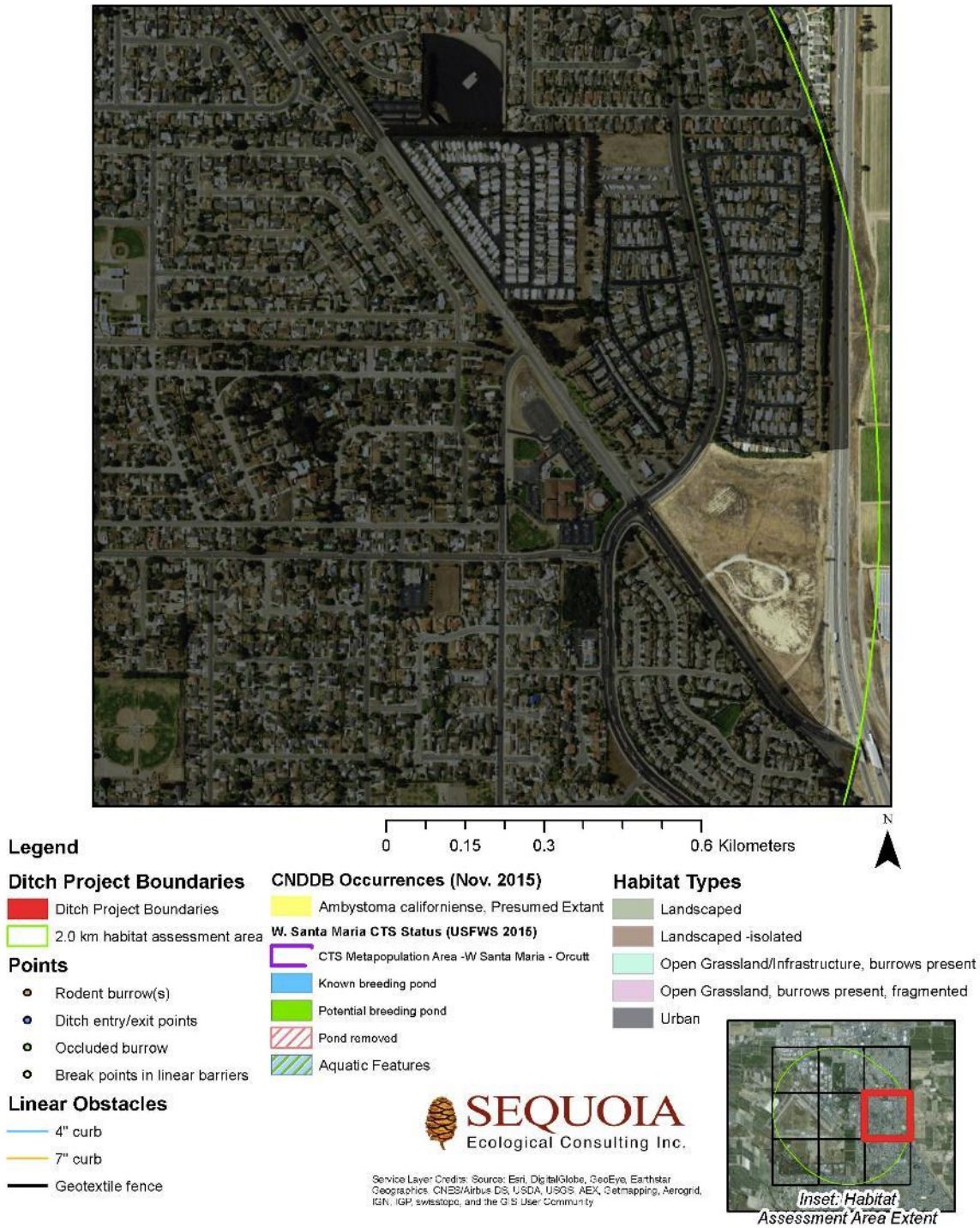


Figure 2f. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 6 of 9 (east).

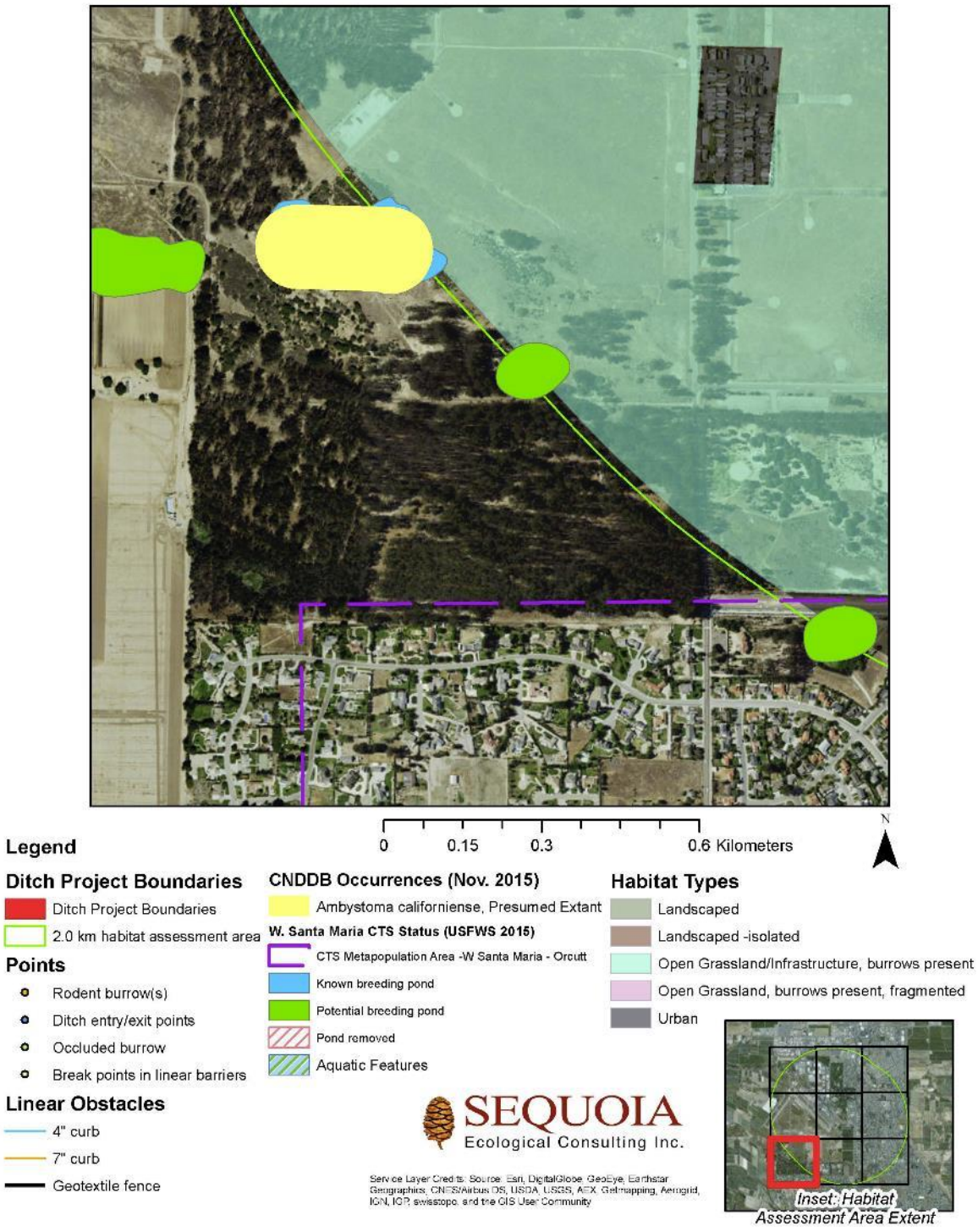


Figure 2g. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 7 of 9 (southwest).

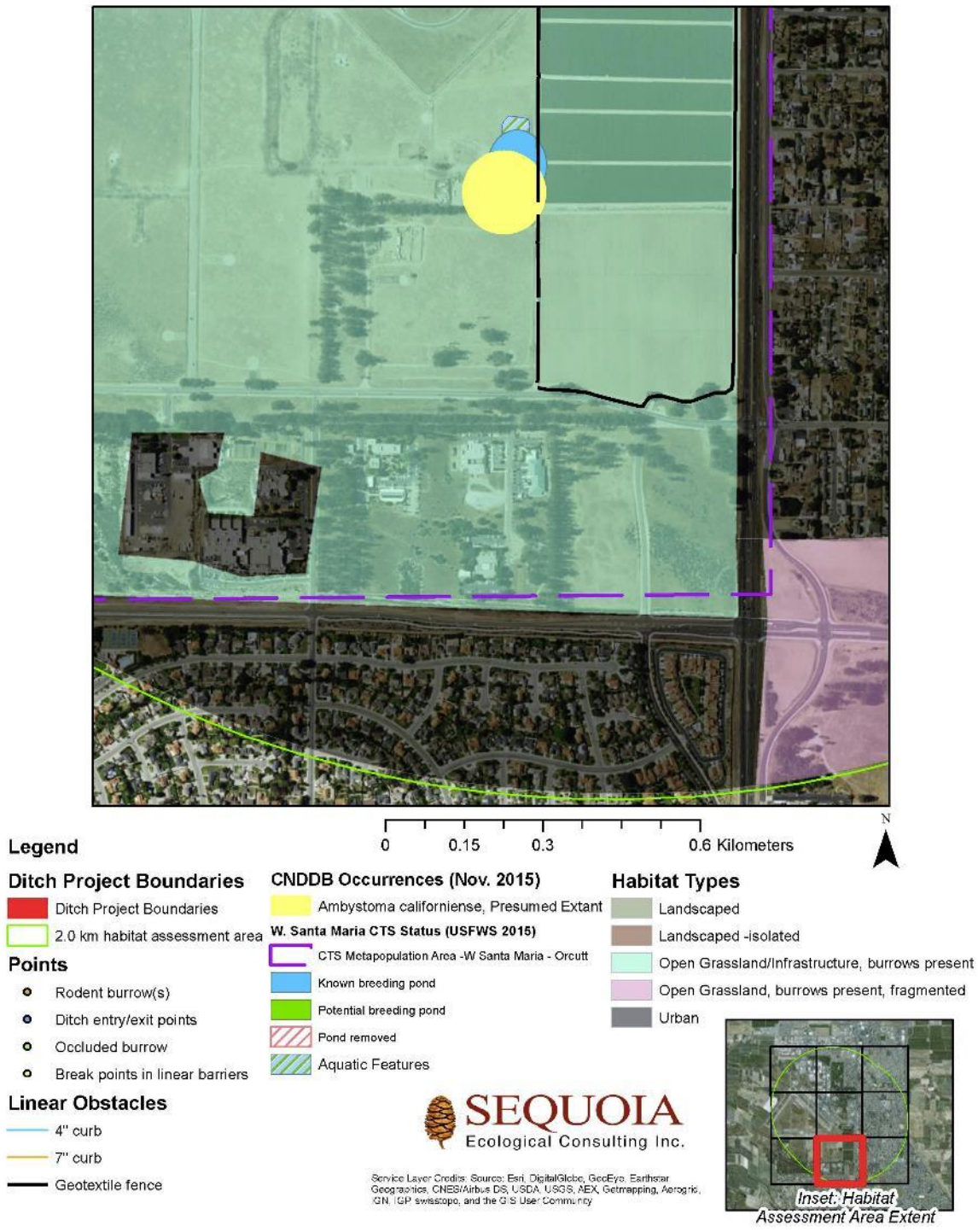


Figure 2h. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 8 of 9 (south).

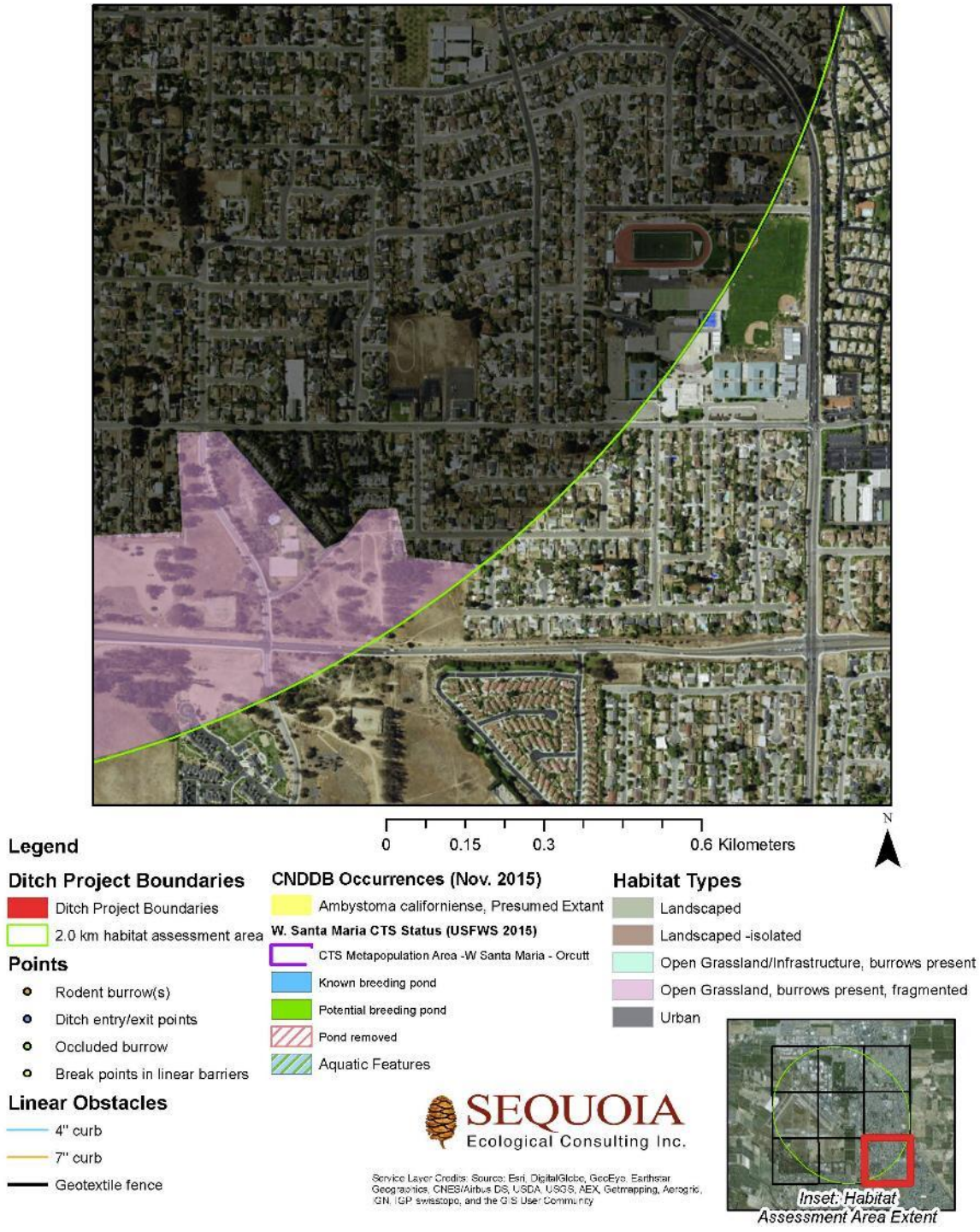


Figure 2i. Habitat types, obstacles, and CTS occurrences within 2.0 kilometers of Santa Maria Airport Ditch project site. Zoom on panel 9 of 9 (southeast).

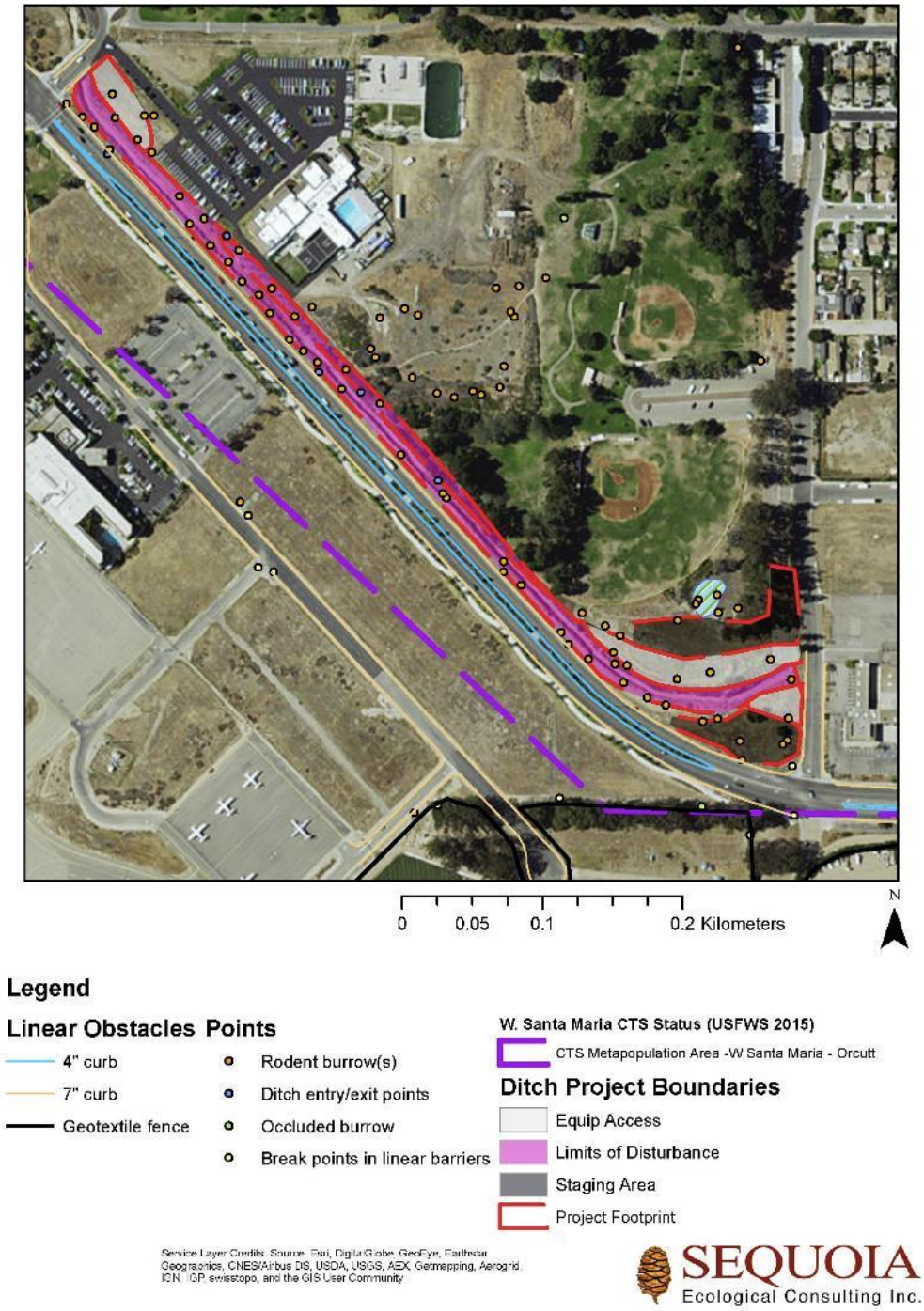


Figure 3. Santa Maria Airport Ditch project limits, rodent burrows, and linear obstacles adjacent to the project footprint.

APPENDIX B

PHOTO LOG

Santa Maria Airport Ditch Photo Log 11-17-2015

Photo 1

Ground squirrel and gopher burrows in access area north of the ditch, adjacent to Hagerman Drive.

Photo 2

Storm drain (1 of 2) emptying from Skyway Drive directly to ditch.

Photo 3

North end of project site, photo taken facing south. Work would occur in the ditch, and the access point to the ditch is visible on the left-hand side of the frame.

Photo 4

Photo of project site, taken facing south from northern access point. Note shear southern wall of ditch. Rodent burrows visible on both sides of ditch.

Photo 5

Sloped culvert on north side of ditch. Rodent burrows visible on both sides of ditch. All four curbs in Skyway Drive visible.

Photo 6

Photo of project site, taken facing northwest approximately midway through the project location. Shear walls and burrows are visible.

Photo 7

Open lot immediately north of project site, between the YMCA and Waller Park. Grassland, ruderal, and scrub vegetation types are present interspersed with rodent burrows.

Photo 8

Rodent burrows in Waller Park were typically occluded as a result of being run over by lawn maintenance equipment.

Photo 9

Backfilled gopher burrows were observed in loose, sandy soil in conifer-dominated areas of Waller Park.

Photo 10

Ground squirrel burrows in Waller Park were observed at low densities, and were concentrated at the bases of conifer trees.

Photo 11

Photograph of man-made pond in eastern Waller Park. The bathymetry and aquatic community composition of the pond could not be determined in the field.

Photo: 12

Access and staging area at southeast end of project site, north of the ditch. Numerous gopher burrows are present along the north bank of the ditch and in the flat access/staging area adjacent.

Photo 13

Photograph of north edge of ditch, access and staging area at southern end of site. Photograph taken facing southeast. Gopher burrows were observed throughout the area.

Photo 14

An impounded, ephemeral water body was present north of a swale adjacent to the southeast portion of the project site. Hydroperiod could not be determined.

Photo 15

Photograph of staging area south of the ditch, north of Skyway Drive, and west of Autopark Drive. Burrows and collapsing riprap armor are visible in the foreground.

Photo 16

Photograph of southern end of project area, taken facing west. Burrows are present on both banks. The proposed access points and staging areas are on either side of the ditch.

Photo 17

Photo of wheelchair ramp at intersection of Autopark Drive and Skyway Drive, taken facing southeast towards strawberry farm.

Photo 18

Photograph demonstrating height of exterior curbs of Skyway Drive. Staging area and project site are visible on the right-hand side of the frame. Orange notebook is 7.5" tall.

Photo 19

Photo taken facing south from staging area, showing four curbs of Skyway Drive and geotextile fence between strawberry farm and Skyway Drive.

Photo 20

Photograph showing general condition of project site between the ditch and Skyway Drive.

Photo 21

Photograph documenting the general condition and installation of the geotextile fence between Skyway Drive and the strawberry farm to the south.

Photo 22

A gap beneath the geotextile fence was located at the northwest corner, adjacent to the airport. Monofilament-wrapped fiber rolls were observed perpendicular to the drainage.

Photo 23

Photograph taken from the northwest end of the geotextile fence surrounding the strawberry field, taken facing north towards project site (visible in background). Numerous tall curbs were observed.

Photo 24

Open grass and scrub habitat with rodent burrows was observed north of the Santa Maria Airport and south of Skyway Drive.

Photo 25

Photo of pond at north end of Waller Park.

ATTACHMENT B

Central Coast Information Center Records Search Results Letter,
Alicia Gorman, (July 28, 2016).

THIS PAGE IS INTENTIONALLY BLANK

California
Archaeological
Inventory

SAN LUIS OBISPO AND
SANTA BARBARA COUNTIES

Central Coast Information Center
Department of Anthropology
University of California, Santa Barbara
Santa Barbara, CA 93106-3210
(805) 893-2474
FAX (805) 893-8707
centralcoastinfo@gmail.com

7/28/2016

Harry Price
RECON Environmental
1927 Fifth Avenue
San Diego, CA 92101

Re: Santa Maria Airport Ditch

The Central Coast Information Center received your record search request for the project area referenced above, located on the Santa Maria USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a 1 mile radius:

As indicated on the data request form, the locations of all reports and resources are provided in the following format: ■ custom GIS maps ■ shapefiles ☐ hand-drawn maps

Resources within project area:	none
Resources within 1 mile radius:	P-42-040932
Reports within project area:	SR-040807
Reports within 1 mile radius:	22 (see maps and bibliography)

Resource Database Printout (list):	▣ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	■ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	■ not requested	☐ nothing listed
Report Database Printout (list):	■ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	■ not requested	☐ nothing listed
Resource Record Copies:	■ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☐ enclosed	■ not requested	☐ nothing listed
OHP Historic Properties Directory:	☐ enclosed	☐ not requested	■ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	■ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☐ nothing listed

Caltrans Bridge Survey:	☐ enclosed ■ not requested ☐ nothing listed
Ethnographic Information:	☐ enclosed ■ not requested ☐ nothing listed
Historical Literature:	☐ enclosed ■ not requested ☐ nothing listed
Historical Maps:	☐ enclosed ■ not requested ☐ nothing listed
Local Inventories:	☐ enclosed ■ not requested ☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed ■ not requested ☐ nothing listed
Shipwreck Inventory:	☐ enclosed ■ not requested ☐ nothing listed
Soil Survey Maps:	☐ enclosed ■ not requested ☐ nothing listed

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of California Historical Resources Information System (CHRIS) data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the CHRIS.

Sincerely,

Alicia Gorman, M.A.
Assistant Coordinator

ATTACHMENT C

Geotechnical Engineering Letter-Report, Skyway Drive Drainage Ditch Improvements, Santa Maria, CA, Fugro Consultants, (August 2015).

THIS PAGE IS INTENTIONALLY BLANK

FUGRO CONSULTANTS, INC.

4820 McGrath Street, Suite 100
Ventura, California 93003-7778
Tel: (805) 650-7000
Fax: (805) 650-7010

August 6, 2015
Project No. 04.62150054

County of Santa Barbara
Flood Control & Water Conservation District
130 East Victoria Street Suite 200
Santa Barbara, California 93101

Attention: Mr. Jon Frye, PE, CFM, Engineering Manager

Subject: Geotechnical Engineering Letter-Report, Skyway Drive Drainage Ditch Improvements, Santa Maria, California

Dear Mr. Frye:

INTRODUCTION AND BACKGROUND

Fugro is pleased to present this letter-report for the Skyway Drive Drainage Ditch Improvements project in Santa Maria, California. The report summarizes the work we performed on this project, describes our findings, and provides recommendations for the proposed drainage improvements. Our work was performed in general conformance with our proposal dated April 1, 2015 (revised May 20, 2015) and authorized under our master services agreement (contract No. CN16095) to provide professional services to the County of Santa Barbara Public Works Department (County).

The project generally consists of improving the existing unlined trapezoidal drainage ditch located northeast of the Santa Maria Airport. Plate 1 – Vicinity Map indicates the general project location with respect to local roadways and other landmarks. The ditch extends approximately 1/2-mile along the northeast shoulder of Skyway Drive between Auto Park Drive and Skyway Lane. The existing channel bottom ranges from about 5 to 10 feet below the elevation of the pavement surface along Skyway Drive. The side slopes are typically inclined at about 1h:1v (horizontal to vertical) but are locally inclined near vertical. Portions of the channel walls have been undercut by scour resulting in significant erosion and sloughing. In some areas the channel walls have been undercut by erosion resulting in a cut-bank condition with up to about 1 to 2 erosion beyond the face of the channel. The cut-bank condition exists, at least on a temporary basis, because of the cemented nature of the on-site sandy soils.

We understand that the County would like to improve the drainage channel within the project limits to prevent future erosion and sloughing problems. Possible improvement alternatives under consideration by the county include replacing the open channel with a buried 60- to 72-inch diameter storm drain pipe, or regrading and lining the channel with articulated concrete mats. The County is assessing several pipe material alternatives, including reinforced concrete pipe (RCP), high-density polyethylene (HDPE), Contech DuroMaxx, and ADS HP. If

the pipe option is selected, we assume that the pipe invert would be at or near the bottom elevation of the existing ditch and the ditch would be backfilled around the pipe. On the basis of discussions with County staff, we understand a minor vegetated overflow swale would be provided at the ground surface above the pipe.

As part of the design effort for the project, the County is requesting geotechnical engineering input and recommendations for grading and compacted fill material specifications for the proposed storm drain pipe and armored slope alternatives.

WORK PERFORMED

Our work performed on the project consisted of the following tasks:

Project Coordination

Prior to the drilling work we staked the drill hole locations in the field and contacted Underground Service Alert (USA) to request marking of existing underground utility lined in the proposed work areas. Our staff coordinated with local member agencies listed on the USA ticket to assess our drilling locations for potential utility conflicts. We also prepared a site-specific health and safety plan for the use of all on-site personnel through the duration of the project.

Subsurface Exploration

We excavated four soil drill holes at the site to depths of up to about 10 feet using hand drilling and sampling methods. The drill holes were located along the top of the channel slopes and spaced along the ditch alignment. Soil samples were collected using a California-type (Cal) liner sampler and the sampler was driven 6 inches into the subsurface materials at the bottom of the drill hole using a light weight hand-operated slide hammer. Fugro engineers conducted the drilling activities, logged the soil conditions encountered in the drill holes and packaged recovered soil samples for transport to our laboratory. While on-site our personnel also collected two surficial grab samples of intact cemented sands along the channel walls. The approximate locations of each drill hole and grab sample are provided on Plate 2 – Exploration Location Map. Logs of the encountered conditions are provided in Appendix A - Subsurface Exploration.

Laboratory Testing

We performed geotechnical laboratory tests on selected samples obtained from the field exploration program and used the results to assist our characterization of the geotechnical engineering properties exhibited by the on-site soil materials. Tests were conducted to assess total unit weight and moisture content (and dry unit weight), Atterberg limits (plasticity), fines content (percent of material passing through a No. 200 sieve), sand equivalent, expansion potential, compaction characteristics, shear strength (consisting of direct shear and unconfined compression), and corrosion potential. The results of our laboratory analyses are included in

Appendix B - Laboratory Testing. Selected data are also reported on the respective drill hole logs in Appendix A.

Geotechnical Evaluation and Report

We reviewed local geologic maps and the geotechnical data acquired for the project to develop recommendations for the design and construction of the proposed pipeline and armored open channel configuration alternatives. This report was prepared to present our findings and summarize our geotechnical recommendations for those proposed channel rehabilitation alternatives.

FINDINGS

Geologic Setting

The project site is located within the Santa Maria basin, a transitional area between the Coast Ranges geomorphic province to the north, and the Transverse Ranges to the south. The onshore Santa Maria basin is a northwest oriented structural basin that could have been formed by a large tectonic depression originating during the Miocene as a result of extension related to the San Andreas Fault system (Richmond et al. 1981). The result of that extension was rapid subsidence and accumulation of up to 15,000 feet Miocene- to Pleistocene-age marine sediments within the basin. During the Plio-Pleistocene period, the tectonic stress regime changed to compression, as evidenced by Quaternary shortening and uplift of sediments in the region (Namson and Davis 1990).

As mapped by Dibblee (1994), the surface geology within the project vicinity consists of wind-deposited older alluvium (Qos). Hall (1978) notes older dune sand alluvial deposits are unconsolidated and slightly cemented sand of stabilized dunes. The subsurface conditions encountered along the ditch alignment generally comprise of alluvium consistent with the characterization by Dibblee (1994) and Hall (1978).

Soil Conditions

Based upon the materials encountered in the hand auger drill holes and observations of exposed soil conditions along the existing channel slopes/walls, we anticipate that the soils along the alignment generally consist of slightly to highly cemented silty and clayey sands. Our exploration effort also encountered localized layers of sandy, silty clay material. Near Auto Park Drive the existing channel slopes/walls appear to generally consist of approximately 3 to 5 feet of alluvium or possible artificial fill overlying older alluvium sand dune deposits. The thickness of possible artificial fill material increases along the alignment moving towards Skyway Lane to as much as about 8 feet below grade at drill hole location HA-1, or about 2 to 3 feet below the existing channel bottom elevation. In that area the older alluvium outcrops along the channel slope adjacent to Skyway Drive but is not visible along the northeast slope. We expect that the materials identified as alluvium or possible artificial fill may have been placed during the development of the surrounding area or could consist of younger naturally deposited sand dune materials.

While most of the materials encountered on-site exhibited some degree of cementation, the older alluvium is characterized by a stronger degree of cementation and darker yellowish brown coloring. Under saturated conditions the overlying possible artificial fill retains little to no cohesive strength and is highly susceptible to sloughing and erosion during storm events or when exposed to other sources of runoff. The older alluvium exhibits a high degree of residual cemented strength under saturated conditions providing more resistance to erosion.

Despite the cemented nature of the older alluvium, significant erosion and sloughing has occurred along the channel and the bottom has filled with loose redeposited granular sediment. Hand probing along the channel bottom indicates that the thickness of loose sediment generally ranges from less than a foot to about 2 to 3 feet in thickness; however, some areas may have experienced deeper scour, resulting in additional thickness of loose sediment.

Groundwater Conditions

Groundwater was not encountered to the ultimate depth of the deepest exploration or approximately 10 feet below the elevation of Skyway Drive. Surface water was observed in localized areas at the bottom of the existing drainage ditch; however, we expect that such free water is associated with irrigation and other artificial runoff directed into the drainage channel from the surrounding properties. Although groundwater was not encountered in our study, we note there is a potential for very moist to wet soil conditions and possibly perched groundwater to occur in the subsurface following periods of heavy precipitation.

RECOMMENDATIONS

The following sections provide our opinions and recommendations regarding the design and construction of the proposed pipe culvert and armored slope channel rehabilitation alternatives.

Storm Drain Pipe Alternative

As previously described, we understand that the County is considering several pipe material types to install as a permanent storm drain culvert system with an overlying vegetated overflow swale. The pipe materials under consideration include HDPE, RCP, ADS HD, and Contech DuroMaxx. We anticipate the design team will select a pipe ranging from about 60 to 72 inches in diameter and assume that the invert will rest at or near the flow line elevation of the existing channel.

Site Grading

We recommend that the channel be graded and shaped for the proposed pipeline construction. In addition, we recommend that loose soil be removed from below the pipe invert prior to placing pipe bedding or backfill. On a preliminary basis, we anticipate the depth of loose soils to be removed is about 2 feet, however, additional excavation may be necessary if soft or compressible zones are identified at the trench subgrade. The excavation bottom should be cut neat and observed by Fugro to assess subgrade stability prior to placing any compacted fill

materials. If extensive thicknesses of unsuitable material are encountered the contractor should contact Fugro to provide input regarding measures to stabilize the subgrade surface prior to fill placement. Once approved, the subgrade surface should be moisture conditioned to within 2 percent of optimum and compacted to 90 percent relative density as determined by ASTM D1557.

Fill Materials

Imported Fill. Imported fill materials may be used for trench backfill or select fill (bedding and pipe zone), provided that the imported fill satisfies the requirements for its intended use. Imported fill material should be evaluated by the geotechnical engineer to verify suitability for its intended use.

Bedding and Pipe Zone Material. Bedding and pipe zone backfill consists of material placed beneath and around the pipe. We recommend sand materials conforming to Greenbook (2009) Section 306-1.2.1 with a sand equivalent of at least 30 be used as pipe bedding and pipe zone backfill.

Bedding should extend below the bottom of pipe to at least 6 inches or 10 percent of the pipe diameter, whichever is greater, and be placed at least 12 inches above the top of pipe. We recommend the contractor apply at least two passes with a vibratory plate to densify the bedding material placed below the bottom of pipe but leave it loose enough to conform to and evenly support the pipe. Pipe zone backfill extending from the bottom of pipe to at least 12 inches above the top of pipe should be placed at a moisture content within 2 percent of optimum, in loose lifts no greater than 8 inches in thickness, and compacted to 90 percent of the relative maximum dry density as determined by ASTM D1557.

The trench width should provide sufficient space to allow compaction equipment to operate between the pipe spring line and trench wall. We recommend that mechanical equipment be used for compaction. Jetting or flooding of pipe zone materials should not be allowed.

Trench Backfill. Trench backfill consists of material placed above the pipe zone backfill and should meet the following requirements:

- Free of organics, debris or rocks larger than 3 inches in maximum dimension.
- No more than 15 percent material larger than 2 inches.
- Moderate to low expansion potential (EI $\leq$ 50).
- Sand Equivalent of at least 20.

Trench backfill should be moisture conditioned to within 2 percent of optimum, placed in loose lift thicknesses no greater than 8 inches, and mechanically compacted to at least 90 percent relative compaction, as determined from ASTM D1557. We recommend that jetting or flooding of pipe trench backfill materials not be allowed.

Use of On-site Soils. On the basis of the data from our drill hole explorations and laboratory data we anticipate that a large percentage of the granular onsite soils should be

suitable for trench backfill. However, because the pipe invert will likely rest near the elevation of the current channel flow line, we expect that a minimal volume of material will be available for reuse and a majority of the trench backfill materials will need to be imported.

We anticipate that there are soil materials onsite that could meet the minimum sand equivalent recommendations for bedding and pipe zone material; however, the volume of available on-site material will likely be limited. Furthermore, selective excavation and processing of material to meet the criteria for select fill may be difficult due to the variability of the alluvial soils. Therefore, in general, the contractor should also be prepared to import bedding and pipe zone materials.

Pipe Loads

Backfill and Other Loads on Pipes. Backfill loads on the pipes will depend on the pipe type (i.e., rigid or flexible), geometrical conditions (embankment or trench configuration), depth of backfill, and on the characteristics of the backfill and in situ soils. For design purposes, we recommend that a total unit weight of 125 pcf be used to estimate backfill loads. Appropriate pipe design references should be consulted to determine other pipe design parameters.

Other external loads on the pipes come from construction activities, loads related to traffic, or other post-construction land uses. The pipes should be designed to resist the imposed loads with an added factor of safety and for an appropriate limiting deflection. The pipe may be subjected to surcharge pressure line loads and point loads due to construction activities and traffic, and those loading conditions should also be considered in the design of the pipe.

Modulus of Soil Reaction. Flexible and semi-rigid pipes are typically designed to withstand a certain amount of deflection from the applied earth loads. Those deflections can be estimated with the aid of equations developed by Howard (2006). We suggest an embedment material E'-value of 2,500 psi for granular bedding materials meeting the recommendations of this report.

The E'-value is appropriate for a combined trench/pipeline system that assumes the trench walls are at least as stiff as the embedment soil beside the pipe. The conditions encountered during our subsurface exploration work generally support this assumption. If conditions observed during construction suggest otherwise, Fugro should be contacted to provide guidance in developing a composite E'-value that considers reduced stiffness in the trench walls.

Reconstructed Channel with Articulated Concrete Lining

The existing unlined channel has been heavily impacted by erosion. We understand that the County is considering the use of articulated mat armoring systems to stabilize the channel and prevent future erosion. The articulated mat system generally consists of a network of concrete blocks joined by cables that can be placed like a blanket over the finished slope

surface. The following subsections provide our geotechnical recommendations for the rehabilitation alternative to regrade and stabilize the channel slopes.

Site Grading

We recommend that the channel be graded and shaped for the revised channel configuration and the placement of the proposed articulated concrete block mattress (ACBM) and underlying filter material.

In general, we recommend that loose soil be removed from below the proposed ACBM prior to placing the filter material. On a preliminary basis, we anticipate the depth of loose soils to be removed is about 2 feet, however, additional excavation may be necessary if soft or compressible zones are identified at the subgrade level. The excavation bottom should be cut neat and observed by Fugro to assess subgrade stability prior to placing any compacted fill materials. If extensive thicknesses of unsuitable material are encountered the contractor should contact Fugro to provide input regarding measures to stabilize the subgrade surface prior to fill placement. Once approved, the subgrade surface should be moisture conditioned to within 2 percent of optimum and compacted to 90 percent relative density as determined by ASTM D1557. The subgrade should be fine graded to the tolerance required by the ACBM manufacturer. We recommend a geotextile fabric (such as rock slope protection fabric per Caltrans Standard Specifications Section 88 1.02I) be placed between the subgrade and the ACBM and extend up the channel side slopes to the anchor point of the ACBM.

Slope Inclinations

We recommend the channel side slopes for the placement of the ACBM not exceed 1-1/2h:1v or the manufacture recommendations, whichever results in the flatter slope geometry. Un-armored soil slopes should be inclined no steeper than 3h:1v and should be planted with appropriate vegetation to reduce the potential for erosion. Erosion control measures, such as jute matting and hydroseeding, should be employed to reduce the potential for erosion while vegetation is being established on slopes. On-going maintenance of slopes should be provided as needed.

Armoring

The ACBM material should be placed on the slope and anchored at the crest in accordance with the manufacture's specifications. Additional guidance for the placement of ACBM is provided in ASTM D 6884.

Construction Considerations

Trenching and Temporary Excavations

We anticipate the materials observed along the drainage channel alignment can be excavated using conventional excavation equipment. Care should be taken with excavating cemented material to avoid creating irregular excavation surfaces. Excavations more than 4 feet deep should be sloped, shored, or shielded in accordance with federal and state standards,

project specifications, and safe construction practices. The contractor is responsible for providing and maintaining safe excavations, according to Occupational Safety and Health Administration (OSHA) regulations.

In areas where the right-of-way is of sufficient width, temporary excavations could potentially be laid back no steeper than 1h:1v (horizontal: vertical). Temporary excavations should be monitored for stability during construction and be modified, if necessary. Excavations lacking adequate sidewall support could move or become unstable and result in damage to existing improvements and utilities adjacent to the pipeline trench or excavations. The use of unsupported excavations will likely limit traffic access near the top of temporary slopes.

Where there is insufficient width or where other factors that would prohibit the use of temporary construction slopes, a shoring system will be needed. The selection, design, and installation of any shoring system needed for the project should be made by the contractor, in accordance with OSHA regulations.

Dewatering

We do not anticipate excavations performed for this project to encounter a static water table. However, irrigation or storm water runoff should be redirected to avoid the work area during construction and standing water should be removed from the bottom of any excavation on an as-needed basis through the use of sump or trash pumps.

Soil Chemistry and Corrosion

Corrosion. A selected sample of the clayey sand older alluvium encountered on-site was evaluated by Cooper Testing Laboratories in Palo Alto, California, for resistivity, pH, and concentrations of chlorides and sulfates. Table 1 below summarizes the results of those analytical tests.

Table 1. Summary of Chemical Test Results

Sample ID	USCS Classification	Depth (feet)	Sulfate (ppm)	Chloride (ppm)	Resistivity (ohm-cm)	pH
Grab B	Clayey SAND (SC)	Surface	78	129	1,252	4.6

According to the current Caltrans Corrosion Guidelines, a corrosive site is defined as a site where "…chloride concentration is 500 ppm or greater, sulfate concentration is 2000 ppm or greater, or the pH is 5.5 or less." In addition, Caltrans (2012) suggests soil materials can be considered to have a low propensity for corrosion if the resistivity of the soil is greater than 1,000 ohm-cm. In general, soil resistivity, which is a measure of how easily electrical current flows through soils, is the most influential factor.

Based on the limited laboratory test results, the soils in the project vicinity do not meet Caltrans' criteria for a corrosive environment. However, we note that many factors can affect the corrosion potential of soil including soil moisture content, resistivity, permeability and pH, as

well as chloride and sulfate concentration and further testing may be needed during construction to characterize the corrosion potential of imported soil materials or to confirm the corrosion potential in the immediate area of a critical drainage culvert or buried structure.

Concrete Structures and Cement Type. Data from our testing suggest the on-site soils are not aggressive to concrete and not corrosive to ferrous materials. Therefore, in our opinion Type II cement should be adequate for use in constructing the proposed improvements provided reinforcing steel is designed with adequate concrete cover thickness.

Limitations

Report Use

This report has been prepared for the exclusive use of the County of Santa Barbara and their agents for the specific application to the design of the proposed Skyway Drive Drainage Ditch Improvements project in Santa Maria, California. The findings, conclusions, and recommendations presented herein were prepared in accordance with generally accepted geotechnical engineering practice of the project region. No other warranty, express or implied, is made.

Although information contained in this report may be of some use for other purposes, it may not contain sufficient information for other parties or uses. If any changes are made to the project as described in this report, the conclusions and recommendations in this report should not be considered valid unless the changes are reviewed and the conclusions and recommendations in this report are modified or validated in writing by Fugro.

Construction Monitoring

Users of this report should recognize that the construction process is an integral design component with respect to the geotechnical aspects of a project, and that geotechnical engineering is inexact due to the variability of natural and man-induced processes, which can produce unanticipated or changed conditions. Proper geotechnical observation and testing during construction is imperative in allowing the geotechnical engineer the opportunity to verify assumptions made during the design process. Therefore, we recommend that Fugro be retained during pipeline construction to observe compliance with project plans and specifications and to recommend design changes, if needed, in the event that subsurface conditions differ from those anticipated.

Potential Variation of Subsurface Conditions

Earth materials can vary in type, strength, and other geotechnical properties between points of observations and exploration. Additionally, groundwater and soil moisture conditions also can vary seasonally or for other reasons. Moreover, we do not and cannot have a complete knowledge of the subsurface conditions underlying the site. The conclusions and recommendations presented in this report are based on the findings at the points of exploration, interpolation and extrapolation of information between and beyond the points of observation,

and are subject to confirmation (to the extent possible) based on the conditions revealed during construction.

Hazardous Materials

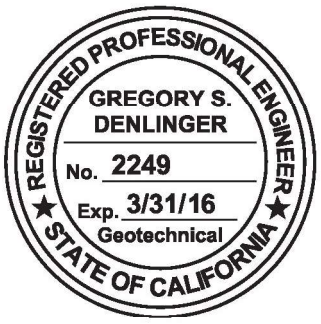
The scope of our services presented in this report did not include any environmental site assessment for the presence or absence of hazardous/toxic/biological materials in the soil, groundwater, surface water, or the presence of wetlands or the presence of environmentally sensitive areas, endangered or candidate wildlife or vegetation, or culturally significant zones within the project area. Any statements or absence of statements in this report or data presented herein regarding odors, unusual or suspicious items, or conditions observed are strictly for descriptive purposes and are not intended to convey engineering judgment regarding the potential presence of any hazardous/toxic materials or environmentally/culturally significant areas.

CLOSURE

We appreciate the opportunity to provide geotechnical services for the County of Santa Barbara in support of the Skyway Drive Drainage Ditch Improvements project and look forward to continuing our professional relationship in the future. If you have any questions or comments regarding the contents of this report, please contact the undersigned.

Sincerely,

FUGRO CONSULTANTS, INC.



Justin R. Martos, PE
Senior Staff Engineer

Gregory S. Denlinger, GE
Principal Engineer

Attachments: Plate 1 – Vicinity Map
Plate 2 – Exploration Location Map
Appendix A – Subsurface Exploration
Appendix B – Laboratory Testing

Copies: (Pdf) Addressee

References

American Society of Testing and Materials (ASTM) (latest edition), ASTM Caltrans Annual Book of Standards.

Dibblee, T.W., Jr. (1994), Geologic Map of the Santa Maria and Twitchell Dam Quadrangle, Santa Barbara County, California, Dibblee Foundation Map #DF-51.

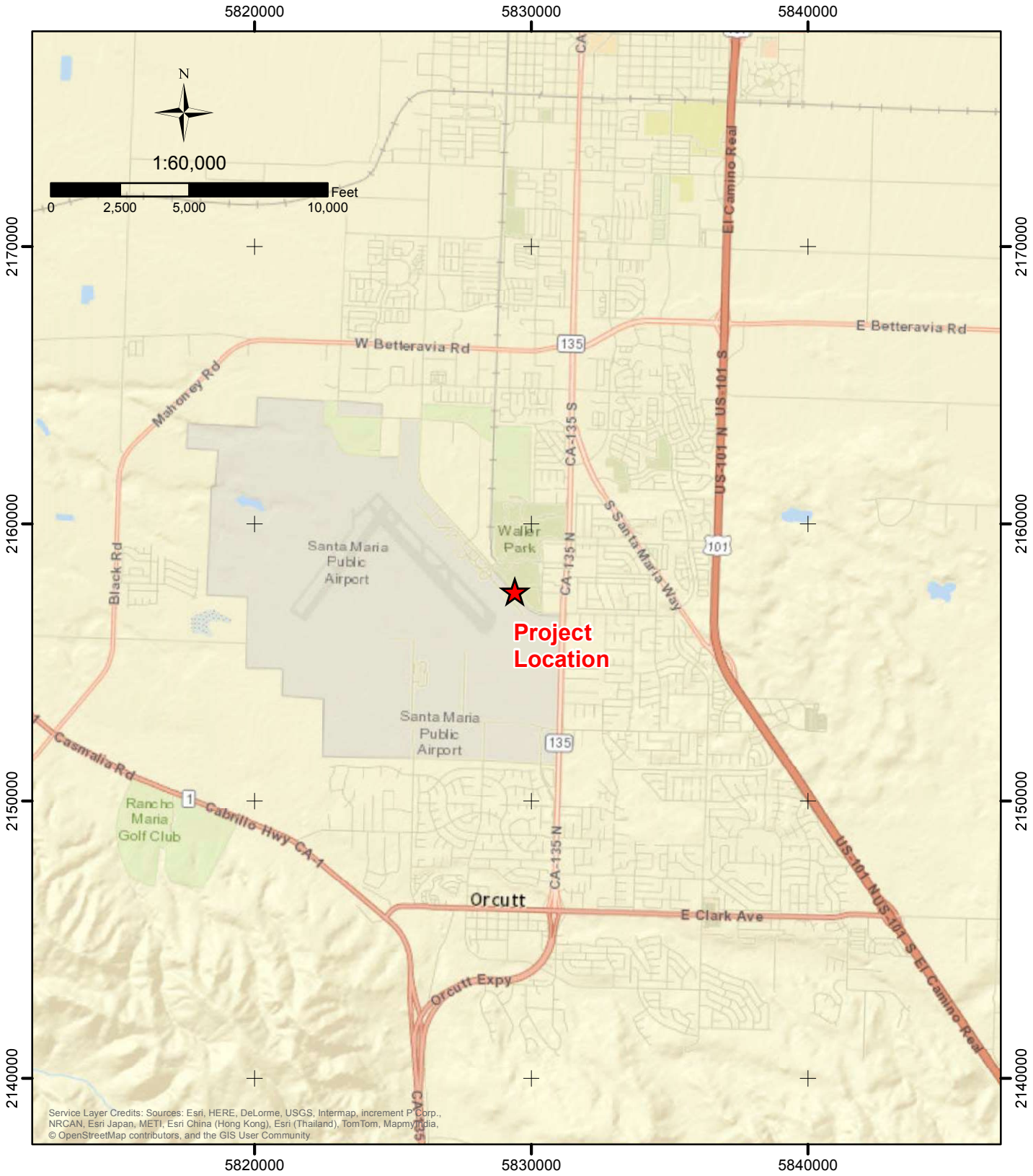
"Greenbook" Standard Specifications for Public Works Construction (2009), Published by BNI Building News, Los Angeles, California.

Hall, C.A., Jr. (1978), Geologic Map of Twitchell Dam and parts of Santa Maria and Tepusquet Canyon quadrangles, Santa Barbara County, California: U.S. Geological Survey Miscellaneous Field Studies Map MF 933.

Namson, J., and Davis, T. (1990), “Late Cenozoic Fold and Thrust Belt of the Southern Coast Ranges and Santa Maria Basin, California”, The American Association of Petroleum Geologists Bulletin, Vol. 74, No. 4, pp. 467-492.

Richmond, et al. (1981), Regional Geology, Seismicity, and Potential Geologic Hazards and Constraints, OCS Oil and Gas Lease Sale 53, Northern and Central California, U.S. Geological Survey Open-File Report 81-318

PLATES



N:\Projects\04_2015\04_6215_0054_Skyway_Ditch\Outputs\2015_07_24_GeotechReport\mxd\Plate1_VicinityMap.mxd, 7/24/2015, cdean

VICINITY MAP
Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE 1

Legend

- Approximate Location of Hand Auger Drill Hole
- Approximate Location of Surficial Grab Sample

N

1:2,400

0 100 200 400 Feet

EXPLORATION LOCATION MAP
Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE 2

N:\Projects\04_2015\04_6215_0054_Skyway_Ditch\Outputs\2015_07_24_GeotechReport\mxd\Plate2_ExplorationLocations.mxd, 7/28/2015, cdean

APPENDIX A
SUBSURFACE EXPLORATION

LOCATION: See Plate 2 - Exploration Location Plan
N 2,158,346 E 5,828,821
CA State Plane, Zone 5, NAD83, Feet

SURFACE EL: 250 ft +/- (rel. WGS84 datum)

ELEVATION, ft	DEPTH, ft	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
					ALLUVIUM/POSSIBLE ARTIFICIAL FILL (Qal/af) Silty SAND (SM): light brown to light reddish brown, dry, fine-grained sand, 6" thick seam of lean clay with sand at approximately 1.3'							
248	2	1			Sandy, silty CLAY (CL-ML): mottled brown and yellowish brown, dry to moist, mostly fine-grained sand							
		2			- increasing silt content at approximately 3.5'	106	95	11	68	17	7	
246	4											
					Silty SAND (SM): reddish brown to brown, moist							
244	6											
242	8	3			**OLDER ALLUVIUM (Qos)** Clayey SAND (SC): reddish brown to brown, moist, fine- to medium-grained sand, strongly cemented, trace to few lenses of sandy clay - moist to wet at approximately 8.5'				38			
240	10				**Drill hole terminated at approximately 10.5'**							
238	12											
236	14											

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 10.5 ft
DEPTH TO WATER: Not Encountered
BACKFILLED WITH: Cuttings
DRILLING DATE: July 8, 2015

DRILLING METHOD: Hand Auger
HAMMER TYPE: hand-slide
LOGGED BY: G Eckrich
CHECKED BY: J Martos

LOG OF DRILL HOLE NO. HA-1

Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE A-1

LOCATION: See Plate 2 - Exploration Location Plan
N 2,157,955 E 5,829,171
CA State Plane, Zone 5, NAD83, Feet

SURFACE EL: 254 ft +/- (rel. WGS84 datum)

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
252	2		1			**ALLUVIUM/POSSIBLE ARTIFICIAL FILL (Qal/af)** Clayey SAND (SC): light brown, dry, fine-grained sand							
						Hand auger met refusal at approximately 3'							
250	4												
248	6												
246	8												
244	10												
242	12												
240	14												

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 3.0 ft
DEPTH TO WATER: Not Encountered
BACKFILLED WITH: Cuttings
DRILLING DATE: July 8, 2015

DRILLING METHOD: Hand Auger
HAMMER TYPE: hand-slide
LOGGED BY: G Eckrich
CHECKED BY: J Martos

LOG OF DRILL HOLE NO. HA-2

Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE A-2

LOCATION: See Plate 2 - Exploration Location Plan
N 2,157,231 E 5,829,770
CA State Plane, Zone 5, NAD83, Feet

SURFACE EL: 250 ft +/- (rel. WGS84 datum)

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
250	0					**ALLUVIUM/POSSIBLE ARTIFICIAL FILL (Qal/af)** Silty SAND (SM): brown, dry to moist, mostly fine-grained sand, strongly cemented, some adjacent gopher holes observed extending to approximately 2'							
						Hand auger met refusal at approximately 1'							
248	2												
246	4												
244	6												
242	8												
240	10												
238	12												
236	14												

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

COMPLETION DEPTH: 1.0 ft
DEPTH TO WATER: Not Encountered
BACKFILLED WITH: Cuttings
DRILLING DATE: July 8, 2015

DRILLING METHOD: Hand Auger
HAMMER TYPE: hand-slide
LOGGED BY: J Martos
CHECKED BY: J Martos

LOG OF DRILL HOLE NO. HA-3

Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE A-3

LOCATION: See Plate 2 - Exploration Location Plan
N 2,157,024 E 5,830,137
CA State Plane, Zone 5, NAD83, Feet

SURFACE EL: 263 ft +/- (rel. WGS84 datum)

ELEVATION, ft	DEPTH, ft	MATERIAL SYMBOL	SAMPLE NO.	SAMPLERS	SAMPLER BLOW COUNT	MATERIAL DESCRIPTION	UNIT WET WEIGHT, pcf	UNIT DRY WEIGHT, pcf	WATER CONTENT, %	% PASSING #200 SIEVE	LIQUID LIMIT, %	PLASTICITY INDEX, %	UNDRAINED SHEAR STRENGTH, S_u, ksf
262	0					**ALLUVIUM/POSSIBLE ARTIFICIAL FILL (Qal/af)** Silty SAND (SM): pale brown, dry, mostly fine-grained sand							
						- increased moisture at 1', dark yellowish brown, moderate penetration with hand probe							
260	2		1										
						- increased resistance encountered at approximately 3.5', decreased silt, with some black asphaltic clasts							
258	4		2			**OLDER ALLUVIUM (Qos)** Clayey SAND (SC): dark yellowish brown, moist, mostly fine-grained sand, strongly cemented	115	108	6				
	6					- brown laminations at approximately 7'							
256						**Hand auger met refusal at approximately 7.5'**							
	8												
254													
	10												
252													
	12												
250													
	14												

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

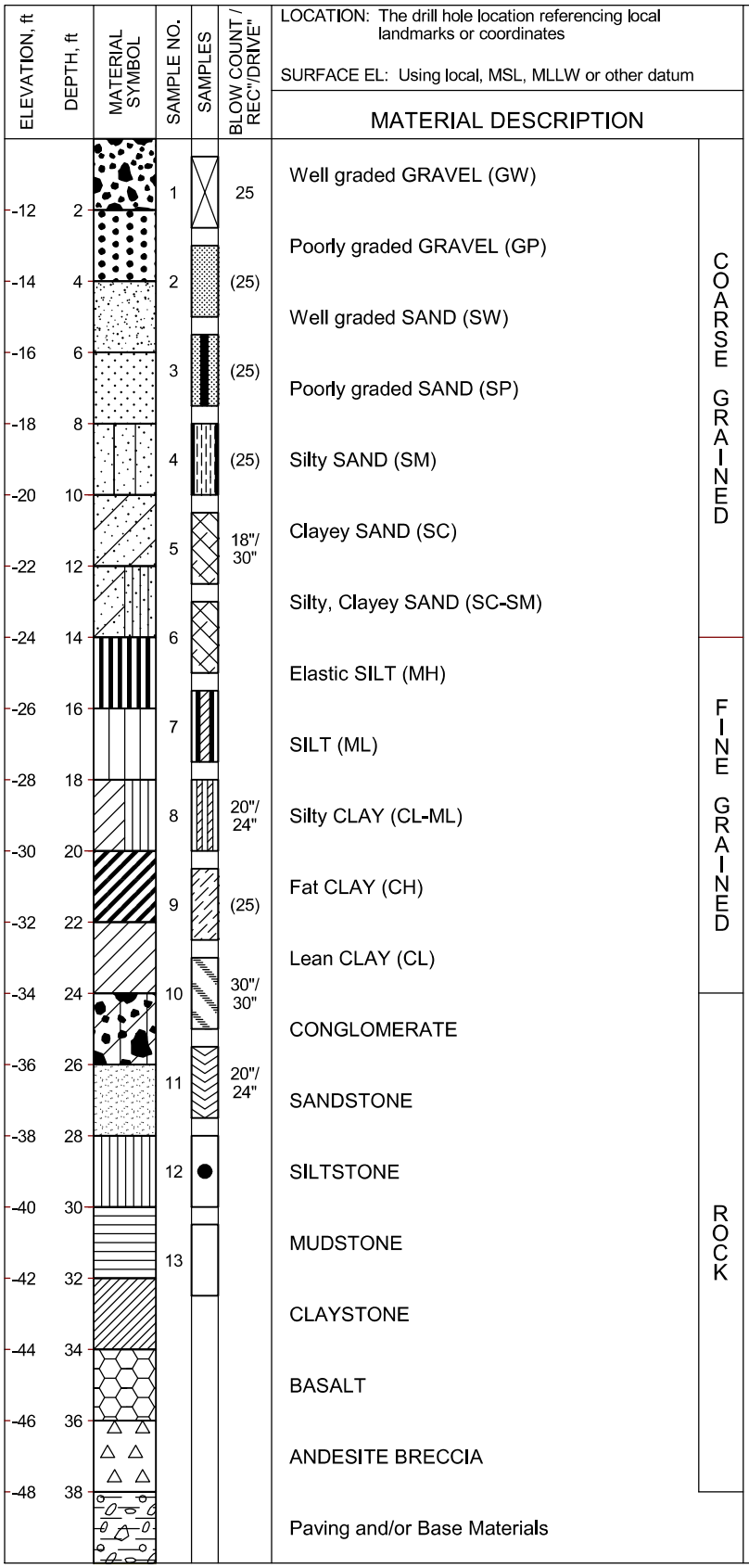
COMPLETION DEPTH: 7.5 ft
DEPTH TO WATER: Not Encountered
BACKFILLED WITH: Cuttings
DRILLING DATE: July 8, 2015

DRILLING METHOD: Hand Auger
HAMMER TYPE: hand-slide
LOGGED BY: J Martos
CHECKED BY: J Martos

LOG OF DRILL HOLE NO. HA-4

Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE A-4



General Notes

Soil Texture Symbol

Sloped line in symbol column indicates transitional boundary

Samplers and sampler dimensions (unless otherwise noted in report text) are as follows:

Symbol for:

1	SPT Sampler, driven 1-3/8" ID, 2" OD
2	CA Liner Sampler, driven 2-3/8" ID, 3" OD
3	CA Liner Sampler, disturbed 2-3/8" ID, 3" OD
4	Thin-walled Tube, pushed 2-7/8" ID, 3" OD
5	Bulk Bag Sample (from cuttings)
6	CA Liner Sampler, Bagged
7	Hand Auger Sample
8	CME Core Sample
9	Pitcher Sample
10	Lexan Sample
11	Vibracore Sample
12	No Sample Recovered
13	Sonic Soil Core Sample

Sampler Driving Resistance

Number of blows with 140 lb. hammer, falling 30" to drive sampler 1 ft. after seating sampler 6"; for example,

Blows/ft	Description
25	25 blows drove sampler 12" after initial 6" of seating
86/11"	After driving sampler the initial 6" of seating, 36 blows drove sampler through the second 6" interval, and 50 blows drove the sampler 5" into the third interval
50/6"	50 blows drove sampler 6" after initial 6" of seating
Ref/3"	50 blows drove sampler 3" during initial 6" seating interval

Blow counts for California Liner Sampler shown in ( )

Length of sample symbol approximates recovery length

Classification of Soils per ASTM D2487 or D2488

Geologic Formation noted in bold font at the top of interpreted interval

Strength Legend

Q = Unconfined Compression
u = Unconsolidated Undrained Triaxial
t = Torvane
p = Pocket Penetrometer
m = Miniature Vane

Water Level Symbols

- Initial or perched water level
- Final ground water level
- Seepages encountered

Rock Quality Designation (RQD) is the sum of recovered core pieces greater than 4 inches divided by the length of the cored interval.

KEY TO TERMS & SYMBOLS USED ON LOGS

PLATE A-5

APPENDIX B
LABORATORY TESTING

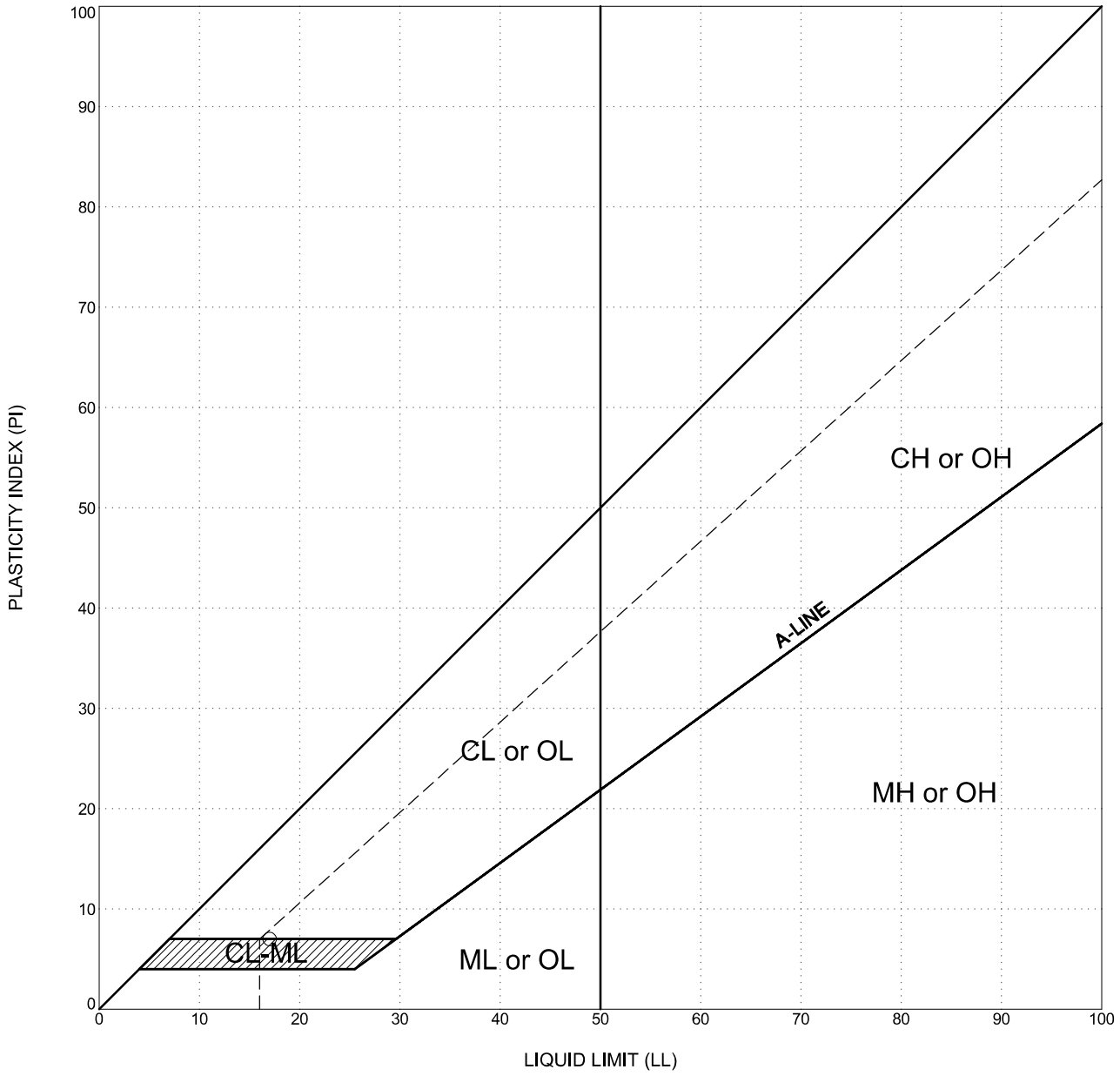
County of Santa Barbara
Project No. 04.62150054

DRILL HOLE	DEPTH, ft	SAMPLE NUMBER	MATERIAL DESCRIPTION	UWW pcf	UDW pcf	MC %	FINES %	ATTERBERG LIMITS		COMPACTION TEST		DIRECT SHEAR		COMPRESSIVE STRENGTH TESTS		CORROSIVITY TESTS				R-VALUE	EXPANSION INDEX	SAND EQUIVALENT (SE)	Specific Gravity
								LL	PI	MAX DD pcf	OPT MC %	C ksf	PHI deg	Qu, ksf	S_U (Cell Prs.) ksf	R	pH	Cl	So_4 (ppm)				
Grab A	0.0	A	Poorly graded SAND with silt (SP-SM)							129.3	7.9	0.2	33								0.0		
Grab B	0.0	B	Poorly graded SAND with clay (SP-SC)											13.3	6.6	1252	4.60	129	78.0		0.0		
HA-1	2.0	1	Sandy, silty CLAY (CL-ML)																			17	
HA-1	3.0	2	Sandy, silty CLAY (CL-ML)	106	95	11	68	17	7														
HA-1	8.0	3	Clayey SAND (SC)				38																
HA-4	5.0	2	Clayey SAND (SC)	115	108	6																21	

SUMMARY OF LABORATORY TEST RESULTS

Skyway Drainage Ditch Improvements
Santa Maria, California

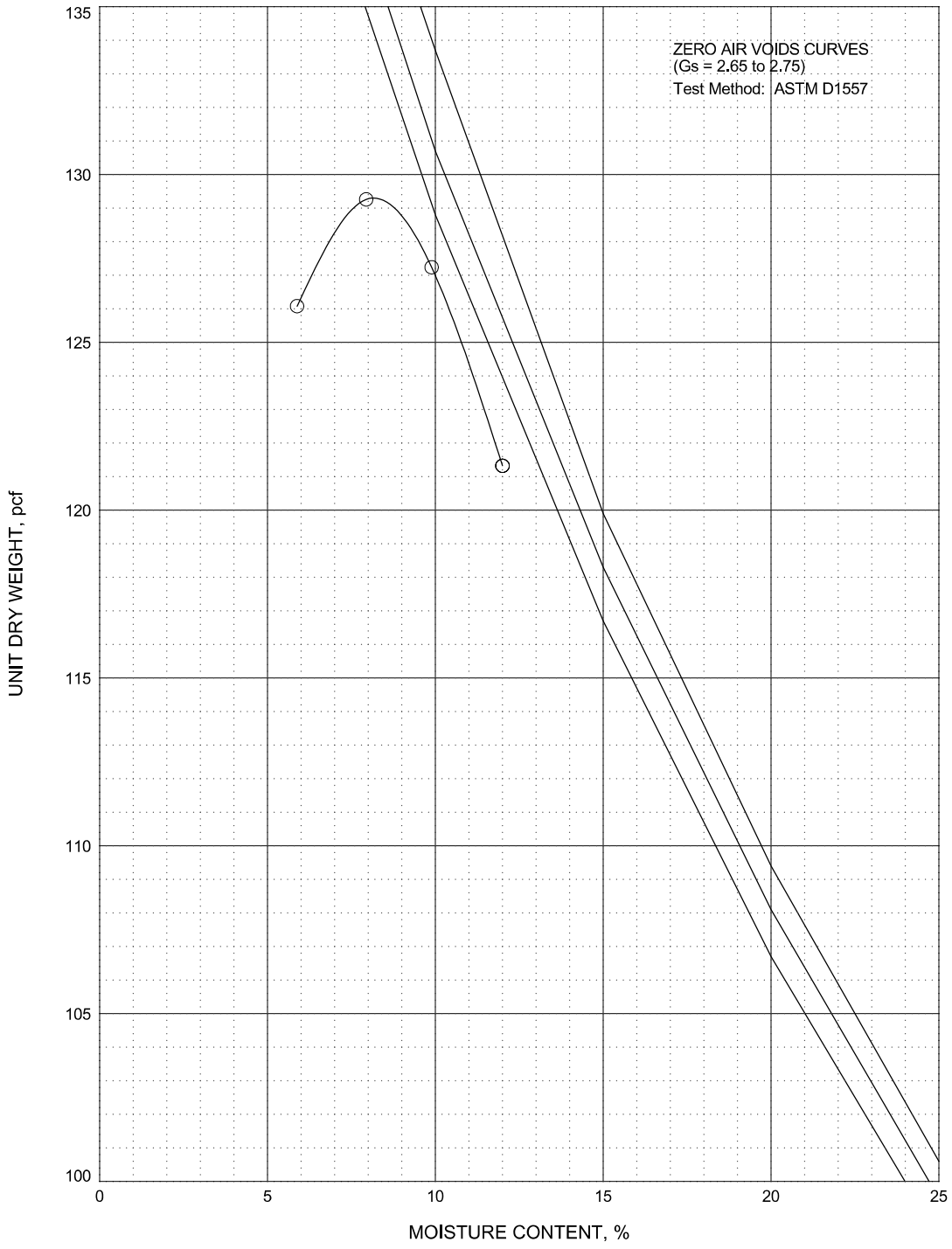
PLATE B-1



LEGEND			CLASSIFICATION	ATTERBERG LIMITS TEST RESULTS		
	location	depth, ft		LIQUID LIMIT(LL)	PLASTIC LIMIT(PL)	PLASTICITY INDEX (PI)
○	HA-1	3.0	Sandy, silty CLAY (CL-ML)	17	10	7

PLASTICITY CHART
Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE B-2

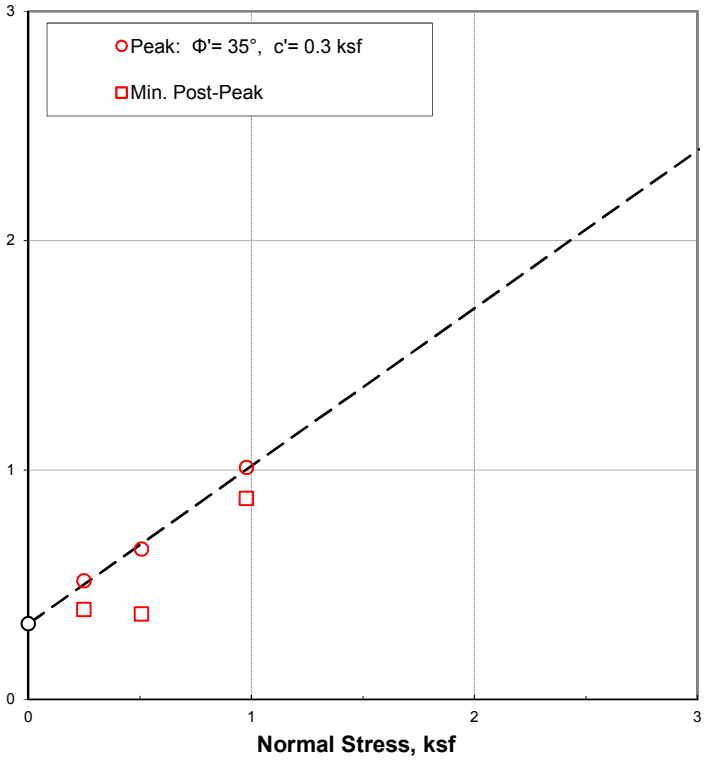


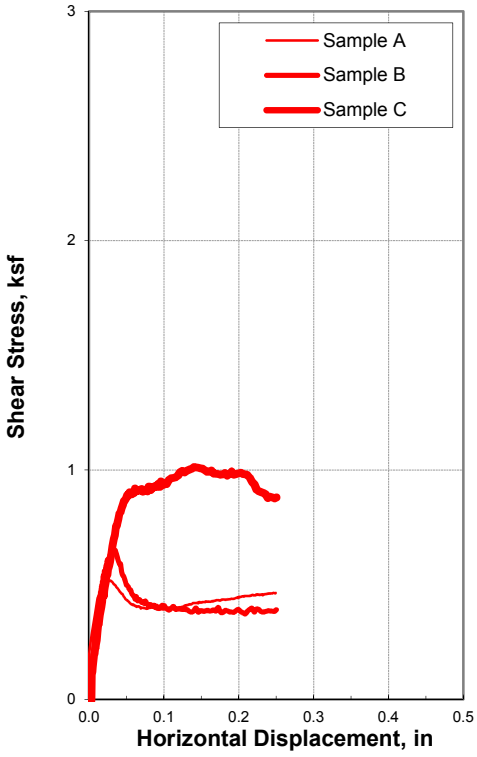
LEGEND (location)	depth, ft	CLASSIFICATION	MAXIMUM UNIT DRY WEIGHT, pcf	OPTIMUM WATER CONTENT, %
○ Grab A	0.0	Poorly graded SAND with silt (SP-SM)	129.3	7.9

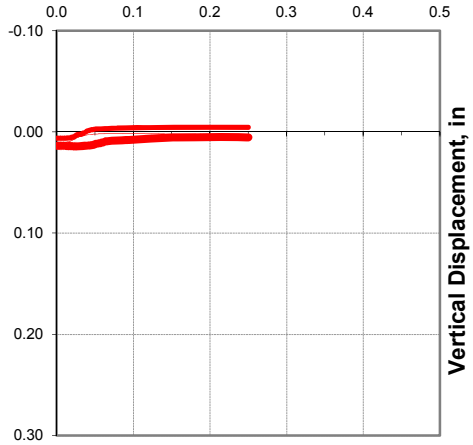
COMPACTION TEST RESULTS

Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE B-3







SAMPLE ID

Boring Number:	Grab A
Sample Number:	A
Sample Depth:	0.0 ft
USCS Classification:	Poorly graded SAND with silt (SP-SM): strong brown, dry

	Specimen	A	B	C	D
INITIAL	Water Content, %	7.9%	7.9%	7.9%	
	Dry Unit Weight, pcf	117.0	117.2	116.7	
	Saturation, %	51%	51%	50%	
	Void Ratio	0.41	0.41	0.42	
	Diameter, in	2.42	2.42	2.42	
	Height, in	1.00	1.00	1.00	
FINAL	Water Content, %	14.9%	14.5%	13.9%	
	Dry Unit Weight, pcf	118.4	119.6	121.1	
	Void Ratio	0.40	0.38	0.37	
TEST SUMMARY	Displacement at Peak, in	0.03	0.03	0.14	
	Displacement Rate, in/min	0.001	0.001	0.001	
	Normal Stress, ksf	0.2	0.5	1.0	
	Peak Shear Stress, ksf	0.52	0.66	1.01	
	Min. Post-Peak Stress, ksf	0.39	0.37	0.88	

REMARKS

Test Method: ASTM D3080

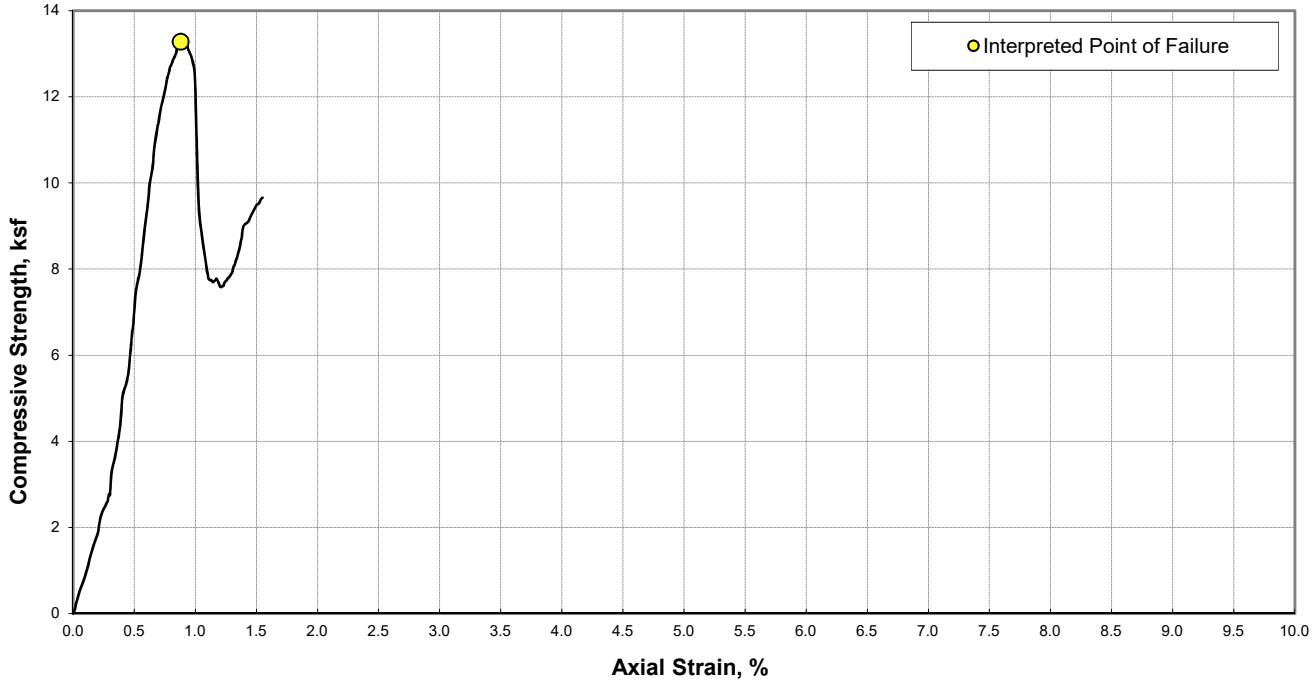
CLASSIFICATION

Sieve Size	% Passing
3/8-in. (9.5mm)	---
#4 (4.75mm)	---
#16 (1.18mm)	---
#30 (0.6mm)	---
#100 (0.150mm)	---
#200 (0.075mm)	---

Atterberg Limits	
Liquid Limit, %	---
Plastic Limit, %	---
Plasticity Index, %	---
Estimated Gs	2.65
k_{avg} 20°C, cm/sec	---

DIRECT SHEAR TEST RESULTS
Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE B-4



SAMPLE ID

Boring Number.:	Grab B
Sample Number.:	B
Sample Depth:	0.0 ft
USCS Classification:	Poorly graded SAND with clay (SP-SC): strong brown, dry

SAMPLE PROPERTIES

Water Content, %	0.5%
Dry Unit Weight, pcf	115.4
Saturation, %	3%
Void Ratio	0.43
Diameter, in	2.07
Height, in	3.78
Height/Diameter	1.82

SAMPLE IMAGES

CLASSIFICATION

Sieve Size	% Passing
3/8-in. (9.5mm)	---
#4 (4.75mm)	---
#16 (1.18mm)	---
#30 (0.6mm)	---
#100 (0.150mm)	---
#200 (0.075mm)	---

Other Parameters	
Liquid Limit	---
Plastic Limit	---
Plasticity Index	---
Estimated Gs	2.65

TEST SUMMARY

Compressive Strength, ksf	13.3
Undrained Shear Strength, ksf	6.6
Axial Strain at Failure, %	0.88
Strain Rate, %/min	0.77
Tested By:	JB
Date Tested:	7/24/15

REMARKS

Test Method: ASTM D2166

UNCONFINED COMPRESSION TEST

Skyway Drainage Ditch Improvements
Santa Maria, California

PLATE B-5

ATTACHMENT D

Air Quality: Project Modeling Results Summary Tables – CalEEMod (July 2016).

THIS PAGE IS INTENTIONALLY BLANK

7797 Santa Maria Airport Ditch

Santa Barbara County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	5.00	Acre	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2016
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	225.2	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS status - PG&E currently at 28.0%
CalEEMod accounts for 14.1%
Additional 13.9% reduction applied
(552,20, 0.025, 0.005)

Land Use - 5 acre disturbance area

Construction Phase - 40 days

Off-road Equipment - See Table 1.0 Estimated Construction Equipment and Personnel

Grading - See Table 1.0 Estimated Construction Equipment and Personnel

Trips and VMT - 8 personnel, 4 trips/day
See Table 1.0 Estimated Construction Equipment and Personnel

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	40.00

tblGrading	MaterialExported	0.00	225.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025
tblProjectCharacteristics	CO2IntensityFactor	641.35	225.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005

tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	HaulingTripNumber	28.00	23.00
tblTripsAndVMT	WorkerTripNumber	40.00	32.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.1398	1.2283	0.9117	1.5200e-003	6.0700e-003	0.0779	0.0840	1.6100e-003	0.0745	0.0761	0.0000	136.2882	136.2882	0.0284	0.0000	136.8840
Total	**0.1398**	**1.2283**	**0.9117**	**1.5200e-003**	**6.0700e-003**	**0.0779**	**0.0840**	**1.6100e-003**	**0.0745**	**0.0761**	**0.0000**	**136.2882**	**136.2882**	**0.0284**	**0.0000**	**136.8840**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.1398	1.2283	0.9117	1.5200e-003	6.0700e-003	0.0779	0.0840	1.6100e-003	0.0745	0.0761	0.0000	136.2881	136.2881	0.0284	0.0000	136.8838
Total	**0.1398**	**1.2283**	**0.9117**	**1.5200e-003**	**6.0700e-003**	**0.0779**	**0.0840**	**1.6100e-003**	**0.0745**	**0.0761**	**0.0000**	**136.2881**	**136.2881**	**0.0284**	**0.0000**	**136.8838**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1030	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	9.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1030**	**0.0000**	**5.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**9.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1030	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	9.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1030**	**0.0000**	**5.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**9.0000e-005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ditch Improvements	Grading	10/3/2016	11/25/2016	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ditch Improvements	Graders	0	0.00	174	0.41
Ditch Improvements	Rubber Tired Dozers	0	0.00	255	0.40
Ditch Improvements	Concrete/Industrial Saws	3	8.00	81	0.73
Ditch Improvements	Excavators	2	6.00	162	0.38
Ditch Improvements	Off-Highway Trucks	1	8.00	400	0.38
Ditch Improvements	Paving Equipment	1	8.00	130	0.36
Ditch Improvements	Plate Compactors	1	8.00	8	0.43
Ditch Improvements	Pumps	2	8.00	84	0.74
Ditch Improvements	Rollers	2	6.00	80	0.38
Ditch Improvements	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Ditch Improvements	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ditch Improvements	16	32.00	0.00	23.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Ditch Improvements - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1368	1.2199	0.8682	1.4500e-003		0.0778	0.0778		0.0744	0.0744	0.0000	130.7085	130.7085	0.0281	0.0000	131.2978
Total	**0.1368**	**1.2199**	**0.8682**	**1.4500e-003**	**2.0000e-005**	**0.0778**	**0.0779**	**0.0000**	**0.0744**	**0.0744**	**0.0000**	**130.7085**	**130.7085**	**0.0281**	**0.0000**	**131.2978**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	3.6900e-003	3.7800e-003	1.0000e-005	2.0000e-004	5.0000e-005	2.4000e-004	5.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.7721	0.7721	1.0000e-005	0.0000	0.7722
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7200e-003	4.6600e-003	0.0397	6.0000e-005	5.8500e-003	5.0000e-005	5.9000e-003	1.5600e-003	4.0000e-005	1.6000e-003	0.0000	4.8077	4.8077	3.0000e-004	0.0000	4.8140
Total	**3.0000e-003**	**8.3500e-003**	**0.0435**	**7.0000e-005**	**6.0500e-003**	**1.0000e-004**	**6.1400e-003**	**1.6100e-003**	**8.0000e-005**	**1.7000e-003**	**0.0000**	**5.5798**	**5.5798**	**3.1000e-004**	**0.0000**	**5.5862**

3.2 Ditch Improvements - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1368	1.2199	0.8682	1.4500e-003		0.0778	0.0778		0.0744	0.0744	0.0000	130.7083	130.7083	0.0281	0.0000	131.2976
Total	**0.1368**	**1.2199**	**0.8682**	**1.4500e-003**	**2.0000e-005**	**0.0778**	**0.0779**	**0.0000**	**0.0744**	**0.0744**	**0.0000**	**130.7083**	**130.7083**	**0.0281**	**0.0000**	**131.2976**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	3.6900e-003	3.7800e-003	1.0000e-005	2.0000e-004	5.0000e-005	2.4000e-004	5.0000e-005	4.0000e-005	1.0000e-004	0.0000	0.7721	0.7721	1.0000e-005	0.0000	0.7722
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7200e-003	4.6600e-003	0.0397	6.0000e-005	5.8500e-003	5.0000e-005	5.9000e-003	1.5600e-003	4.0000e-005	1.6000e-003	0.0000	4.8077	4.8077	3.0000e-004	0.0000	4.8140
Total	**3.0000e-003**	**8.3500e-003**	**0.0435**	**7.0000e-005**	**6.0500e-003**	**1.0000e-004**	**6.1400e-003**	**1.6100e-003**	**8.0000e-005**	**1.7000e-003**	**0.0000**	**5.5798**	**5.5798**	**3.1000e-004**	**0.0000**	**5.5862**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	8.80	4.60	4.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488644	0.036147	0.211789	0.155303	0.049980	0.007496	0.019734	0.013964	0.001908	0.002194	0.008100	0.001610	0.003131

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1030	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	9.0000e-005
Unmitigated	1.1030	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	9.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2524					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8506					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	9.0000e-005
Total	**1.1030**	**0.0000**	**5.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**9.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2524					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8506					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	9.0000e-005
Total	**1.1030**	**0.0000**	**5.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**9.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

7797 Santa Maria Airport Ditch

Santa Barbara County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	5.00	Acre	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2016
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	225.2	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS status - PG&E currently at 28.0%
CalEEMod accounts for 14.1%
Additional 13.9% reduction applied
(552,20, 0.025, 0.005)

Land Use - 5 acre disturbance area

Construction Phase - 40 days

Off-road Equipment - See Table 1.0 Estimated Construction Equipment and Personnel

Grading - See Table 1.0 Estimated Construction Equipment and Personnel

Trips and VMT - 8 personnel, 4 trips/day
See Table 1.0 Estimated Construction Equipment and Personnel

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	40.00

tblGrading	MaterialExported	0.00	225.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025
tblProjectCharacteristics	CO2IntensityFactor	641.35	225.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005

tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	HaulingTripNumber	28.00	23.00
tblTripsAndVMT	WorkerTripNumber	40.00	32.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.9826	61.3823	45.5112	0.0760	0.3102	3.8966	4.2068	0.0823	3.7259	3.8082	0.0000	7,517.5297	7,517.5297	1.5636	0.0000	7,550.3650
Total	**6.9826**	**61.3823**	**45.5112**	**0.0760**	**0.3102**	**3.8966**	**4.2068**	**0.0823**	**3.7259**	**3.8082**	**0.0000**	**7,517.5297**	**7,517.5297**	**1.5636**	**0.0000**	**7,550.3650**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.9826	61.3823	45.5112	0.0760	0.3102	3.8966	4.2068	0.0823	3.7259	3.8082	0.0000	7,517.5297	7,517.5297	1.5636	0.0000	7,550.3650
Total	**6.9826**	**61.3823**	**45.5112**	**0.0760**	**0.3102**	**3.8966**	**4.2068**	**0.0823**	**3.7259**	**3.8082**	**0.0000**	**7,517.5297**	**7,517.5297**	**1.5636**	**0.0000**	**7,550.3650**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0439	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**6.0439**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.0900e-003**	**1.0900e-003**	**0.0000**	**0.0000**	**1.1600e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0439	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**6.0439**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.0900e-003**	**1.0900e-003**	**0.0000**	**0.0000**	**1.1600e-003**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ditch Improvements	Grading	10/3/2016	11/25/2016	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ditch Improvements	Graders	0	0.00	174	0.41
Ditch Improvements	Rubber Tired Dozers	0	0.00	255	0.40
Ditch Improvements	Concrete/Industrial Saws	3	8.00	81	0.73
Ditch Improvements	Excavators	2	6.00	162	0.38
Ditch Improvements	Off-Highway Trucks	1	8.00	400	0.38
Ditch Improvements	Paving Equipment	1	8.00	130	0.36
Ditch Improvements	Plate Compactors	1	8.00	8	0.43
Ditch Improvements	Pumps	2	8.00	84	0.74
Ditch Improvements	Rollers	2	6.00	80	0.38
Ditch Improvements	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Ditch Improvements	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ditch Improvements	16	32.00	0.00	23.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Ditch Improvements - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1000e-004	0.0000	9.1000e-004	1.4000e-004	0.0000	1.4000e-004			0.0000			0.0000
Off-Road	6.8380	60.9970	43.4090	0.0723		3.8920	3.8920		3.7218	3.7218		7,204.0702	7,204.0702	1.5467		7,236.5506
Total	**6.8380**	**60.9970**	**43.4090**	**0.0723**	**9.1000e-004**	**3.8920**	**3.8929**	**1.4000e-004**	**3.7218**	**3.7219**		**7,204.0702**	**7,204.0702**	**1.5467**		**7,236.5506**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0127	0.1777	0.1622	4.2000e-004	9.9500e-003	2.2600e-003	0.0122	2.7200e-003	2.0800e-003	4.8000e-003		42.5959	42.5959	3.0000e-004		42.6021
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1320	0.2077	1.9400	3.2600e-003	0.2993	2.2700e-003	0.3016	0.0794	2.0600e-003	0.0815		270.8636	270.8636	0.0166		271.2123
Total	**0.1447**	**0.3854**	**2.1022**	**3.6800e-003**	**0.3093**	**4.5300e-003**	**0.3138**	**0.0821**	**4.1400e-003**	**0.0863**		**313.4595**	**313.4595**	**0.0169**		**313.8144**

3.2 Ditch Improvements - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1000e-004	0.0000	9.1000e-004	1.4000e-004	0.0000	1.4000e-004			0.0000			0.0000
Off-Road	6.8380	60.9970	43.4090	0.0723		3.8920	3.8920		3.7218	3.7218	0.0000	7,204.0702	7,204.0702	1.5467		7,236.5506
Total	**6.8380**	**60.9970**	**43.4090**	**0.0723**	**9.1000e-004**	**3.8920**	**3.8929**	**1.4000e-004**	**3.7218**	**3.7219**	**0.0000**	**7,204.0702**	**7,204.0702**	**1.5467**		**7,236.5506**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0127	0.1777	0.1622	4.2000e-004	9.9500e-003	2.2600e-003	0.0122	2.7200e-003	2.0800e-003	4.8000e-003		42.5959	42.5959	3.0000e-004		42.6021
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1320	0.2077	1.9400	3.2600e-003	0.2993	2.2700e-003	0.3016	0.0794	2.0600e-003	0.0815		270.8636	270.8636	0.0166		271.2123
Total	**0.1447**	**0.3854**	**2.1022**	**3.6800e-003**	**0.3093**	**4.5300e-003**	**0.3138**	**0.0821**	**4.1400e-003**	**0.0863**		**313.4595**	**313.4595**	**0.0169**		**313.8144**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	8.80	4.60	4.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488644	0.036147	0.211789	0.155303	0.049980	0.007496	0.019734	0.013964	0.001908	0.002194	0.008100	0.001610	0.003131

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0439	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Unmitigated	6.0439	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Total	**6.0439**	**1.0000e-005**	**5.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.0900e-003**	**1.0900e-003**	**0.0000**		**1.1600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Total	**6.0439**	**1.0000e-005**	**5.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.0900e-003**	**1.0900e-003**	**0.0000**		**1.1600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

7797 Santa Maria Airport Ditch

Santa Barbara County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	5.00	Acre	5.00	217,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2016
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	225.2	**CH4 Intensity (lb/MWhr)**	0.025	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS status - PG&E currently at 28.0%
CalEEMod accounts for 14.1%
Additional 13.9% reduction applied
(552,20, 0.025, 0.005)

Land Use - 5 acre disturbance area

Construction Phase - 40 days

Off-road Equipment - See Table 1.0 Estimated Construction Equipment and Personnel

Grading - See Table 1.0 Estimated Construction Equipment and Personnel

Trips and VMT - 8 personnel, 4 trips/day
See Table 1.0 Estimated Construction Equipment and Personnel

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	40.00

tblGrading	MaterialExported	0.00	225.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.025
tblProjectCharacteristics	CO2IntensityFactor	641.35	225.2
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005

tblProjectCharacteristics	OperationalYear	2014	2016
tblTripsAndVMT	HaulingTripNumber	28.00	23.00
tblTripsAndVMT	WorkerTripNumber	40.00	32.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.9974	61.4161	45.6652	0.0759	0.3102	3.8966	4.2068	0.0823	3.7259	3.8082	0.0000	7,511.1804	7,511.1804	1.5636	0.0000	7,544.0158
Total	**6.9974**	**61.4161**	**45.6652**	**0.0759**	**0.3102**	**3.8966**	**4.2068**	**0.0823**	**3.7259**	**3.8082**	**0.0000**	**7,511.1804**	**7,511.1804**	**1.5636**	**0.0000**	**7,544.0158**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.9974	61.4161	45.6652	0.0759	0.3102	3.8966	4.2068	0.0823	3.7259	3.8082	0.0000	7,511.1804	7,511.1804	1.5636	0.0000	7,544.0158
Total	**6.9974**	**61.4161**	**45.6652**	**0.0759**	**0.3102**	**3.8966**	**4.2068**	**0.0823**	**3.7259**	**3.8082**	**0.0000**	**7,511.1804**	**7,511.1804**	**1.5636**	**0.0000**	**7,544.0158**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0439	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**6.0439**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.0900e-003**	**1.0900e-003**	**0.0000**	**0.0000**	**1.1600e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0439	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**6.0439**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**1.0900e-003**	**1.0900e-003**	**0.0000**	**0.0000**	**1.1600e-003**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Ditch Improvements	Grading	10/3/2016	11/25/2016	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Ditch Improvements	Graders	0	0.00	174	0.41
Ditch Improvements	Rubber Tired Dozers	0	0.00	255	0.40
Ditch Improvements	Concrete/Industrial Saws	3	8.00	81	0.73
Ditch Improvements	Excavators	2	6.00	162	0.38
Ditch Improvements	Off-Highway Trucks	1	8.00	400	0.38
Ditch Improvements	Paving Equipment	1	8.00	130	0.36
Ditch Improvements	Plate Compactors	1	8.00	8	0.43
Ditch Improvements	Pumps	2	8.00	84	0.74
Ditch Improvements	Rollers	2	6.00	80	0.38
Ditch Improvements	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Ditch Improvements	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Ditch Improvements	16	32.00	0.00	23.00	12.30	4.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Ditch Improvements - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1000e-004	0.0000	9.1000e-004	1.4000e-004	0.0000	1.4000e-004			0.0000			0.0000
Off-Road	6.8380	60.9970	43.4090	0.0723		3.8920	3.8920		3.7218	3.7218		7,204.0702	7,204.0702	1.5467		7,236.5506
Total	**6.8380**	**60.9970**	**43.4090**	**0.0723**	**9.1000e-004**	**3.8920**	**3.8929**	**1.4000e-004**	**3.7218**	**3.7219**		**7,204.0702**	**7,204.0702**	**1.5467**		**7,236.5506**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0147	0.1821	0.2072	4.2000e-004	9.9500e-003	2.2700e-003	0.0122	2.7200e-003	2.0900e-003	4.8100e-003		42.4944	42.4944	3.0000e-004		42.5007
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1447	0.2371	2.0491	3.1800e-003	0.2993	2.2700e-003	0.3016	0.0794	2.0600e-003	0.0815		264.6158	264.6158	0.0166		264.9645
Total	**0.1594**	**0.4192**	**2.2563**	**3.6000e-003**	**0.3093**	**4.5400e-003**	**0.3138**	**0.0821**	**4.1500e-003**	**0.0863**		**307.1102**	**307.1102**	**0.0169**		**307.4653**

3.2 Ditch Improvements - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1000e-004	0.0000	9.1000e-004	1.4000e-004	0.0000	1.4000e-004			0.0000			0.0000
Off-Road	6.8380	60.9970	43.4090	0.0723		3.8920	3.8920		3.7218	3.7218	0.0000	7,204.0702	7,204.0702	1.5467		7,236.5506
Total	**6.8380**	**60.9970**	**43.4090**	**0.0723**	**9.1000e-004**	**3.8920**	**3.8929**	**1.4000e-004**	**3.7218**	**3.7219**	**0.0000**	**7,204.0702**	**7,204.0702**	**1.5467**		**7,236.5506**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0147	0.1821	0.2072	4.2000e-004	9.9500e-003	2.2700e-003	0.0122	2.7200e-003	2.0900e-003	4.8100e-003		42.4944	42.4944	3.0000e-004		42.5007
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1447	0.2371	2.0491	3.1800e-003	0.2993	2.2700e-003	0.3016	0.0794	2.0600e-003	0.0815		264.6158	264.6158	0.0166		264.9645
Total	**0.1594**	**0.4192**	**2.2563**	**3.6000e-003**	**0.3093**	**4.5400e-003**	**0.3138**	**0.0821**	**4.1500e-003**	**0.0863**		**307.1102**	**307.1102**	**0.0169**		**307.4653**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	8.80	4.60	4.60	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.488644	0.036147	0.211789	0.155303	0.049980	0.007496	0.019734	0.013964	0.001908	0.002194	0.008100	0.001610	0.003131

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0439	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Unmitigated	6.0439	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Total	**6.0439**	**1.0000e-005**	**5.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.0900e-003**	**1.0900e-003**	**0.0000**		**1.1600e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.6609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.0900e-003	1.0900e-003	0.0000		1.1600e-003
Total	**6.0439**	**1.0000e-005**	**5.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.0900e-003**	**1.0900e-003**	**0.0000**		**1.1600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

ATTACHMENT E

California Natural Diversity Database Species Occurrence within a Three Mile Radius of the Project Site

THIS PAGE IS INTENTIONALLY BLANK

ATTACHMENT E

CNDDB SPECIES OCCURRENCE WITHIN 3 MILE RADIUS OF PROJECT SITE

Species	Federal/State Listing
Animals	
Vernal pool fairy shrimp (*Brachinecta lynchi*)	FT/--
Monarch butterfly (*Danaus plexippus*)	--/--
California tiger salamander (*Ambystoma californiense*)	FT/ST
Silvery legless lizard (*Anniella pulchra pulchra*)	--/--
Western pond turtle (*Emys marmorata*)	--/--
Western spadefoot (*Spea hammondii*)	--/--
California red-legged frog (*Tana draytonii*)	FT/--
Western burrowing owl (*Athene cunicularia*)	--/--
American badger (*Taxidea taxus*)	--/--
Plants	
Gaviota tarplant (*Dienandra increscens* ssp. *villosa*)	FE/SE
La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*)	FE/ST
Dune larkspur (*Delphinium parryi* ssp. *blochmaniae*)	--/--

ATTACHMENT F

Santa Maria Airport Ditch Waller-Skyway Channel, EDR Radius Report with Geocheck, EDR, (July 28. 2016)

This document is available for public review at the County of Santa Barbara Flood Control District located at 130 East Victoria Street, Suite 200, Santa Barbara CA 93101 (805)568-3437 and on the web.

http://cosb.countyofsb.org/pwd/pwwater.aspx?id=2956

THIS PAGE IS INTENTIONALLY BLANK

ATTACHMENT G

Public Comment Letters

THIS PAGE IS INTENTIONALLY BLANK

ATTACHMENT G1

Governor's Office and Planning and Research, State Clearinghouse and Planning Unit
(Letter Dated October 18, 2016)

THIS PAGE IS INTENTIONALLY BLANK

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

October 18, 2016

Maureen Spencer
Santa Barbara County Flood Control District
130 E. Victoria St, Suite 200
Santa Barbara, CA 93101

Subject: DRAFT MND Santa Maria Airport Ditch Improvements Project
SCH#: 2016091043

Dear Maureen Spencer:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on October 17, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

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

Sincerely,

Scott Morgan
Director, State Clearinghouse

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

Document Details Report
State Clearinghouse Data Base

SCH# 2016091043
Project Title DRAFT MND Santa Maria Airport Ditch Improvements Project
Lead Agency Santa Barbara County Flood Control District

Type MND Mitigated Negative Declaration

Description SMAD improvements project is a County of Santa Barbara Flood Control and Water Conservation District project to repair erosion damage to an approximately 0.5-mile segment of the existing earthen flood channel located along the north side of Skyway Drive immediately southeast of the Santa Maria Public Airport. The purpose of this project is to install drainage ditch to eliminate ongoing erosion that is threatening Skyway Dr. The proposed project will provide necessary improvements to the SMAD to improve the hydrology and drainage flow for future storm and flood events. The project encompasses reconstruction of the eroding 2,300 ft SMAD between the existing 60" cured in place pipe outfall at Auto Park Dr and the 10' wide by 5' high box culvert under Hagerman Dr located northeast of the Santa Maria Public Airport in northern Santa Barbara County.

Lead Agency Contact

Name Maureen Spencer
Agency Santa Barbara County Flood Control District
Phone (805) 568-3437 **Fax**
email
Address 130 E. Victoria St, Suite 200
City Santa Barbara **State** CA **Zip** 93101

Project Location

County Santa Barbara
City
Region
Lat / Long 34.897704° N / 120.440599° W
Cross Streets Sky Way Dr and Harman Ave
Parcel No. 111-100-015
Township **Range** **Section** **Base**

Proximity to:

Highways 135
Airports Santa Maria
Railways
Waterways Within Santa Maria Airport Ditch
Schools
Land Use Flood Control channel, Z: Recreation, Designation urban area, open space. exisitng rec/park

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Public Services; Schools/Universities; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Regional Water Quality Control Board, Region 3; Native American Heritage Commission; Caltrans, District 5

Date Received 09/16/2016 **Start of Review** 09/16/2016 **End of Review** 10/17/2016

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

ATTACHMENT G2

Santa Barbara County Air Pollution Control District (Comment letter dated October 13, 2016)

THIS PAGE IS INTENTIONALLY BLANK

Santa Barbara County
Air Pollution Control District

Our Vision Clean Air

October 13, 2016

Maureen Spencer
Santa Barbara County, Public Works
Flood Control and Water Conservation District
130 E. Victoria Street, Suite 220
Santa Barbara, CA 93101

Re: APCD Comments on the Mitigated Negative Declaration for the Santa Maria Airport Ditch Improvement Project, 16NGD-00000-00014

Dear Ms. Spencer:

The Air Pollution Control District (APCD) has reviewed the Draft Mitigated Negative Declaration (DMND) for the Santa Maria Airport Ditch (SMAD) Improvement Project, which consists of the proposed installation of drainage system improvements for the SMAD to eliminate ongoing erosion that is threatening Skyway Drive and the surrounding area. Also a minor vegetated overflow swale is proposed at the ground surface above the pipe. The project site covers about 5 acres and consists of an existing 2,300-foot earthen drainage channel (SMAD) that runs southeast to northwest along the northern side of Skyway Drive between Auto Park Drive and Hagerman Drive in the unincorporated Orcutt area.

Air Pollution Control District staff offers the following comment on the DMND:

1. **4.9 Greenhouse Gas Emissions, Impact Discussion, page 48:** It is stated that the total annual CO_2e estimated from CalEEMod is 136.884 MT which is "*below 1,150 metric tons/year.*" Please explain why this metric is relevant to the significance determination when the project is relying on consistency with the ECAP to determine the significance of project impacts.

If you or the project applicant have any questions regarding this comment, please feel free to contact me at (805) 961-8893 or via email at NightingaleK@sbcapcd.org.

Sincerely,

Krista Nightingale

Krista Nightingale,
Air Quality Specialist
Technology and Environmental Assessment Division

cc: Bret McNulty, RECON Environmental, Inc.
TEA Chron File

ATTACHMENT G3

Santa Barbara County Air Pollution Control District
(Suggested conditions letter dated October 13, 2016)

THIS PAGE IS INTENTIONALLY BLANK

October 13, 2016

Maureen Spencer
Santa Barbara County, Public Works
Flood Control and Water Conservation District
130 E. Victoria Street, Suite 220
Santa Barbara, CA 93101

Re: APCD Suggested Conditions on the Santa Maria Airport Ditch Improvement Project,

Dear *Ms. Spencer:*

The Air Pollution Control District (APCD) has reviewed the referenced project, which consists of the proposed installation of drainage system improvements for the Santa Maria Airport Ditch (SMAD) to eliminate ongoing erosion that is threatening Skyway Drive and the surrounding area. Also a minor vegetated overflow swale is proposed at the ground surface above the pipe. The project site covers about 5 acres and consists of an existing 2,300-foot earthen drainage channel (SMAD) that runs southeast to northwest along the northern side of Skyway Drive between Auto Park Drive and Hagerman Drive in the unincorporated Orcutt area.

Air Pollution Control District staff offers the following suggested conditions:

1. Standard dust mitigations (**Attachment A**) are recommended for all construction and/or grading activities. The name and telephone number of an on-site contact person must be provided to the APCD prior to grading/building permit issuance.

2. APCD Rule 345, *Control of Fugitive Dust from Construction and Demolition Activities* establishes limits on the generation of visible fugitive dust emissions at demolition and construction sites. The rule includes measures for minimizing fugitive dust from on-site activities and from trucks moving on- and off-site. The rule can be viewed at www.ourair.org/wp-content/uploads/rule345.pdf.

If you or the project applicant have any questions regarding these comments, please feel free to contact me at (805) 961-8893 or via email at NightingaleK@sbcapcd.org.

Sincerely,

Krista Nightingale,
Air Quality Specialist
Technology and Environmental Assessment Division

Attachments: Fugitive Dust Control Measures

cc: Bret McNulty, RECON Environmental, Inc.
TEA Chron File

ATTACHMENT G4

Native American Heritage Commission (Comment letter dated October 17, 2016)

THIS PAGE IS INTENTIONALLY BLANK

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

October 17, 2016

Maureen Spencer
Santa Barbara County Flood Control District
130 E. Victoria Street, Suite 200
Santa Barbara, CA 93101

sent via e-mail:
mospenc@cosbpw.net

Re: SCH#2016091043, Santa Maria Airport Ditch Improvements Project, Community of Orcutt, Santa Barbara County, California

Dear Ms. Spencer:

The Native American Heritage Commission (NAHC) has reviewed the Draft Mitigated Negative Declaration prepared for the project referenced above. The review included the Project Overview, and the Cultural Resources Section of the Initial Study from the document prepared by the RECON Environmental, Inc. for the County of Santa Barbara, Public Works Department, Flood Control and Water Conservation District. We have the following concerns:

- There is no information in the documents of any contact or consultation with all traditionally, culturally affiliated California Native American Tribes from the NAHC's contact list pursuant to SB-18 or AB-52.
- There is no evidence that possible mitigation measures were developed in consultation with the traditionally, culturally affiliated California Native American Tribes. Mitigation measures do not take Tribal Cultural Resources into consideration as required under AB-52, with or without consultation occurring.
- Section 4.5 Cultural Resources does not document any Sacred Lands File search results or discussion of potential undocumented sites with Native American tribes in the Project area.

The California Environmental Quality Act (CEQA)[1], specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.[2] If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.[3] In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended in 2014 by Assembly Bill 52. (AB 52).[4] **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** AB 52 created a separate category for "tribal cultural resources"[5], that now includes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.[6] Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.[7] Your project may also be subject to **Senate Bill 18 (SB 18)** (Burton, Chapter 905, Statutes of 2004), Government Code 65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. **Both SB 18 and AB 52 have tribal consultation requirements**. Additionally, if your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966[8] may also apply.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

---

[1] Pub. Resources Code § 21000 et seq.
[2] Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)
[3] Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)
[4] Government Code 65352.3
[5] Pub. Resources Code § 21074
[6] Pub. Resources Code § 21084.2
[7] Pub. Resources Code § 21084.3 (a)
[8] 154 U.S.C. 300101, 36 C.F.R. § 800 et seq.

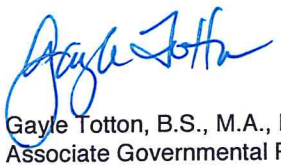
Agencies should be aware that AB 52 does not preclude agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices".

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

A brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments is also attached.

Please contact me at gayle.totton@nahc.ca.gov or call (916) 373-3710 if you have any questions.

Sincerely,



Gayle Totton, B.S., M.A., Ph.D
Associate Governmental Project Analyst

Attachment

cc: State Clearinghouse

Pertinent Statutory Information:

Under AB 52:
AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:
Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.
A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.[9] and **prior to the release of a negative declaration, mitigated negative declaration or environmental impact report**. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18).[10]
The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

a. Alternatives to the project.
b. Recommended mitigation measures.
c. Significant effects.[11]

1. The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.

If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency.[12]
With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process **shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10.** Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.[13]
If a project may have a significant impact on a tribal cultural resource, **the lead agency's environmental document shall discuss** both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.[14]

Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.[15]

Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 **shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program**, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.[16]
If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, **the lead agency shall consider feasible mitigation** pursuant to Public Resources Code section 21084.3 (b).[17]
An environmental impact report **may not be certified**, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

---

[9] Pub. Resources Code § 21080.3.1, subds. (d) and (e)
[10] Pub. Resources Code § 21080.3.1 (b)
[11] Pub. Resources Code § 21080.3.2 (a)
[12] Pub. Resources Code § 21080.3.2 (a)
[13] Pub. Resources Code § 21082.3 (c)(1)
[14] Pub. Resources Code § 21082.3 (b)
[15] Pub. Resources Code § 21080.3.2 (b)
[16] Pub. Resources Code § 21082.3 (a)
[17] Pub. Resources Code § 21082.3 (e)

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days.[18]

This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:

Government Code § 65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of "preserving or mitigating impacts to places, features, and objects described § 5097.9 and § 5091.993 of the Public Resources Code that are located within the city or county's jurisdiction. Government Code § 65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf
- Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.**[19]
- There is no Statutory Time Limit on Tribal Consultation under the law.
- Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research,[20] the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction.[21]
- Conclusion Tribal Consultation: Consultation should be concluded at the point in which:
    - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    - Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation.[22]

NAHC Recommendations for Cultural Resources Assessments:

- Contact the NAHC for:
    - A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    - A Native American Tribal Contact List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
        - The request form can be found at http://nahc.ca.gov/resources/forms/.
- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    - If part or the entire APE has been previously surveyed for cultural resources.
    - If any known cultural resources have been already been recorded on or adjacent to the APE.
    - If the probability is low, moderate, or high that cultural resources are located in the APE.
    - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    - The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

[18] Pub. Resources Code § 21082.3 (d)
[19] (Gov. Code § 65352.3 (a)(2)).
[20] pursuant to Gov. Code section 65040.2,
[21] (Gov. Code § 65352.3 (b)).
[22] (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Examples of Mitigation Measures That May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- Avoidance and preservation of the resources in place, including, but not limited to:
  - Planning and construction to avoid the resources and protect the cultural and natural context.
  - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - Protecting the cultural character and integrity of the resource.
  - Protecting the traditional use of the resource.
  - Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed.[23]
- Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.[24]

The lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

- Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources.[25] In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

[23] (Civ. Code § 815.3 (c)).
[24] (Pub. Resources Code § 5097.991).
[25] per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)).

ATTACHMENT H

Notice of Availability of the Draft Mitigated Negative Declaration for the Proposed Santa Maria Airport Ditch Improvement Project 16NGD-00000-00014

THIS PAGE IS INTENTIONALLY BLANK

NOTICE OF AVAILABILITY OF THE DRAFT MITIGATED NEGATIVE DECLARATION FOR THE PROPOSED SANTA MARIA AIRPORT DITCH IMPROVEMENT PROJECT 16NGD-00000-00014

PROJECT DESCRIPTION: The Santa Barbara County Flood Control & Water Conservation District (District) proposes to install drainage system improvements in the existing Santa Maria Airport Ditch (SMAD) to eliminate ongoing erosion that is threatening Skyway Drive and the surrounding area.

PROJECT LOCATION: The proposed project is located in Orcutt on the southern edge of Waller County Park adjacent to the Santa Maria Valley YMCA, south of the City of Santa Maria, bounded by Skyway Drive and the Santa Maria Public Airport to the west, Fourth Supervisorial District.

PUBLIC COMMENT: The District is soliciting comments on the adequacy and completeness of the Mitigated Negative Declaration. You may comment by submitting written or oral comments to the Project Manager identified below prior to the close of the public comment period on October 17, 2016. Due to the non-complex nature of this project, a separate environmental hearing will not be held.

PROJECT DETAILS: The project involves construction of a combination buried pipe and trapezoidal overflow channel for the SMAD. Specifically, the proposed combination system consists of a high-density polyethylene (HDPE) storm drain overlain by an 8'-16' wide by 2-3' high earthen trapezoidal channel. Both the pipe and trapezoidal channel will outfall just upstream of the existing box culvert under Hagerman Drive. A minor vegetated overflow swale is proposed at the ground surface above the pipe. All proposed excavation and construction of the new pipe and overflow channel will occur along SMAD between Auto Park Drive and Hagerman Drive.

ENVIRONMENTAL REVIEW FINDINGS: The District has prepared a Draft Mitigated Negative Declaration pursuant to Section 15073 of the State Guidelines for the Implementation of the California Environmental Quality Act (CEQA) and the County of Santa Barbara Guidelines for the Implementation of CEQA. Issuance of a Mitigated Negative Declaration affirms our opinion that any significant adverse impacts associated with the proposed project may be reduced to a less than significant level with the adoption of mitigation measures and that the project does not require the preparation of an Environmental Impact Report (EIR). The Mitigated Negative Declaration prepared for the project identifies and discusses potential impacts, mitigation measures, residual impacts and monitoring requirements for identified subject areas. Potential Significant but mitigable effects on the environment are anticipated in the following areas: **aesthetics/visual resources, air quality, biological resources, cultural resources, geologic processes, noise, and water resources/flooding**. If you challenge this environmental document in court, you may be limited to raising only those issues raised by you or others in written correspondence or in hearings on the proposed project.

DOCUMENT AVAILABILITY: If a copy of MND is not attached, the draft MND may be obtained and all documents referenced in the MND may be reviewed at the District offices located at 130 E. Victoria Street, Suite 200, Santa Barbara. The document is also posted on the District's website at: http://cosb.countyofsb.org/uploadedFiles/pwd/Water/Environmental/Draft%20MND_Santa%20Maria%20Airport%20Ditch.pdf**.** Draft documents are also available for review at the Santa Maria Library at 421 S. McClelland Street, Santa Maria, the Orcutt Branch Library at 175 S. Broadway, Building C, Suite 101, Orcutt, and the Santa Barbara Library at 40 E. Anapamu Street, Santa Barbara.

HOW TO COMMENT: Comments should be provided to the Project Manager, Maureen Spencer at 130 E. Victoria Street, Suite 200, Santa Barbara, (805) 568-3440 prior to the close of the public comment period on **October 17**, **2016** at 5:00 p.m. Please limit comments to environmental issues such as air quality, biology, noise, etc. You will receive notice of the dates of future public hearings to consider project approval or denial. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this hearing, please contact Hearing Support Staff (805) 568-2000. Notification at least 48 hours prior to the hearing will enable Hearing Support Staff to make reasonable arrangements.

ATTACHMENT I

Letter to the Barbareño/Ventureño Band of Mission Indians
from the County of Santa Barbara Public Works Department (December 9, 2016)

THIS PAGE IS INTENTIONALLY BLANK

COUNTY OF SANTA BARBARA
PUBLIC WORKS DEPARTMENT
123 E. Anapamu Street
Santa Barbara, California 93101
805\568-3000 • FAX 805\568-3019

SCOTT D. MCGOLPIN
Director

December 9, 2016

Julie Tumamait-Stenslie
Chair, Barbareño/Ventureño Band of Mission Indians
365 N. Poli Avenue, Ojai, CA 93023

RE: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of determination that a Project Application is Complete or Decision to Undertake a Project, and Notification of Consultation Opportunity, pursuant to Public Resources Code (PRC) § 21080.3.1

Santa Maria Airport Ditch Improvement Project, Santa Maria, Ca. 16NGD-00000-00014, APN Numbers 111-100-015 and 111-100-005

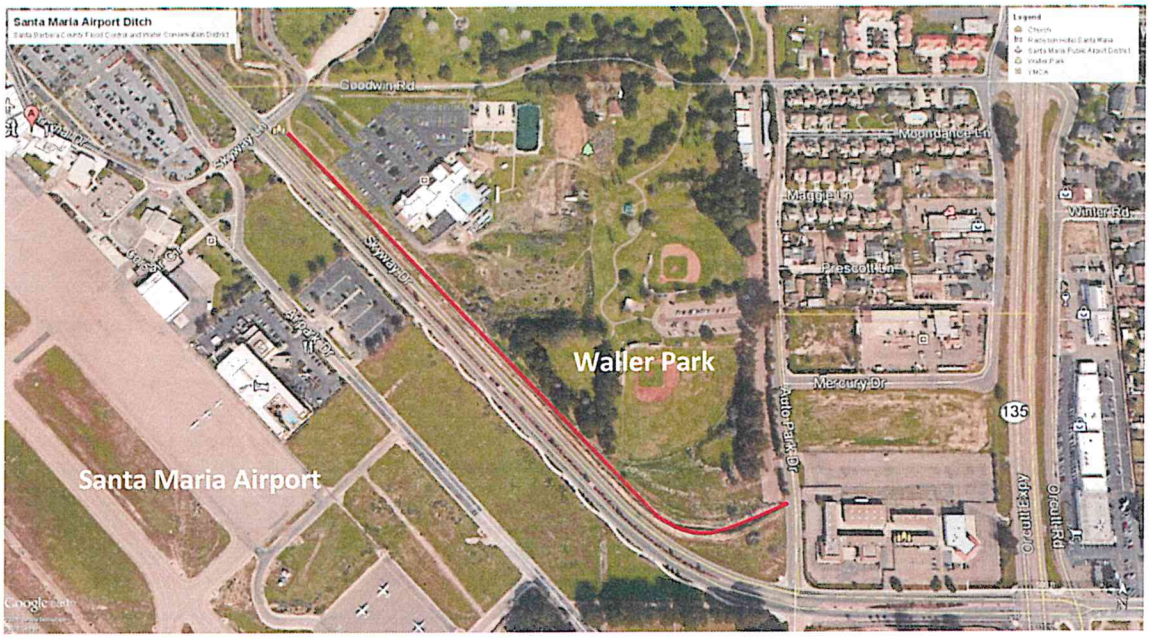
Dear Chair Tumamait-Stenslie,
The Santa Barbara County Flood Control and Water Conservation District (District) is proposing an improvement project along Santa Maria Airport Ditch (SMAD) in Santa Maria. Below please find the project description, a map showing the project location, and the name of or our project point of contact, pursuant to PRC Section 21080.3.1(d). A records search at the Central Coast Information Center was completed in 2016 and no cultural or archaeological resources were found within the project area of impact. As such, the potential for undiscovered cultural resources to exist onsite is low.

Description of the Proposed Project

The project is located within the Orcutt Community Plan area in Santa Maria and consists of improvements to an existing 2,300' roadside earthen ditch which runs along Skyway Drive adjacent to the Santa Maria Airport and the southern edge of Waller County Park. The District is proposing to construct a combination buried pipe and trapezoidal overflow channel for the SMAD. Specifically, the proposed combination system consists of a 60-inch high-density polyethylene (HDPE) storm drain overlain by an 8-to-16-foot-wide by 2-to-3-foot-high earthen trapezoidal channel. Both the pipe and trapezoidal channel will outfall just upstream of the existing box culvert under Hagerman Drive. A minor vegetated overflow swale is proposed at the ground surface above the pipe.

The proposed project will include the excavation and grading of approximately 225 cubic yards (cy) within the channel, removal of vegetation along the north side of a portion of the channel (predominately ice plant, weedy species or bare ground with an occasional coyote brush), installation of the HDPE pipe, backfill and compaction around the pipe, and work to construct the trapezoidal drainage ditch atop the buried HDPE pipe.

Once construction in the drainage channel concludes, the next phase of the project includes restoration of native plants along the northern side of the SMAD channel along the Waller Park boundary. Restoration will be facilitated by removal of the non-native and ruderal species in that location.



Project Location

Lead Agency Point of Contact

Maureen Spencer, Operations and Environmental Manager
Santa Barbara County Flood Control and Water Conservation District
County of Santa Barbara
130 E. Victoria St. Suite 200
Santa Barbara, CA 93101
(805) 568-3437

Pursuant to PRC Section 21080.3.1(b), you have 30 days from the receipt of this letter to request consultation, in writing, with the Santa Barbara County Public Works Department/Flood Control District

Sincerely,

Scott D. McGolpin
Public Works Director