Baylands Pump Station No. 2 Rehabilitation Project

Initial Study

Prepared for:
City of Sunnyvale

December 2013

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1.0 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (Title 14, California Code of Regulations §15000 *et seq.*), and the regulations and policies of the City of Sunnyvale (City). The purpose of this IS is to provide objective information regarding the environmental consequences of the proposed project to the decision makers who will be reviewing and considering the project.

This IS/MND and related technical reports evaluate the potential environmental effects of the Baylands Pump Station No. 2 Rehabilitation project, located in the City of Sunnyvale. The project will take place on a five-acre parcel owned by the City of Sunnyvale and within an existing storm drain easement. The City property is adjacent to a 230-acre property owned by the County of Santa Clara (County), which consists of Baylands Park, Twin Creeks Sports Complex, a storage basin, and seasonal wetlands area. A more detailed description of the proposed project is provided in Section *2.0 Project Description* below. The City is the Lead Agency under CEQA and has prepared this IS/MND to address the impacts of implementing the proposed project.

The environmental approval process, which is regulated by CEQA Statutes and Guidelines, includes circulation of this IS/MND for public and agency review for a 30-day period, beginning on December 6, 2013. The Notice of Availability of the Mitigated Negative Declaration in presented in Appendix B. All documents referenced in this IS are available for public review at the City offices, 456 West Olive Avenue, Sunnyvale, CA 94088, during normal business hours. Any individual, group, or agency, wishing to comment on the project may submit written comments to the City of Sunnyvale, Department of Public Works, 456 West Olive Avenue, Sunnyvale, CA 94088 by no later than 5:00 pm on January 6, 2013.

The organization and format of this document is stipulated by the CEQA Guidelines. Section 4 of this IS/MND, the "Environmental Checklist", includes 18 specific elements (e.g. Air Quality, Cultural Resources, Transportation and Traffic, etc.) which must be addressed. Each element begins with a statement from the regulations of the particular issues to be studied and an analysis of the project impact in that regard. The four levels of impact are: "Potentially Significant Impact," "Less Than Significant with Mitigation Incorporation," "Less than Significant Impact," and "No Impact." A discussion relating the anticipated impacts to each of the CEQA issues then follows. If a significant impact is identified, mitigation is presented to offset any potentially significant impacts. The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of the checklist.

1.1 PROJECT SPECIFICS

1.1.1 Project Title

Baylands Pump Station No. 2 Rehabilitation Project

1.1.2 Project Location

Baylands Pump Station No. 2 is located on a five-acre property owned by the City in the northern low lying lands of the City of Sunnyvale, east of Baylands Park and west of Calabazas Creek. Figures 1 through 3 show the project location.

1.1.3 Lead Agency Name and Address

City of Sunnyvale
Department of Public Works
456 West Olive Avenue
Sunnyvale, CA 94088

1.1.3 Contact Person and Phone Number

Nathan Scribner
Senior Engineer
City of Sunnyvale
(408) 730-7605

1.1.4 Existing General Plan Designation and Zoning

The project site is designated as Parks (PARK) land and zoned public facilities (PF).

1.1.5 Summary Project Description

The project consists of a series of improvements to the Baylands Pump Station No. 2. The planned rehabilitated station will have a pumping capacity of 133.7 cubic feet per second (cfs) versus the existing station design pumping capacity of 220 cfs. The City has determined that this excess capacity is not needed to meet the stormwater runoff requirements of northern Sunnyvale.

Reducing the peak discharge rate of the station has additional benefits for Calabazas Creek. These include reduced impacts to the channel bank during station operation and reduced peak discharge to the creek which reduces impacts to the creek system.

2.0 PROJECT DESCRIPTION

2.1 BACKGROUND

The City of Sunnyvale is planning to rehabilitate the Baylands Pump Station No. 2. The pump station, which is located on a five-acre parcel owned by the City of Sunnyvale, was built in 1966 and expanded in 1990. It receives stormwater from an 84-inch diameter pipe and from the surrounding wetlands. The 84-inch pipe is located below ground and runs linearly south to north across the County wetlands between State Route (SR) 237 and the southwest corner of the City's stormwater basin. The 84-inch pipe was installed in a 25-foot wide Strom Drain & Ingress and Egress Easement dedicated to the City in 1964to convey stormwater from a 500-acre area south of SR 237, and discharge it into the existing City-owned stormwater basin, which drains to the pump station. Before the development south of SR 237, all flows from this area drained under the highway into the Baylands area.

The pump station discharges into Calabazas Creek, which drains into San Francisco Bay via Guadalupe Slough. The pump station structure was originally constructed with an 84-inch stub out pipe on the north side of the station and several surplus pump bays and additional outfalls which were never used. These features were included originally so that additional stormwater created by future developments could be easily accommodated by adding pumps to the surplus bays.
The mechanical equipment at the pump station has reached the end of its useful life and needs to be replaced. Currently, the 84-inch pipe can accommodate a 100-year storm if all of the existing pumps are functional and the control levels are set low in the wet well.

2.2 PROJECT SITE AND VICINITY

The pump station is located on an approximately five-acre site owned by the City, adjacent to a 230-acre property owned by the County. The County property currently consists of Baylands Park, Twin Creeks Sports Complex, a storage basin, and seasonal wetlands area. Baylands Park is located on approximately 65 acres in the western portion of the property. The City manages and maintains Baylands Park under agreement with the County. The Twin Creeks Sports Complex is located on the northwestern 60 acres of the property and is leased and operated by a private company. The approximately 22-acre storage basin (formerly referred to as a "dredge spoils basin") is located in the northeastern corner of the property.[1] The approximately 105-acre "seasonal wetlands" is protected as a Wetlands Preserve, providing habitat for plants and wildlife[2] (refer to Figure 3). Baylands Park and the levees surrounding the seasonal wetlands area are very popular and highly used for walking, jogging, and biking.

The County property is bounded by Calabazas Creek to the east, Guadalupe Slough to the north, Caribbean Drive to the west, and SR 237 to the south, as shown on Figure 3. North of the sloughs are salt ponds in the San Francisco Bay and property east of Calabazas Creek is vacant. Industrial, commercial, and mobile home uses are south of SR 237 and west of Caribbean Drive. The City

[1] According to the 1988 EIR (page 6), the basin was originally intended to received spoils from the Alviso yacht harbor, but its malfunctioning culvert has resulted in permanent inundation, largely unaffected by tides. It now serves as a waterfowl resting area.
[2]County of Santa Clara. http://www.sccgov.org/sites/parks/Maps%20Here/Pages/Sunnyvale-Baylands-Park.aspx

Water Pollution Control Plant, Materials Recovery and Transfer Station (SMaRT), and sanitary landfill are also located west of the County property.

2.3 PROJECT CHARACTERISTICS

The proposed improvements to Baylands Pump Station No. 2 include upgrades to the existing pump station structure and drainage basin on City property, and the outfalls to the creek (refer to Figure 4). Improvements to the existing junction structure would also occur within the existing storm drain easement in the southwest corner of the basin.

The planned rehabilitated station would have a pumping capacity of 133.7 cfs compared to the existing station design pumping capacity of 220 cfs, which would reduce the overall capacity of the pump station. The City has determined that the reduced capacity would still meet the storm water needs of northern Sunnyvale. During rare, severe storms greater than the 50-year event, the City basin may become full causing stormwater to release from the 84-inch junction structure onto the seasonal wetland area. Once the storm peak flow subsides, the water would reenter the junction structure and continue to the City drainage basin. Reducing the peak discharge rate of the station and improving the creek outfalls would reduce the potential for erosion to occur at the levee[3] and banks of the creek. The improvements would also reduce the amount of air pollution emissions generated by the gas powered engines, and the overall operation and maintenance costs of the facility.

2.3.1 Improvements to the Existing Pump Station Structure

Rehabilitation of the existing pump station structure includes replacing six existing pumps (five high flow and one low flow) and engine drive units with three high flow pumps and two low flow pumps. The existing natural gas service and propane tank would be replaced with new electrical service, including a new Main Switch Board and Motor Control Center. The Main Switch Board would include an auto transfer switch for standby power. The standby engine generator would be installed at a size sufficient to run three large pumps and one small pump. The engine generator would include an in-frame fuel storage tank. The existing trash racks would also be replaced. The new trash racks and landing would be positioned to be above the basin design water level.

The existing wet well (where water is retained prior to pumping) would also be rehabilitated as part of the station structure upgrades. The slide gate between the wet wells would be removed and a divider wall would be added within the building to isolate the wet well openings from the building interior. The divider wall would prevent wet well gases or fumes from entering the electrical room.

2.3.2 Improvements to the City-Owned Drainage Basin and Creek Outfalls

A low storage area, approximately 58 feet by 58 feet, would be excavated in the existing detention basin on City property for operational storage to prevent short pump cycling. The material excavated would be disposed of at the southeast corner of the City-owned basin and erosion controls measures

[3] The City basin is surrounded by an engineered fill levee, which has been built on top of the natural ground and extends as high as 13 feet above the natural ground in some places. The levee adjacent to the creek was put into place for flood protection and includes a flood wall.

would be implemented to preserve water quality. The existing rock barrier to the west of the detention basin would be relocated as shown on Figure 4.

The existing seven creek discharge outfalls, which discharge near the bottom of the engineered fill levee atop the creek's bank, are completely buried in creek sediment and would be replaced with five new outfalls. The five new structures (three high flow and two low flow) would discharge higher up the levee, near the top of the creek bank, as shown on Figure 5. The creek bank would be excavated to remove the old pipes and install the new outfalls. Rock slope protection (1/2-ton) would be installed within the excavated footprint along the creek bank. Geowebbing may be used to stabilize the rock slope protection, which would not be grouted. Flap-gates would be installed on all the discharge pipes.

2.3.3 Improvements to Larger Baylands Seasonal Wetlands Area Currently Existing on County Property

During storm events above the 50-year event, additional waters could enter the Baylands seasonal wetlands area on County property. To account for the possible flooding, an inlet would be added to the existing junction structure at the angle point of the existing 84-inch pipe near the southwest corner of the drainage basin (refer to Figure 4). Modification would allow for the release of stormwater from the 84-inch pipe into the County property during events higher than the 50-year storm event, and would allow for the return of released water back into the 84-inch pipe, which lets water into the pump station once the peak flow has passed. During a storm of this magnitude, the seasonal wetlands area would likely already be inundated with water and the volume released from the City system would return to the pump station within a matter of hours after the storm subsides. Modification to the junction structure would take place entirely within an existing City easement on County property. This modification would also allow for the proposed reduced pump station size.[4] After project construction, all temporarily disturbed areas would be modified to match existing grade in the surrounding areas.

2.3.4 Construction Schedule and Equipment

Construction of the proposed project facilities is expected to begin in the late spring of 2014 and likely will continue into the winter of 2014/15, over a total period of approximately six to eight months. Construction work will typically be done within normal City working hours, weekdays between the hours of 7:00 a.m. and 6:00 p.m., and, if necessary, Saturdays between 8:00 a.m. and 5:00 p.m. There shall be no construction activity on Sundays or national holidays when City offices are closed.

In support of these activities and for the assumptions for this document, the types of equipment that may be used at any one time during construction may include, but are not limited to:

- Track-mounted excavator
- Backhoe

[4] The pump station can handle flows up to the 50-year storm event but requires additional storage to handle 100-year storm events without flooding south of Highway 237.

- Crane
- Compactor
- End and bottom dump truck
- Front-end loader
- Water truck
- Flat-bed delivery truck
- Forklift
- Asphalt paver

During construction, access to the trail along the existing levee adjacent to Calabazas Creek would be temporarily closed. A detour route would be designated with signage along the levee surrounding the City basin. The City is sensitive to the needs of park users that utilize the trail and will work with the contractor during construction to minimize any temporary closures.

2.3.5 Staging Areas and Access

Staging areas for construction equipment and other materials will be at locations that would minimize hauling distances and long-term disruption. Staging areas for construction materials and equipment would be located on City land adjacent to the existing station, along the top of the existing City levee, and within the City's basin. The City will review and approve any other designated areas within the project area proposed by the contractor for staging. Access for construction will be on the existing road through Baylands Park and from the existing levees surrounding the City basin and seasonal wetlands area.

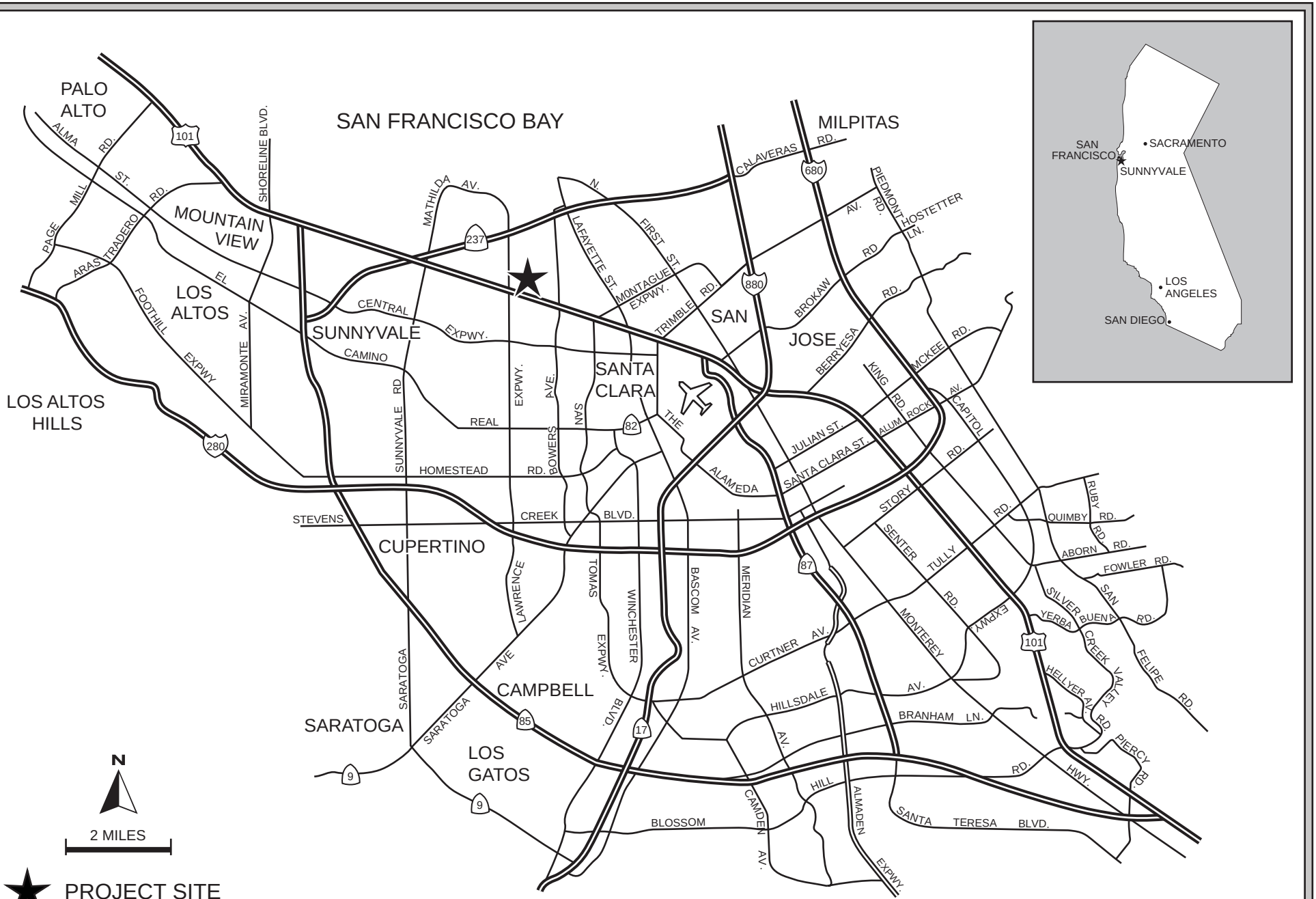
2.4 APPROVALS REQUIRED

The project would require the following approvals and discretionary actions by the City of Sunnyvale:

- Adoption of the Initial Study/Mitigated Negative Declaration
- Adoption of the Mitigation Monitoring and Reporting Program
- Construction documents

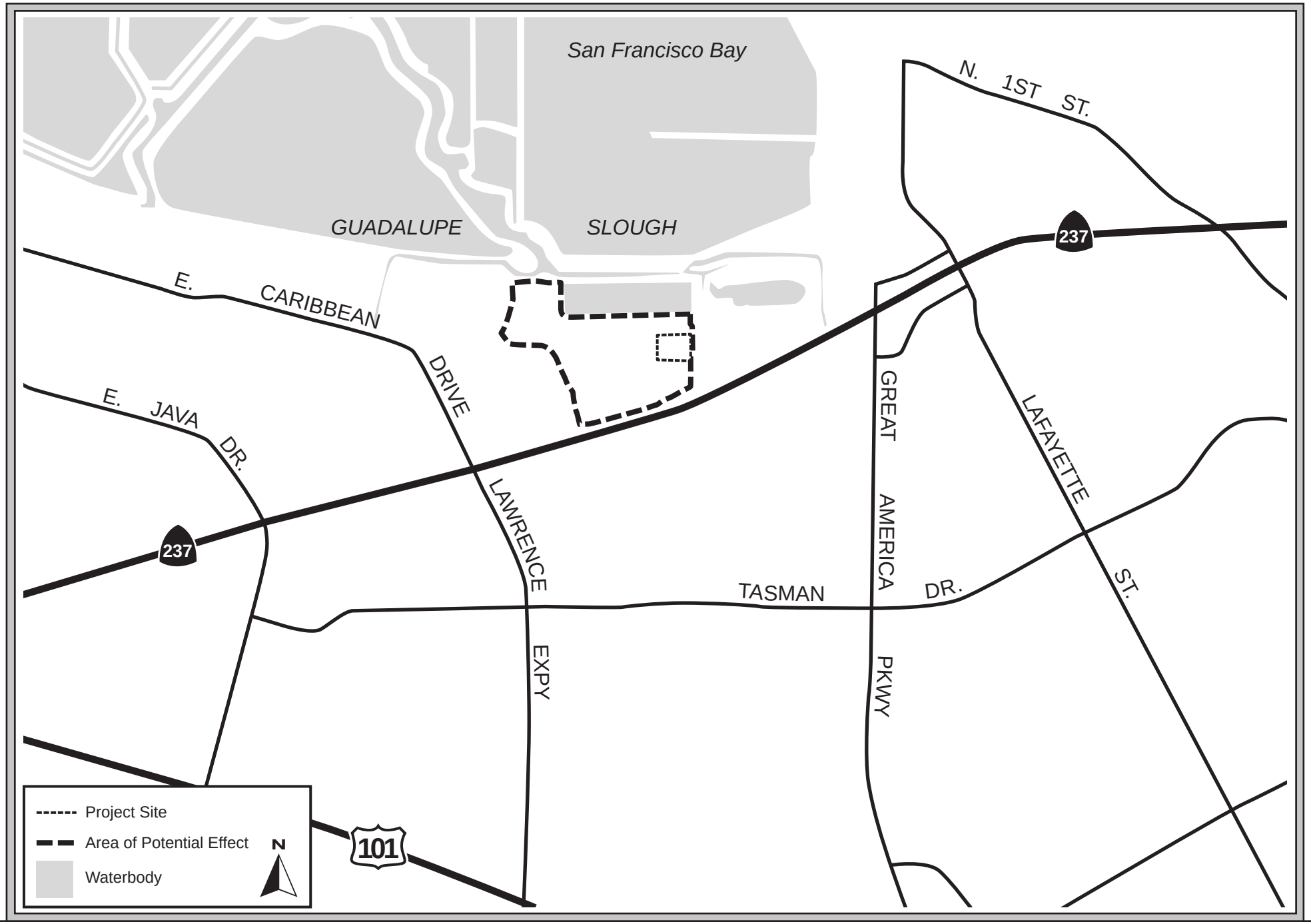
Based on the project description, the following permits are anticipated to be necessary:

- U.S. Army Corps of Engineers (Corps) Section 404 Nationwide Permit
- Regional Water Quality Control Board (RWQCB) Section 401 Certification
- San Francisco Bay Conservation and Development Commission (BCDC) permit for the outfall repairs
- California Department of Fish and Wildlife (CDFW) Streambed Alteration Permit 1601
- Santa Clara Valley Water District Encroachment Permit for Construction



REGIONAL MAP

FIGURE 1

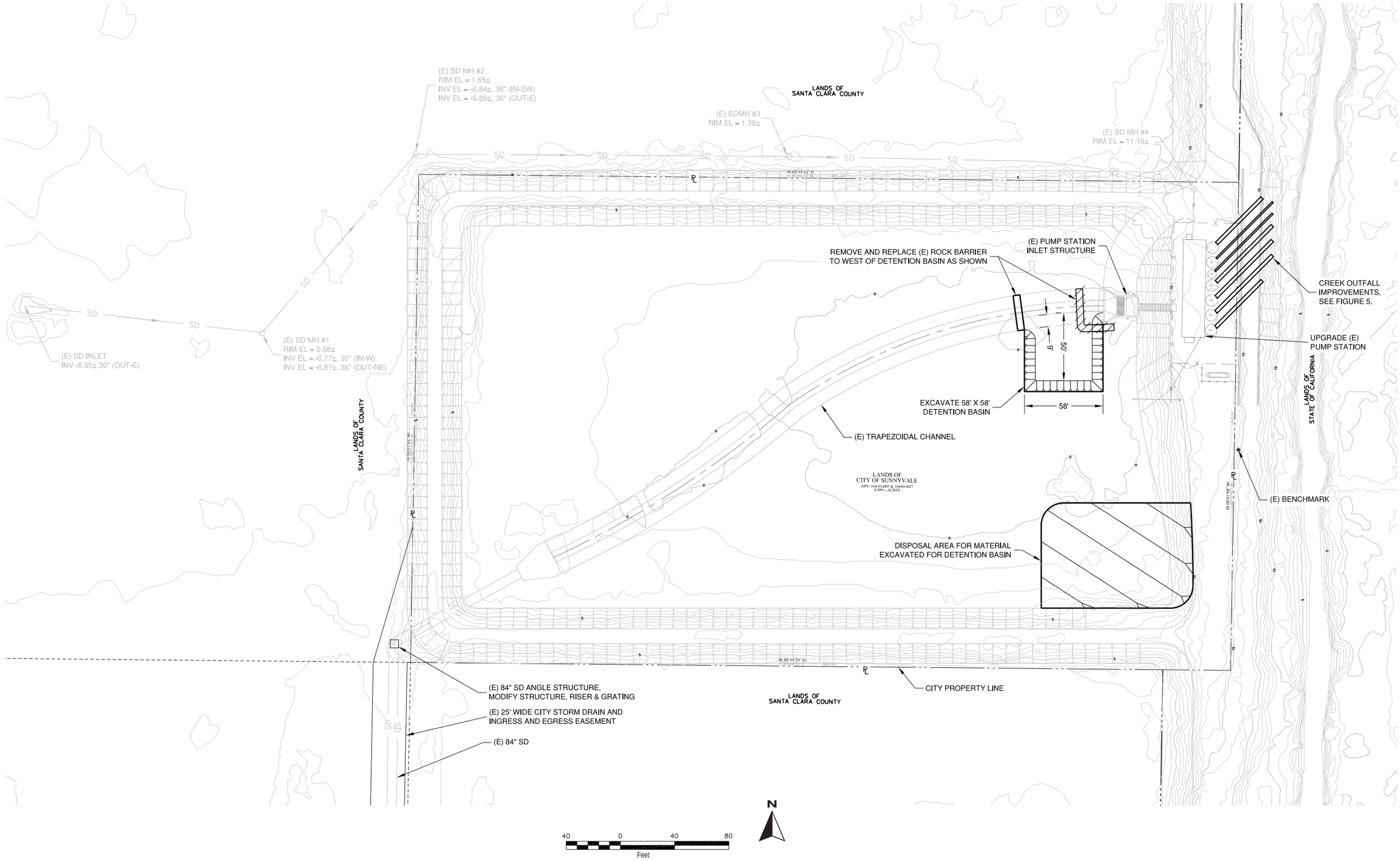


VICINITY MAP

FIGURE 2

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

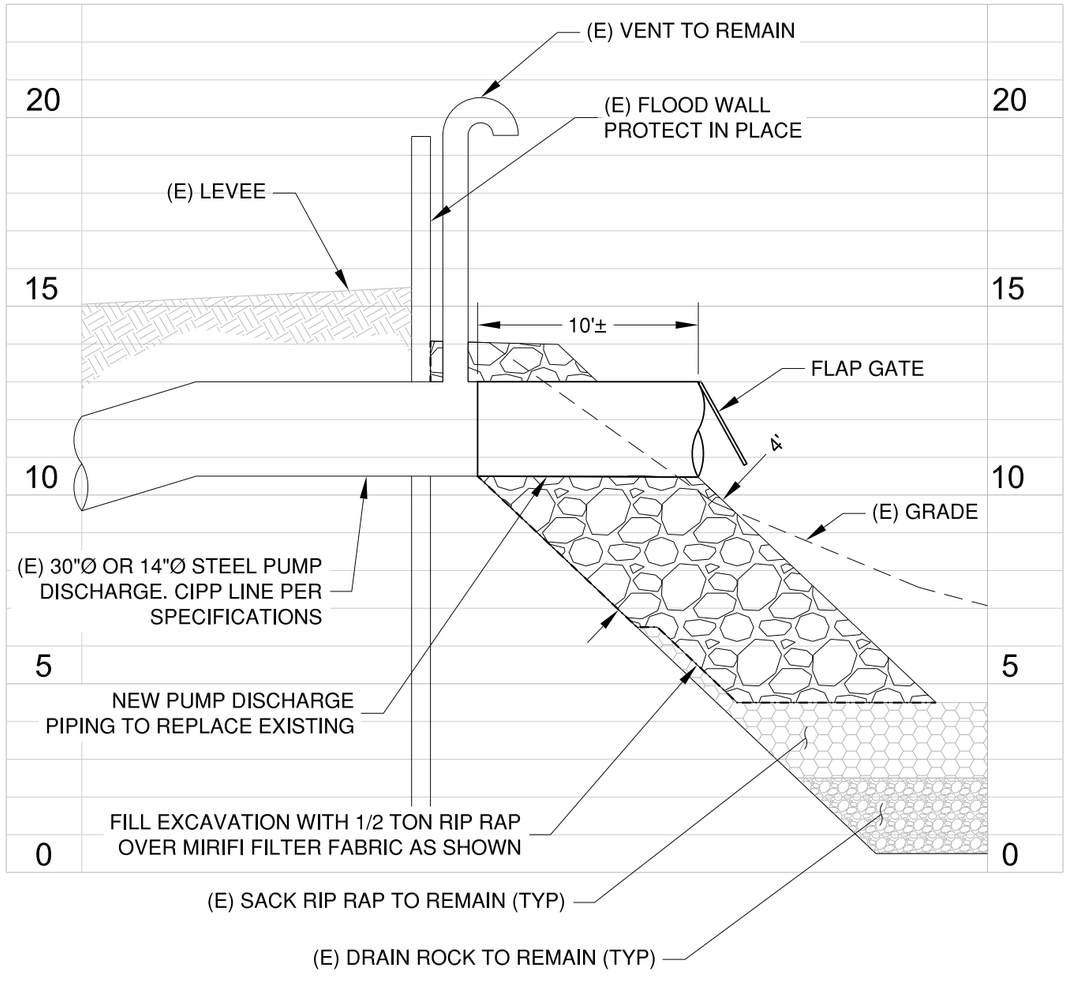
FIGURE 3



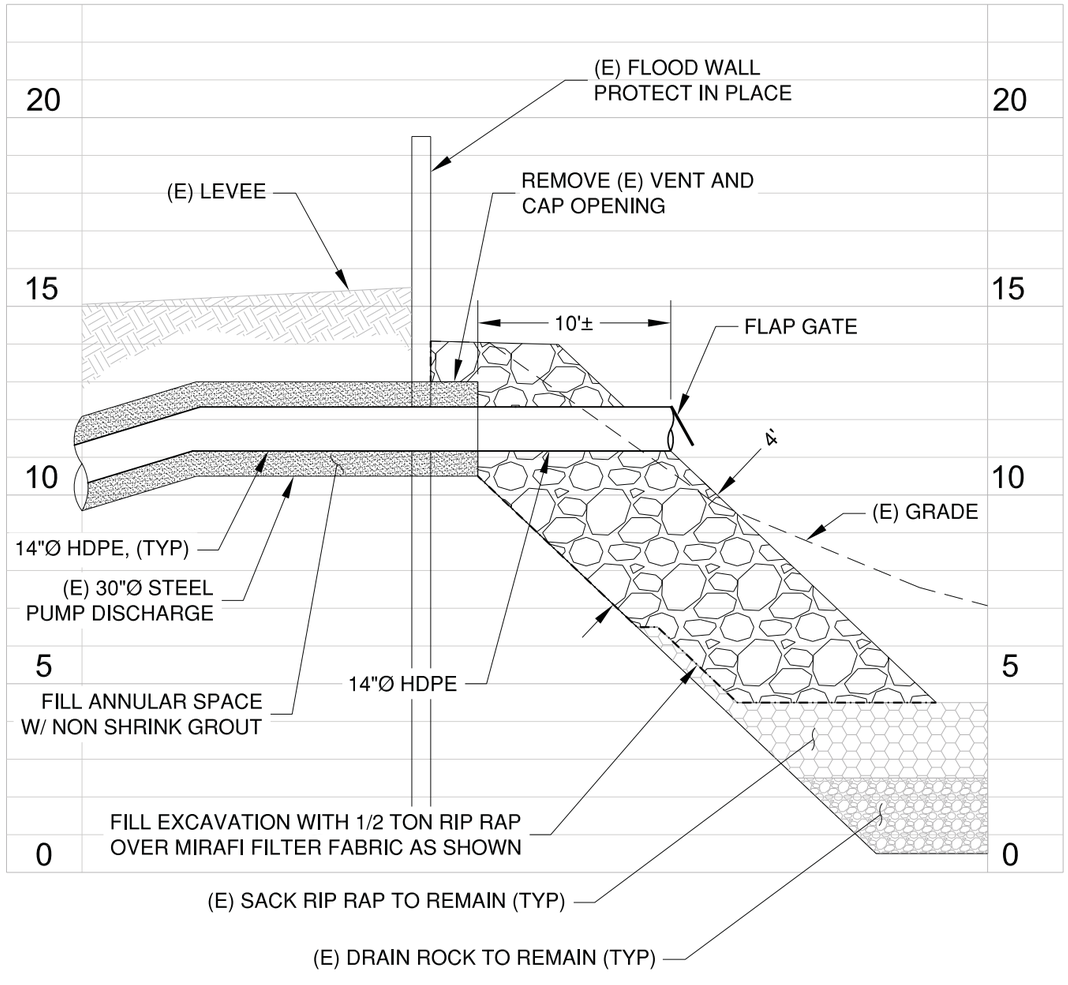
PROPOSED BAYLANDS PUMP STATION NO. 2 IMPROVEMENTS

FIGURE 4

TYPICAL CROSS SECTION FOR HIGH FLOW OUTFALL



TYPICAL CROSS SECTION FOR LOW FLOW OUTFALL



PROPOSED OUTFALL IMPROVEMENTS

FIGURE 5

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND CITY'S MITIGATION DETERMINATION

☐	Aesthetics	☒	Hazards & Hazardous Materials	☐	Public Services
☐	Agricultural Resources	☒	Hydrology/Water Quality	☐	Recreation
☐	Air Quality	☐	Land Use/Planning	☐	Transportation/Traffic
☒	Biological Resources	☐	Mineral Resources	☐	Utilities/Service Systems
☒	Cultural Resources	☐	Noise	☒	Mandatory Findings of Significance
☐	Geology/Soils	☐	Population/Housing		

DETERMINATION:
On the basis of this Initial Study:

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

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

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

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

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

Nathan Scribner — 12/3/13

Signature — Date

NATHAN SCRIBNER — CITY OF SUNNYVALE

Printed Name — For

4.0 ENVIRONMENTAL CHECKLIST, DISCUSSION, AND MITIGATION MEASURES

4.1 AESTHETICS

AESTHETICS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	1,2
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	1,2
3) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	1,2
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒	1,2

Discussion

1-2) **No Impact.** The proposed project site is bounded to the north by the County storage basin, to the east by Calabazas Creek, to the south and west by the Baylands seasonal wetland preserve. The project site is only visible from the immediately surrounding area. The proposed project includes upgrades to the existing pump station structure, pipelines within the drainage basin, and the creek outfalls. The project does not include erecting structures higher than what are currently on the site and would not block any scenic views. Because the proposed improvements would be placed within the same location as existing facilities, or below grade, it is not expected that the proposed project would substantially degrade existing views of the area.

The proposed project site is located off of the E. Caribbean Drive/Moffett Park Drive /Baylands Park intersection on a five-acre site owned by the City of Sunnyvale, adjacent to a 230-acre property owned by the County (refer to Figure 3). None of these roadways have been designated or are considered eligible to be scenic highways, nor is the project site visible from a scenic highway.

3) **Less than Significant.** The proposed project site is adjacent to a 230-acre property owned by the County. The County property currently consists of Baylands Park, Twin Creeks Sports Complex, a storage basin, and seasonal wetlands area. Baylands Park is located on approximately 65 acres in the western portion of the property. Baylands Park connects to the

Bay Trail. The seasonal wetlands comprise 105 acres in a protected wetlands preserve, which has aesthetic and biological benefits to Baylands Park and the Bay Trail. Since only 10 percent of the San Francisco Bay's wetlands remain, Baylands Park and the Bay Trail are invaluable resources for Sunnyvale and for the entire Bay Area region.

Improvements to the existing pump station structure and inlet structure, and creek outfalls would not substantially change the visual character of the site. Once built, the equipment upgrades to the pump would be placed within the same location as existing facilities, or below grade. The outfalls would be placed higher up the creek bank than the existing outfalls, but below the level of the existing levee at locations that are minimally visible to the public. The junction structure improvements in the existing easement within the seasonal wetlands area would be placed below grade. After project construction, all temporarily disturbed areas would match existing grade in the surrounding wetland areas. The visual character of the project site would be the same before and after construction of the proposed project. Operation and maintenance of the proposed project would not affect any visual resources within the City.

4) **No Impact.** There would be no lighting associated with the proposed project. Therefore, the project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. The project does not propose any increase in illumination in the area, and therefore would not result in light or glare impacts.

References

California Department of Transportation (Caltrans). *California Scenic Highway Mapping System*. Accessed June 19, 2013. Available at: http://dot.ca.gov/hq/LandArch/scenic_highways/index.htm

City of Sunnyvale. *Sunnyvale General Plan, Chapter 2 Community Vision.* Consolidated in 2011.

4.2 AGRICULTURAL AND FORESTRY RESOURCES

AGRICULTURAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	1,2,5
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1,2
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Codes section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	1,2,3
4) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1,2
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	1,2

Discussion

1-5) **No Impact.** The project site is not designated by either the Sunnyvale General Plan or the Zoning Ordinance as agricultural lands. The Santa Clara County Important Farmlands Map (2010) depicts that there is no Farmland of Statewide Importance within the project area. The proposed project would not result in or induce the conversion of farmland or forest land to non-agricultural or non-forest uses. For these reasons, the proposed project would not result in a loss of agricultural or forestry land, or impacts to agricultural or forestry resources.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Land Use and Transportation Chapter*. Consolidated in 2011.

City of Sunnyvale. *Zoning Ordinance. Map – North of 101*. March 2008.

California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2010*. Map. June 2011.

4.3 AIR QUALITY

AIR QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	1,2,3,6
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1,2
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	☐	☐	☒	☐	1,2
4) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	1,2,7
5) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	1,2

Discussion

1) **Less than Significant.** The project site is within the San Francisco Bay Area Air Basin (Bay Area). The project is located in an area which experiences violations of federal and state air quality standards on various occasions each year. Specifically, the Bay Area experiences violations of standards for ozone and particulate matter including respirable particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$). The number of violations per year varies due to meteorological conditions. The region is, however, in attainment with regard to carbon monoxide. On September 15, 2010, the Bay Area Air Quality Management District (BAAQMD) adopted the Bay Area 2010 Clean Air Plan, which is the applicable plan that has been prepared to address ozone nonattainment issues and to comply with state air quality planning requirements to include all feasible measures to reduce emissions of ozone precursors.

   If a City's General Plan is consistent with the most recently adopted Clean Air Plan, a project that is consistent with the General Plan's land use designation is considered consistent with applicable air quality plans and policies. The proposed project would be consistent with the General Plan land use designations and zoning for the project site. In addition, the City's General Plan is consistent with the Clean Air Plan because data and projections from the General Plan are incorporated into the Clean Air Plan. Development of the project would not interfere with the population and vehicle-miles-traveled (VMT) used to develop the 2010

Clean Air Plan planning projections as it would not increase the population of the area and VMT traveled would be negligible. Therefore, the proposed project would result in a less than significant impact because it would not substantially conflict with the region's air quality management plan.

2) **Less than Significant.** Construction activities associated with the proposed project would generate pollutant emissions from the following construction activities: (1) site preparation; (2) construction workers traveling to and from the construction site; (3) delivery of construction supplies to the construction site and hauling of debris from the construction site; and (4) fuel combustion by on-site construction equipment. These construction activities would create dust and exhaust emissions from equipment and vehicles. PM_{10}, $PM_{2.5}$, and diesel exhaust would be the pollutants of greatest concern. Construction activities would temporarily affect local air quality, causing a temporary increase in particulate dust and other emissions.

Standard measures are included in the project to avoid or reduce short-term construction related impacts to a less than significant level.

Standard Measures: The project includes the following measures during all phases of construction to minimize emissions and fugitive dust:

- Water all active construction areas at least twice daily and more often during windy periods to prevent visible dust from leaving the site. Active areas adjacent to existing land uses shall be kept damp at all times or shall be treated with non-toxic stabilizers or dust palliatives.

- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.

- Apply water at least three times daily or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.

- Sweep daily (or more often if necessary) to prevent visible dust from leaving the construction areas (preferably with water sweepers) all paved access roads, parking areas, and staging areas at the construction site; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality.

- Sweep streets daily, or more often if necessary (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.

- Hydroseed or apply (non-toxic) soil stabilizers to inactivate construction areas (previously graded areas inactive for 10 days or more).

- Enclose, cover, and/or water at least twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.) to prevent visible dust from leaving the site.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways and local waterways.

- Replant vegetation in disturbed areas as quickly as possible.

3) **Less than Significant.** The project proposes improvements to the existing pump station structure, inlet, and the creek outfalls. The existing natural gas service and propane tank would be replaced with new electrical service, which would reduce the amount of air pollution emissions generated by the existing engines. The project would not generate long-term traffic trips, and therefore, would not impact regional or local air quality in the long-term. According to the BAAQMD, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In addition, according to the BAAQMD CEQA Air Quality Guidelines[5], if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less than significant air quality impacts. The project would result in less than significant construction emissions with standard measures incorporated, as discussed above, and less than significant operational emissions.

4) **Less than Significant.** There are groups of people more affected by air pollution than others. The California Air Resources Board (CARB) has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as "sensitive receptors". The nearest sensitive receptors to the project site are the users of the trail adjacent to the project site. There are no residents or schools adjacent to the project site. Construction activities associated with the proposed project could temporarily expose users of the trail to short-term diesel exhaust emissions (DPM), which are toxic air contaminants (TACs), from on-site heavy duty equipment. With incorporation of the standard

[5] In December 2010, the California Building Industry Association (BIA) filed a lawsuit in Alameda County Superior Court challenging the toxic air contaminant (TAC) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$) thresholds adopted by BAAQMD in its 2010 CEQA Air Quality Guidelines (*California Building Industry Association v. Bay Area Air Quality Management District, Alameda County Superior Court Case No. RG10548693*). On March 5, 2012, the State Superior Court found that the adoption of thresholds by BAAQMD in its CEQA Air Quality Guidelines is a CEQA project and BAAQMD is not to disseminate officially sanctioned air quality thresholds of significance until BAAQMD fully complies with CEQA. No further findings or rulings on the thresholds in the BAAQMD CEQA Air Quality Guidelines were made. The City understands the effect of the lawsuit to be that BAAQMD may eventually prepare an environmental review document before BAAQMD adopts the same or revised thresholds. However, the ruling in the case does not equate to a finding that the quantitative metrics in the BAAQMD thresholds are incorrect or unreliable for meeting goals in the Bay Area 2010 Clean Air Plan. Moreover, the determination of whether a project may have a significant effect on the environment is subject to the discretion of each Lead Agency, based upon substantial evidence. The City has carefully considered the thresholds previously prepared by BAAQMD and regards the thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The analysis in this IS is based upon the general methodologies in the most recent BAAQMD CEQA Air Quality Guidelines (dated May 2012) and numeric thresholds for the San Francisco Bay Basin.

measures described above, these emissions would be reduced. The long-term operation of the project would not result in any sources of toxic air emissions.

5) **Less than Significant.** Construction activities could produce occasional odors from diesel equipment exhaust. However, the construction of the proposed project would be of short duration and these potential odors are not expected to frequently or significantly affect local populations. As a general matter, the types of land use development that pose potential odor problems include wastewater treatment plants, refineries, landfills, composting facilities, and transfer stations. No such permanent uses would occupy the project site. Therefore, the project would not create objectionable odors that would affect a substantial number of people.

References

Bay Area Air Quality Management District (BAAQMD). *Bay Area 2010 Clean Air Plan.* September 15, 2010.

BAAQMD. *CEQA Guidelines Update-Thresholds of Significance*. June 2010.

City of Sunnyvale. *City of Sunnyvale General Plan, Land Use and Transportation Chapter.* Consolidated in 2011.

City of Sunnyvale. *Zoning Ordinance. Map – North of 101*. March 2008.

4.4 BIOLOGICAL RESOURCES

BIOLOGICAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	1,2,16
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	1,2,16
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐	1,2,16
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☒	☐	☐	1,2,16
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	1,2
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	1,2

Discussion

1) **Less than Significant with Mitigation.**

Plant Species: Based on the database searches conducted for the Biological Resources Assessment (refer to Appendix A), there are three special status plant species with the potential to occur in the within alkali wetland portions of the project area[6], as listed below in Table 4.4-1.

TABLE 4.4-1. SPECIAL STATUS PLANT SPECIES IN PROJECT STUDY AREA

Common Name	Scientific Name	Federal Status	State Status
Alkali milk-vetch	*Astragalus tener var. tener*	--	CNPS[1] Rank 1B
California seablite	*Suaedacalifornica*	Endangered	CNPS Rank 1B.1
Saline clover	*Trifolium hydrophilum*	--	

Notes:
1 – California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (Inventory) with California Rare Plant Ranks (Rank) of 1 and 2 are also considered special-status plant species.
Source: WRA, Inc. 2013. *Draft Biological Resources Assessment, Baylands Pump Station #2, Santa Clara County, California*. October 2013.

Most of these plant species have the potential to occur within the project area adjacent to, but outside of the project construction disturbance zones. None of these species were observed during the survey of the project construction areas completed in May 2013. The operation of the flood control facility is not anticipated to result in substantial adverse effects to rare plant species based on the infrequent timing and short duration of the increased flooding resulting from the project. The project is anticipated to temporarily impact 0.02 acres of coastal brackish marsh within the project area during the repair and replacement of the existing storm drain outfalls. Based on the prevalence of tall (greater than six feet), weedy vegetation in Calabazas Creek, it is not anticipated that any rare plant species would occur in that area. If rare plant species are present in the areas of construction and access in the flood control basin and at the junction structure, direct impacts could occur to those species during construction. Implementation of the mitigation measure below will reduce these impacts to a less than significant level.

MM BIO-1.1: Appropriately-timed surveys will be completed in April or early May (depending on the rainy season) prior to project construction to document the presence or absence of these special status plant species within the project construction areas. If special-status plant species are observed, they will be flagged by a qualified biologist for avoidance during construction. If avoidance is not feasible, individuals will be transplanted to suitable undisturbed habitat or seed will be collected for replanting following construction. The method of mitigation will be selected based on the specific species observed (if any) and the efficacy of each method in successfully re-establishing the observed species.

[6] The Study Area referenced to in the Biological Resources Assessment encompasses the same boundary as the project area.

Wildlife Species: Six special status wildlife species have a moderate to high potential to occur within the seasonal wetlands area, City flood control basin, and/or the coastal brackish marsh within Calabazas Creek[7], east of the pump station structure. These wildlife species are listed below in Table 4.4-2.

TABLE 4.4-2. SPECIAL STATUS WILDLIFE SPECIES IN PROJECT STUDY AREA

Common Name	Scientific Name	Federal Status	State Status
Salt marsh harvest mouse	*Reithrodontomys raviventris*	Endangered	Endangered CDFW[1] Fully Protected
Western burrowing owl	*Athene cunicularia*	--	CDFW Species of Special Concern
Northern harrier	*Circus cyaneus*	--	CDFW Species of Special Concern
White-tailed kite	*Elanus leucurus*	--	CDFW Fully Protected
Alameda song sparrow	*Melospiza melodia pusillula*	--	CDFW Species of Special Concern
San Francisco common yellowthroat	*Geothlypis trichas sinuosa*	--	CDFW Species of Special Concern

Notes:
1- California Department of Fish and Wildlife (CDFW) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue.
Source: WRA, Inc. 2013. *Draft Biological Resources Assessment, Baylands Pump Station #2, Santa Clara County, California*. October 2013.

Salt Marsh Harvest Mouse

The Salt Marsh Harvest Mouse (SMHM) is a relatively small rodent found only in suitable salt- and brackish-marsh habitat in the greater San Francisco Bay, San Pablo Bay, and Suisun Bay areas. This species has been divided into two subspecies: the northern SMHM (*Reithrodontomys raviventris halicoetes*) which lives in the brackish marshes of the San Pablo and Suisun Bays, and the SMHM (*Reithrodontomys raviventris raviventris*) which is found in the marshes of San Francisco Bay. The project area occurs within the range of the southern subspecies, which generally persists in smaller and more isolated populations than the northern subspecies. Within the project site, this species may be present in ruderal grassland and seasonal wetland vegetation communities where substantial vegetation cover is present. This habitat is present in the Baylands seasonal wetlands area and in the flood control basin. Though the diked seasonal wetland habitat is not considered high-quality potential habitat due to the short stature of vegetation present and the lack of cover in some areas, there are no apparent barriers between the project area and potential habitat adjacent to the project site that would prevent mice from moving into the area. This species has been observed as recently as 1990 within two miles of the project area and a dead harvest mouse was found near a burrow along the levee in the far western portion of the seasonal wetlands preserve area during the protocol level trapping surveys conducted when the park was initially constructed. Based on the proximity of documented occurrences, the dead harvest mouse found at the site, and marginal quality of onsite habitat, there is a moderate potential for SMHM to occur within the project area.

[7] Calabazas Creek is subject to tidal influence from the San Francisco Bay waters, which creates a "brackish" habitat. Salinity varies considerably and may increase at high tide and during seasons of low freshwater runoff.

Because the presence of SMHM in the seasonal wetland area cannot be ruled out, potential impacts to the SMHM resulting from the proposed project during and after construction have been evaluated. Based on the SMHM's ability to avoid flooding and the availability of areas for the mouse to take refuge during flood events, it is not anticipated that the short duration and infrequent increase in flooding in the seasonal wetland preserve area that would occur once the improvements are constructed would result in a significant impact to this species.

Impacts to the SMHM may occur during vegetation removal within the flood control basin, and within the seasonal wetland preserve to access and improve the junction structure. This species may inhabit dense grass or marsh plant communities in these areas, and removal of this vegetation may impact the mouse directly if no avoidance or minimization measures are implemented. Additionally, bringing large equipment or vehicles into the flood control basin or Baylands may also directly impact mice if sufficient avoidance measures are not implemented. Vegetation removal would also result in temporary impacts to potential SMHM upland habitat. Implementation of mitigation measures will reduce impact to the SMHM to a less than significant level.

MM BIO-1.2: An exclusion fence will be placed around areas of active construction. The exclusion fence will be made of a material that does not allow SMHM to pass through and the bottom will be buried to a depth of six inches so that mice cannot crawl under the fence. All structural support for the exclusion fencing will be placed around areas of earthwork, including excavation and stockpiling of fill material in the drainage basin, and around the inlet improvement areas if ground disturbance will occur. . The coastal brackish marsh within the project area will be cleared of vegetation and surrounded by silt fence as an erosion control measure, and although it is unlikely that the SMHM would occur in this area, the erosion control measures, as described in Section 4.9 *Hydrology and Water Quality*, will double as extra assurance that SMHM will not enter the work area. All exclusion fences will be inspected daily for holes and gaps, and repaired as soon as deficiencies are detected.

MM BIO-1.3: If removal of any wetland or ruderal grassland vegetation is necessary, it will be conducted in the presence of a biological monitor using only hand tools during the SMHM breeding season (March 1 – November 30) or hand-held mechanized tools during the non-breeding season (December 1 – February 28).

The biological monitor will have demonstrated experience in monitoring sensitive resource issues on construction projects and knowledge of the biology of SMHM. The biological monitor will provide an endangered species training program to all personnel involved in project construction. The program will include a description of this species and its habitat needs, any reports of occurrences in the project area, an explanation of the status of the SMHM and their protection under state and federal legislation, and a list of measures being taken to reduce impacts to the SMHM during project construction. The biological monitor will be the contact person for any employee or contractor who might inadvertently kill or injure a SMHM or anyone who finds a dead, injured, or entrapped SMHM.

Western Burrowing Owl

Although no evidence of burrowing owl presence was observed during the site visit in May 2013, suitable burrow habitat was present on several mounds in the seasonal wetland preserve and along the berms of the flood control basin. These areas have the potential to become occupied in the future. A potential increase in flooding from project implementation is not anticipated to affect the western burrowing owl. The increase in flooding could theoretically affect burrowing owls and their habitat if the depth changed substantially enough to affect owl mortality compared to existing conditions. However, this potential impact is only speculative. It would occur only during an unpredictable and stochastic event and would subside within 24 hours of the end of the storm. Based on the project design, which is anticipated to result in an extremely short-duration and infrequent flood increase, the proposed project is not expected to adversely affect burrowing owls in the long-term.

If burrowing owls move into the project area prior to construction, they may be impacted directly through movement of machinery, or indirectly through the temporary noise disturbance and/or temporary removal of foraging or nesting habitat. These impacts will be reduced to a less than significant level with implementation of the mitigation measure below.

MM BIO-1.4: A biologist will conduct a pre-construction survey for burrowing owl within 14 days prior to the initiation of construction activities within the project area. If an active burrowing owl burrow is detected, the biologist will establish an exclusion buffer around the owl's burrow where no construction is permitted unless the owl is determined by the biologist to have migrated out of or abandoned its burrow in the project area. The biologist may also decide that it is necessary to establish screens around the owl burrow, depending on its placement relative to construction activities and the time of year, to buffer this species from visual disturbance from construction activities.

Special Status and Common Birds

Impacts to birds are further discussed below under Comment 4.

2, 3) **Less than Significant with Mitigation.** Approximately half of the project area is comprised of an engineered flood control basin, a seasonal wetland community, and a small portion to the east, along the banks of Calabazas Creek, contains coastal brackish marsh. These wetland habitats are considered sensitive communities. The biological communities within the project area and the potential acreage of impacts to each are listed below in Table 4.4-3. The project area contains 8.88 acres of existing seasonal wetlands and 0.11 acres of coastal brackish marsh potentially within the jurisdiction of the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act and RWQCB under the Porter Cologne Act and Section 401 of the Clean Water Act.

TABLE 4.4-3 IMPACTS TO BIOLOGICAL COMMUNITIES WITHIN THE PROJECT STUDY AREA		
Community Type	**Total Acres within Project Study Area**	**Temporarily Impacted Acres**
Developed Land	0.38	0
Ruderal uplands	3.72	0.03
Coastal Brackish Marsh	0.11	0.02
Seasonal wetland	8.88	0
Detention basin	0.10	0.10
Flood control basin	3.80	0.20
Total	*16.99*	*0.35*
Source: WRA, Inc. 2013. *Draft Biological Resources Assessment, Baylands Pump Station #2, Santa Clara County, California*. October 2013.		

Pump Station Structure Improvements: The existing pump station structure and the surrounding paved and graveled areas do not support any sensitive vegetation communities or waters. No permanent, temporary or operational impacts to sensitive vegetation communities are anticipated from the pump station structure improvement work.

Flood Control Basin and Creek Outfall Improvements: Improvements to the flood control basin and creek outfalls are proposed as part of the project. A portion of the existing flood control basin would be excavated, increasing the total flood control capacity within the basin. The material excavated from the basin would be deposited in the southeast corner of the basin, which does not support jurisdictional wetlands, water features, or other sensitive biological communities. No sensitive biological communities will be impacted as a result of excavation in the flood control basin.

The existing creek outfalls will also be replaced as part of the proposed project, which is anticipated to result in approximately 0.02 acres of temporary impacts to coastal brackish marsh present along the banks of the creek. A portion of the creek slope would be excavated to cap the old outfall pipes and armored with rock slope protection. These impacts are considered temporary because the existing bank of Calabazas Creek is comprised of rip rap and the project is replacing this existing condition. Further, based on the abundance of sediment observed in the area during the site visit, it is anticipated that the area of disturbance will fill with sediment and the slope will become revegetated naturally in the course of two to three growing seasons. Additionally, the area of construction disturbance is small enough at 0.02 acres to mimic the occurrence of a gap in vegetation resulting from a natural disturbance event. Based on the small footprint of the excavation, existing conditions of the rip rap along the creek banks of a trapezoidal channel, and the expectation that the area will become revegetated in a short period of time, the temporary impacts to the stream bank are not anticipated to substantially affect the function and condition of the coastal brackish marsh along the banks of Calabazas Creek. Therefore, the temporary impacts are considered less than significant. However, these temporary impacts will require regulatory agency permits. Monitoring of the area and/or mitigation in some form may be required by the resource agencies as part of the permitting process. Measures to reduce these impacts can include, but are not limited to, those listed below.

MM BIO-1.5: The wetland boundaries and areas of disturbance in Calabazas Creek will be flagged prior to construction by a qualified biologist to guide installation of silt or exclusion fencing in the areas at the margins of areas of construction disturbance. Upon project completion, the temporarily disturbed areas would be modified to match the surrounding wetland grade and revegetated with appropriate native plants.

Measures were evaluated for revegetation in the areas of disturbance along Calabazas Creek and were determined to not be feasible due to the potential for those revegetation efforts to affect the function of the creek as a flood control channel. Revegetation would require the placement of soil and plant material in the interstitial spaces in the rip rap, and this unnatural deposition is anticipated to be washed away by discharge from the pump station outfalls. Additionally, the sediment and plant materials would enter and settle in Calabazas Creek, reducing the capacity of the creek to carry flood waters. As previously described, based on the abundance of sediment observed in the area of Calabazas Creek during the site visit, it is anticipated that the supplemental rip rap areas will fill with sediment and the bank slope will become revegetated naturally in the course of two to three growing seasons.

Junction Structure Modification/Baylands Seasonal Wetlands Area Improvements:
Modification of the existing junction structure just outside of the southwest corner of the flood control basin will result in impacts only to areas of ruderal uplands located in the seasonal wetland preserve. All impacts from the installation of the new inlets are considered temporary, and the area will be revegetated with hydroseed or broadcast seed following construction. Project construction would not result in temporary or permanent impacts to the adjacent seasonal wetlands.

During storm events above the 50-year frequency, additional waters could enter the seasonal wetlands area on County property. During a storm of this magnitude, the seasonal wetlands area would likely already be inundated with water and the volume released from the City system would return to the pump station within 24 hours after the storm subsides. The duration of ponding may be longer than 24-hours for rare storm events, such as the 100-year storm event. The proposed project improvements will not result in a change to existing hydrological conditions in the seasonal wetland area at the more frequent storm events, up to the 50-year frequency.

The proposed project will result in minor changes to the frequency of ponding in the seasonal wetlands area, increasing ponding only during rain events greater than the 50-year storm. Because the project is designed to drain any increased ponding within a short period of time, no substantial change to the duration of ponding is anticipated. The short-duration and infrequent increases in ponding are not anticipated to result in a substantial adverse effect to the seasonal wetlands area because the improvements will not change the existing conditions for the more regularly occurring flood frequencies (i.e., 2-year, 5-year, and 10-year). The increase in water depth in the seasonal wetland area is anticipated to be a maximum of 1 ½ feet during the 100-year storm. The most influential storm events for wetland function and condition are the more frequent storm events. The increase in short duration, shallow, and infrequent ponding during flood events are not enough of a disturbance to result in substantial adverse impacts to the seasonal wetlands. Therefore, the proposed project is not expected to have a substantial adverse effect on the seasonal wetlands during system operation. In

addition, based on the available scientific literature described in the Biological Resource Assessment (refer to Appendix A), no long-term significant impacts to the seasonal wetland community within the project area are anticipated to result from the proposed project.

All project staging and access during construction work will occur in existing developed areas and will avoid impacts to sensitive biological communities. No impacts to sensitive biological communities are expected from staging and access during project work.

4) **Less than Significant with Mitigation.** No large structures or substantial changes to the accessibility of the area for migrating wildlife will result from the project; therefore no significant impacts to wildlife migratory corridors will occur as a result of the proposed project.

Removal of vegetation and movement of heavy machinery through the Baylands seasonal wetlands preserve area has the potential to result in impacts to nesting birds, including the northern harrier, white-tailed kite, Alameda song sparrow, San Francisco common yellowthroat, and Western burrowing owl, if present. Vegetation removal could harm bird nests, eggs or young, either through direct contact or by exposing eggs or young to predators. Native bird species are protected during the nesting season by the Migratory Bird Treaty Act and Fish and Game Code. Implementation of the mitigation measures below would reduce these impacts to a less than significant level.

MM BIO-1.6: Construction during the active nesting season for breeding birds (February 1 – August 31) will be avoided as much as possible in areas that are not currently developed. For areas where direct impacts to vegetation will occur, impacts to birds can be avoided by removing vegetation outside of the bird breeding season to avoid potential delays in construction schedule due to breeding activity. If construction during the breeding season cannot be avoided, pre-construction breeding bird surveys will be conducted within 14 days of ground disturbance to avoid disturbance to active nests, eggs, and/or young of ground-nesting birds. Surveys can be used to detect the nests of special status as well as non-special status birds. An exclusion zone where no construction would be allowed will be established around any active nests of any avian species found in the project area until a qualified biologist has determined that all young have fledged. Suggested exclusion zone distances differ depending on species, location, and placement of nest, and will be at the discretion of the biologist and, if necessary, USFWS and CDFW.

5, 6) **No Impact.** There are no trees on the project site that would be impacted by the proposed project. The project site is not covered by a Habitat Conservation Plan or Natural Community Conservation Plan.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Community Vision Chapter*. Consolidated in 2011.

WRA, Inc. 2013. *Draft Biological Resources Assessment, Baylands Pump Station #2, Santa Clara County, California*. October 2013.

4.5 CULTURAL RESOURCES

CULTURAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	☐	☐	☐	☒	1,2
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☒	☐	☐	1,2
3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☐	☐	☒	1,2,8
4) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	1,2

Discussion

1) **No Impact.** There are no listed, determined or pending local, State of California, or California Register of Historic Resources historic properties located within or adjacent to the proposed project site. Therefore, the project would not impact any historical resources.

2) **Less than Significant with Mitigation.** The proposed project site does not contain any known archaeological resources, but given that the project is located in an area which was historically occupied by Ohlone Indians (Posolmi) and adjacent to a creek, there is potential for unanticipated cultural resources to be encountered during project construction activities. Construction activities could disturb unknown buried archaeological resources.

The proposed project will include the following mitigation measure to avoid or reduce impacts to cultural resources:

MM CUL–1.1: In the event of the inadvertent exposure of prehistoric or historic cultural resources during construction, all work within 50 feet of the discovery shall be stopped to allow for the identification and evaluation of the significance of the cultural materials by a qualified archaeologist meeting the Secretary of the Interior's standards (CEQA Guideline 15064.5(f)). If the cultural materials are determined to be significant, a qualified archaeologist shall develop an appropriate treatment plan in consultation with the City to mitigate impacts to materials to a less than significant level. The plan could include avoidance and preservation measures to preserve the materials in place; scientific collection and analysis; preparation of a professional report in accordance with current professional standards; and/or, professional museum curation of collected cultural materials and resource documentation.

With implementation of these measures, construction of the proposed project would have a less than significant impact on archaeological resources.

3) **No Impact.** Rock formations that are considered of paleontological sensitivity are those rock units that have yielded significant vertebrate or invertebrate fossil remains. This includes, but is not limited to, sedimentary rock units that contain significant paleontological resources anywhere within its geographic extent. The project area is underlain by Holocene deposits, including floodplain deposits (Qhfp) and salt-affected foodplain deposits (Qhbs), and is not likely to yield significant paleontological remains because they are young surface deposits that are not considered fossil-bearing rock units.[8] In addition, construction of the proposed project would not require substantial excavation to depths at which paleontological resources could be encountered.

4) **Less than Significant with Mitigation.** There is no indication that the project area has been used for burial purposes in the recent or distant past. It is unlikely that human remains would be encountered in the project area. Proposed work would occur within areas previously disturbed by construction of the original pump station. However, in the event of the discovery of any human remains during project construction activities, work would be halted. Damage to human remains would be a potentially significant impact. Implementation of the following mitigation measure would reduce potential impacts to a less than significant level.

MM CUL-1.2: The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity within the project area shall comply with applicable State laws. Pursuant to Section 7050.5 of the California Health and Safety Code, and California Public Resources Code (PRC) Section 5097.94, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Medical Examiner shall be immediately notified and shall make a determination as to whether the remains are Native American.

In the event of the coroner's determination that the human remains are Native American, notification of the Native American Heritage Commission (NAHC) is required who shall appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). The archaeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5(d)). The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. California Public Resources Code allows 48 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the reburial method, the project will follow PRC Section 5097.98(b) which states that ". . . the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance."

[8] The Holocene refers to the 11,000 years leading up to and including the present.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Community Vision Chapter*. Consolidated in 2011.

USGS. *Preliminary Quaternary Geologic Maps of Santa Clara Valley, Santa Clara, Alameda, and San Mateo Counties, California: A Digital Database Open-File Report 94-231*. Accessed June 20, 2013. Available at: http://pubs.usgs.gov/of/1994/of94-231/sccomap.pdf

4.6 GEOLOGY, SOILS, AND SEISMICITY

GEOLOGY, SOILS, and SEISMICITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐	1,2,9
b) Strong seismic ground shaking?	☐	☐	☒	☐	1,2,9
c) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	1,2,9,10
d) Landslides?	☐	☐	☐	☒	1,2,9
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	1,2
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐	1,2,8,9
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐	1,2,9
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	1,2

Discussion

1a) **Less than Significant.** The project site is not located in an Alquist-Priolo Earthquake Fault Zone nor is it located on or immediately adjacent to an active or potentially active fault. The active faults nearest to the project site are the San Andreas, located approximately 11 miles southwest of the project site, and the Hayward, located approximately seven miles to

the northeast. As the project site is not located in an Alquist-Priolo Earthquake Fault Zone nor is it located on or immediately adjacent to an active fault, fault rupture hazards associated with the proposed project are considered less than significant.

1b) **Less than Significant.** The project area is located in the seismically-active Santa Clara County, which is designated as Seismic Activity Zone 4 (most seismically-active zone in the United States) by the Uniform Building Code. The faults in the region are capable of generating earthquakes of magnitude 7.0 or higher on the Richter scale. Therefore, it is expected that earthquakes in the region could produce very strong ground shaking in the project area during the life of the proposed project. The pump station structure, inlet, and the creek outfalls would be exposed to hazards associated with severe ground shaking during a major earthquake on one of the region's active faults. This hazard is not unique to the project, because it applies throughout the greater Bay Area. To mitigate the effects of strong ground shaking, all planned structures will be designed and constructed in accordance with the prevailing design and construction standards and the most recent California Building Code. With these standard design and construction measures in place, impacts associated with strong ground shaking would be less than significant.

1c) **Less than Significant.** The potential for liquefaction occurring at the project site during seismic shaking is moderate. If liquefiable soils are present and potentially capable of significant seismic reconsolidation, construction methods would be used to help mitigate the potential for disruption due to liquefaction-induced settlement, including the choice of materials and installation techniques. With the adjustment of materials and techniques, as necessary, liquefaction is expected to have a less than significant impact.

1d) **No Impact.** The project site is located outside of the Santa Clara County Geologic Hazard Zones for landslides. In addition, the project area for the pump station and pipeline improvements is relatively level. The project area for the outfalls is located at the top of the creek bank; however the project would include rock slope protection within the excavated footprint along the creek bank. Therefore, improvements resulting from the proposed project would therefore not be affected by potential impacts associated with landslides or mudslides.

2) **Less than Significant.** The proposed project would involve excavation and grading and these activities could expose soils to erosion. As fully described in Section *4.9 Hydrology and Water Quality*, below, the contractor would be required to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) in order to minimize potential erosion and subsequent sedimentation of stormwater runoff. This SWPPP would include Best Management Practices (BMPs) to control erosion associated with grading and other ground surface-disturbing activities.

3) **Less than Significant.** The project site is located outside of the Santa Clara County Geologic Hazard Zones for landslides. The City of Sunnyvale has historically experienced subsidence resulting from excessive withdrawal of groundwater. However, the stabilization of groundwater pumping rates and a groundwater re-injection program administered by the Santa Clara Valley Water District (SCVWD) has halted subsidence in the surrounding area. The proposed project would not involve the withdrawal of groundwater. The potential for

liquefaction occurring at the project site is moderate. The proposed project will be designed and constructed in conformance with the City guidelines for Seismic Zone 4 and the most recent California Building Code to avoid or minimize potential damage. With implementation of standard design measures, the proposed project would have less than significant landslide impacts.

4) **Less than Significant.** The soils underlying the project site consists of Hangerone clay loam, Embarcadero silty clay loam, and Urbanland-Hangerone complex. According to the Quaternary Geology of Santa Clara Valley Map, the composition of the soils underlying the project site is clay, clay loam, silty clay, and gravelly loam. They are poor to very poorly drained alluvium derived from metamorphic and sedimentary rock. These type of clay soils have a slight to moderate expansion potential. Expansive soils shrink and swell as a result of moisture changes, which can cause heaving and cracking of slabs-on-grade, pavements, and structures found on shallow foundations. Damage resulting from expansive soil conditions can be avoided by incorporation of geotechnical recommendations, as required by the City's Building Division prior to issuance of a building permit, which ensure that site-specific information on shrink-swell capabilities of onsite soils is obtained.

5) **No Impact.** Since the proposed project will not generate any wastewater in operation, there will be no impacts associated with the ability of the soils to support septic tanks or alternative wastewater disposal systems.

References

Association of Bay Area Governments (ABAG). *Liquefaction Hazard Map for Sunnyvale*. Accessed June 20, 2013. Available at: http://www.abag.ca.gov/cgi-bin/pickmapliq.pl

California Department of Conservation. *California Geological Survey - Alquist-Priolo Earthquake Fault Zones, Sunnyvale, CA*. Accessed June 20, 2013. Available at: http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm

City of Sunnyvale. *City of Sunnyvale General Plan, Safety and Noise Chapter*. Consolidated in 2011.

County of Santa Clara Planning Office. *Santa Clara County Geologic Hazard Zones, Map #11*. October 26, 2012.

U.S. Department of Agriculture, Natural Resource Conservation Service. *Web Soil Survey, Santa Clara Area, West*. Accessed June 20, 2013. Available at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

USGS. *National Geologic Map Database, Mapview*. Accessed June 20, 2013. Available at: http://ngmdb.usgs.gov/maps/MapView/

USGS. *Preliminary Quaternary Geologic Maps of Santa Clara Valley, Santa Clara, Alameda, and San Mateo Counties, California: A Digital Database Open-File Report 94-231*. Accessed June 20, 2013. Available at: http://pubs.usgs.gov/of/1994/of94-231/sccomap.pdf

4.7 GREENHOUSE GAS EMISSIONS

GREENHOUSE GAS EMISSIONS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1,2
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	1,2,6

Discussion

1-2) **Less than Significant.** The project area includes an existing pump station, which runs on gas powered engines, which generate greenhouse gas (GHG emissions). Some maintenance activities and automobile trips to/from the existing pump station may also generate GHG emissions.

Given the overwhelming scope of global climate change, it is not anticipated that a single project would have an individually discernable effect on global climate change. It is more appropriate to conclude that the greenhouse gas emissions generated by the proposed project would combine with emissions across the state, nation, and globe to cumulatively contribute to global climate change.

Rehabilitation of the existing pump station structure includes replacing five (5) high flow and one (1) low flow existing pumps and engine drive units with three (3) high flow pumps and two (2) low flow pumps. The existing natural gas service and tank would be replaced with new electrical service. The improvements would reduce the amount of air pollution emissions generated by the gas powered engines and the overall operation and maintenance costs of the facility. The proposed project would reduce the overall capacity of the pump station and would not generate long-term GHG impacts.

The proposed project would result in minor increases in GHGs associated with construction activities. Project construction will result in GHG emissions from the following construction related sources: (1) construction equipment emissions; and (2) emissions from construction workers personal vehicles traveling to and from the construction site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. BAAQMD has not established a quantitative threshold or standard for determining whether a project's construction-related GHG emissions are significant.

Construction GHG emissions would be intermittent and substantially less than the lower reporting limit for major stationary sources established by the CARB. That reporting limit requires sources that generate more than 25,000 metric tons per year of CO_2 to report GHG emissions to CARB. The proposed project would include standard measures to address air quality during construction (described above in *Section 4.3 Air Quality*), which would further reduce construction-related GHG emissions. Consequently, project construction would not have a significant impact on the environment from direct or indirect GHG emissions.

The proposed project would not conflict with any existing GHG laws, plans, policies, or regulations adopted by the California legislature, the CARB, or BAAQMD. Therefore, this impact would be less than significant.

References

BAAQMD. *CEQA Guidelines Update-Thresholds of Significance*. June 2010.

City of Sunnyvale. *City of Sunnyvale General Plan, Environmental Management Chapter*. Consolidated in 2011.

4.8 HAZARDS AND HAZARDOUS MATERIALS

HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐	1,2
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐	1,2
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	1,2
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	1,2,11,13
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1,2,12
6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1,2
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	1,2

HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒	1,2

Discussion

1-2) **Less than Significant with Mitigation.** Operation of the proposed project would not result in the routine use or transport of hazardous materials within the project area, or the release of hazardous materials into the environment. Construction activities associated with the project could create a hazard to the public and/or the environment due to the transportation, use, and disposal of miscellaneous hazardous substances. These substances include, but are not limited to, gasoline, diesel fuel, hydraulic fluids, and paint. Implementing the mitigation measure described below would reduce the potential impacts from construction-related hazardous materials to a less than significant level.

MM HAZ-1.1: *Store, Handle, Use Hazardous Materials in Accordance with Applicable Laws.* The City shall ensure that all construction-related hazardous materials and hazardous wastes shall be stored, handled, and used in a manner consistent with relevant and applicable federal, state, and local laws. In addition, construction-related hazardous materials and hazardous wastes shall be staged and stored away from stream channels and steep banks to prevent them from entering surface waters in the event of an accidental release.

3) **No Impact.** There are no schools located within a quarter mile of the project site. The closest schools to the project site are the Itsy Bitsy Academy and Lakewood Elementary School, located approximately 1.2 miles and 1.4 miles southwest, respectively, of the project site. Because there are no schools within a quarter mile of the project site, the proposed project would not emit hazardous emissions or handle hazardous materials within the vicinity of a school.

4) **No Impact.** There are no known regulated sites within 1,000 feet of the project site that are identified on the State Water Resources Control Board (SWRCB) GeoTracker.[9] There are also no hazardous waste or hazardous substance sites within vicinity of the project site listed on the Department of Toxic Substance Control (DTSC) Envirostar database.

[9] Geotracker is the Water Boards' data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks [USTs], Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites.

5-6) **No Impact.** The project site is located approximately 2.5 miles from Moffett Federal Airfield. There are no private airstrips within a two mile radius of the project site. The project is not within an airport land use plan, airport noise contour, or approach zone. The improvements to the pump station facilities would not conflict with any airport safety compatibility standards or exceed any Federal Aviation Regulations (FAR) Part 77 height limitations. The project site's proximity to the airfield would not result in a safety hazard for people residing or working at the project site.

7) **No Impact.** The proposed project would include improvements to an existing pump station facility, located adjacent to open space areas. Construction and operation of the proposed project would not involve the temporary or permanent closure of roads, and would not interfere with emergency response or evacuation plans.

8) **No Impact.** The project area is located adjacent to an urban setting, in a low lying area of the City, away from hillsides. Therefore, the likelihood of wildland fires within the project area is low. The proposed project area is not within or adjacent to any wildland areas and would not be exposed to wildland fires.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Safety and Noise Chapter*. Consolidated in 2011.

Department of Toxic Substance Control (DTSC). *Envirostar – Hazardous Waste and Substances Site List*. Accessed June 24, 2013. Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm

Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County, Moffett Federal Airfield*. Adopted November 2, 2012. Accessed June 24, 2013. Available at: http://www.sccgov.org/sites/planning/PlansPrograms/ALUC/Documents/ALUC_20121128_NUQ_CLUP_adopted.pdf

State Water Resources Control Board. *Geotracker database.* Accessed June 24, 2013. Available at: http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=999+Caribbean+Drive%2C+Sunnyvale%2C+CA

4.9 HYDROLOGY AND WATER QUALITY

HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐	1,2
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐	1,2
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	☐	☐	☐	☒	1,2
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?	☐	☐	☐	☒	1,2
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒	1,2
6) Otherwise substantially degrade water quality?	☐	☐	☒	☐	1,2
7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	1,2,14
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒	1,2,14
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒	1,2
10) Be subject to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	1,2

Discussion

1) **Less than Significant with Mitigation.** Implementation of the proposed project would temporarily increase pollutant loads due to grading and construction (i.e., removal of the existing structures, excavation, grading, and construction of new structures). Demolition and construction activities would temporarily increase the amount of debris on-site, and grading activities could increase erosion and sedimentation that could increase pollutant loads in stormwater runoff. The following erosion control measures, based on RWQCB BMPs, are included in the project to reduce construction-related water quality impacts:

MM HYDRO-1.1: Prior to construction and grading for the proposed land uses, if required by the NPDES General Permit for Construction Activities (No. 2009-0009-DWQ) administered by the RWQCB, the contractor will file a Notice of Intent (NOI) to comply and will prepare a Stormwater Pollution Prevention Plan (SWPPP) which addresses measures that would be included in the project to minimize and control construction runoff.

Preparation and approval of the SWPPP, as required by the City, would reduce potential degradation of water quality associated with project construction to a less than significant level through compliance with NPDES permit regulations. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements.

2) **Less than Significant.** The proposed project would not involve groundwater extraction. The City is located above the Santa Clara Plain subarea of the Santa Clara Subbasin. Depth to groundwater ranges from greater than 100 feet at the southern edge of the City to approximately 20 feet near the northern portion of the City, near Central Expressway. Deeper open cuts during construction may encounter groundwater; therefore, dewatering may be necessary. Penetration of the water table could result in impacts to groundwater supplies due to dewatering during excavation and construction activities. However, dewatering during the excavation and construction would be carried out only as necessary, and the length of time and volume of water removed during dewatering would be minimized through appropriate scheduling of construction activities. Temporary pumping of groundwater out of the work area is not anticipated to alter the amount of impervious area or groundwater use. Therefore, the proposed project would not alter the groundwater recharge potential or lower the local groundwater table level.

3, 4, 5) **No Impact.** As part of the pump station improvements, the existing seven creek discharge outfalls, which discharge near the bottom of the creek channel would be replaced with five new outfalls. The five new structures (three high flow and two low flow) would discharge near the top of the creek bank. The creek bank would be excavated to remove the old pipes and install the new outfalls. These proposed improvements would take place along the creek bank and would not alter the course of Calabazas Creek or result in substantial erosion or siltation on- or off-site.

The proposed improvements to the existing pump station facilities would involve upgrades and modifications to the existing pump station, drainage basin, and inlet structure to

accommodate the proposed reduced pump station size. Modification of the existing junction structure at the angle point of the existing 84-inch pipe would allow for the release of stormwater from the 84-inch pipe into the County property during events higher than the 50-year storm event, and would allow for the return of released water back into the 84-inch pipe, which lets water into the pump station once the peak flow has passed. This modification would improve the flood control and drainage within the project area. The changes to the inlet design means that the seasonal wetlands preserve may receive floodwaters from the existing 84-inch pipe that runs from SR 237 to the flood control basin when flows are greater than the 50-year event. The elevation of flood water within the seasonal wetlands preserve would increase by approximately 1/3 feet during a 100-year storm and the flood waters would recede via inlets leading to the pump house within 24 hours of peak flood elevation.

The Baylands Pump Station No. 2 is part of the City's storm drain system that collects runoff from the low-lying urban area south of SR 237 and discharge to Calabazas Creek. The proposed project includes improvements and updates the existing pump station facilities and would not increase the amount of impervious surface, and thus no increased stormwater runoff would occur.

6) **Less than Significant.** Operation of the proposed project would not result in any substantial changes to on-site water quality associated with stormwater runoff. During the storm events above the 50-year event, additional stormwater could enter the Baylands seasonal wetlands area on County property. However, during these events the stormwater during the initial portion and first flush of the storm would remain within the City basin. The County property would most likely receive stormwater flows from the events in excess of the 50-year event near the end of the storm event, which will carry less pollutants than the first flush. In addition, the current system is designed as an urban basin and higher flow rates would not cause an increase in the erosion of sediment, as the stormwater flows are contained within a pipeline system. Moreover, as discussed under Comment 1), above, implementation of BMPs under the SWPPP would reduce potential impacts to water quality to a less than significant level.

7 -8) **No Impact.** According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), the project site is located within Flood Zone AE, which is defined as a Special Flood Hazard Area (SFHA) subject to inundation by the one percent annual chance flood (i.e., 100-year flood). The proposed project includes improvements to the existing pump station structure and associated inlet, and outfalls and does not include construction of any residential units. Therefore, the proposed project would not place housing within a 100-year flood hazard area. The proposed improvements to the pump station facilities would not change the footprint of the facilities compared to the current conditions and as such, would not place larger structures which would impede or redirect flood flows in the floodplain. In addition, Title 16.62 of the Sunnyvale Municipal Code requires a series of measures for provisions to reduce flood-related hazards to buildings. These standards are suggested by FEMA and required by code by the City of Sunnyvale. These standards must be met for a building permit to be issued.

9, 10) **Less than Significant.** The proposed project includes improvements to an existing pump station structure and associated inlet, and outfalls and does not include construction of any residential units. Therefore, the proposed project would not expose people to the risk of flooding.

Stevens Creek Dam is located on Stevens Creek, approximately 2.5 miles south of the City of Sunnyvale's boundary. Failure of the Stevens Creek Dam caused by an earthquake could affect the City of Sunnyvale. Most significantly affected would be the southwestern portion of the City, south of Remington Street and west of Sunnyvale-Saratoga Road. The project site is located outside of this area and would not be exposed to flooding from failure of this dam.

Dike and levee systems have been constructed along the San Francisco Bay, including adjacent to the project site. Without the present system of dikes and levees, some areas of northern Sunnyvale would be subjected to flooding by tides. Earthquakes may generate flooding in the City from a tsunami (sea wave caused by an earthquake) or seiche (wave generated in an enclosed body of water). A tsunami off the San Francisco coast could cause Bay water to top local levees, especially if it arrived at high tide. Tidal flooding could occur if the system of dikes and levees failed or their banks overflowed. Local earthquakes could cause failure in parts of the levee system which would create problems if a tsunami were to happen as well. In the years following the 1995, 1997, and 1998 El Nino flooding disasters in Santa Clara County, the SCVWD completed a project to construct taller flood walls along Calabazas Creek. A Capital Improvement Project was also completed by the City of Sunnyvale Department of Public Works in 2006 to repair and strengthen the levees. All these improvements were put in place to reduce the potential for flooding as a result of failure of the levee. Therefore, the proposed project would not be subject to inundation by seiche or tsunami.

The project area for the pump station and pipeline improvements is relatively level. The project area for the outfalls is located at the top of the creek bank; however, the project would include rock slope protection within the excavated footprint along the creek bank. Therefore, improvements resulting from the proposed project would, therefore, not be affected by potential impacts associated with mudslides.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Safety and Noise Chapter*. Consolidated in 2011

City of Sunnyvale. *City of Sunnyvale General Plan, Environmental Management Chapter*. Consolidated in 2011

Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel No. 06085C0061H*, May 18, 2009.

Santa Clara Valley Water District. *2012 Groundwater Management Plan.* July 2012.

4.10 LAND USE

LAND USE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Physically divide an established community?	☐	☐	☐	☒	1,2
2) 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?	☐	☐	☐	☒	1,2,3
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	1,2

Discussion

1) **No Impact.** The proposed project includes improvements to an existing pump station structure, drainage basin, inlet, and creek outfalls, and would not alter the existing land uses. The project site is located adjacent to existing open space areas and therefore, would not physically divide an established community.

2) **No Impact.** The project site is designated as Parks (PARK) land and zoned Public Facilities (PF). The construction of the project would not change the zoning designation of the project site and would not be inconsistent with the General Plan classification for the project site.

3) **No Impact.** The project site is located in an area that is not governed by any habitat conservation plan or natural community conservation plan. Therefore, the proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan affecting the area.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Land Use and Transportation Chapter*. Consolidated in 2011.

City of Sunnyvale. *City of Sunnyvale General Plan Map.* March 2008.

City of Sunnyvale. *City of Sunnyvale Zoning Map – North of 101.* March 2008.

Santa Clara Valley Habitat Conservation Plan. *Santa Clara Valley HCP/NCCP Study Area Boundary Map.* August 2012.

4.11 MINERAL RESOURCES

MINERAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	1,2,15
2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	1,2

Discussion

1-2) **No Impact.** There are no known mineral resources within the project site, and no operational mineral resource recovery sites at the project site or in the vicinity. Therefore, the project would not result in any impacts to mineral resources since it would not result in the loss of availability of a known mineral resource that would be of value to the region or the state, or result in the loss of a locally-important mineral resource. Therefore, the project would not affect mineral resources.

References

State Office of Mine Reclamation. *AB 3098 List*. April 1, 2013. Accessed June 26, 2013. Available at:http://www.conservation.ca.gov/omr/ab_3098_list/Documents/April%202013%20AB%203098%20List.pdf

4.12 NOISE

NOISE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project result in:					
1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐	1,2
2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1,2
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1,2
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	1,2
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1,2,12
6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1,2

Discussion

1, 2, 3) **Less than Significant.** The project site is located adjacent to existing open space areas. The nearest residence is located approximately 0.7 miles southwest of the project site. Operation of the pump and equipment would occur within the proposed pump station building. The building structure and proposed acoustical treatments in the engine-generator room would reduce noise levels at the site resulting from operation of the pumps and equipment. In addition, the existing natural gas service and propane tank would be replaced with new electrical service, which operate quieter than the gas driven motors. The intermittent operation of the proposed pump station would not significantly increase average noise levels

in the site area, and would not expose persons to noise levels in excess of established noise standards.

4) **Less than Significant.** The major noise generating activities associated with project construction would include excavation and grading. The proposed project site is located adjacent to existing open space areas. The users of the trail that is located adjacent to the project site would be detoured around the project site during construction, but may be exposed to temporary or periodic increases in ambient noise levels. Through the City's implementation of the current Municipal Code construction noise regulations this impact will be reduced to a less than significant level during construction. The project will not require pile driving.

5, 6) **No Impact.** The project site is located approximately 2.5 miles from Moffett Federal Airfield, and outside the airport's noise contours. There are no private airstrips within a two mile radius of the project site. Therefore, the proposed project would not expose people in the project area to excessive noise levels.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Safety and Noise Chapter*. Consolidated in 2011.

Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County, Moffett Federal Airfield*. Adopted November 2, 2012. Accessed June 24, 2013. Available at: http://www.sccgov.org/sites/planning/PlansPrograms/ALUC/Documents/ALUC_20121128_NUQ_CLUP_adopted.pdf

4.13 POPULATION AND HOUSING

POPULATION AND HOUSING					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	1,2
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1,2
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1,2

Discussion

1, 2, 3) **No Impact.** The proposed project includes improvements to an existing pump station structure, drainage basin, inlet, and creek outfalls that would actually reduce pump station capacity. The proposed project would not result in any new residential land uses on the site. The project site does not contain any existing residential uses. The proposed project, therefore, will not induce population or job growth, nor will it displace either housing or persons, and would not necessitate the construction of replacement housing elsewhere.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Community Vision Chapter*. Consolidated in 2011.

4.14 PUBLIC SERVICES

PUBLIC SERVICES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	☐	☐	☐	☒	1,2
Police Protection?	☐	☐	☐	☒	1,2
Schools?	☐	☐	☐	☒	1,2
Parks?	☐	☐	☐	☒	1,2
Other Public Facilities?	☐	☐	☐	☒	1,2

Discussion

1) **No Impact.** The proposed project includes improvements to an existing pump station structure, drainage basin, inlet, and creek outfalls that would actually reduce pump station capacity. The proposed project would not generate population growth. In addition, the operation and maintenance of the proposed project would not be labor intensive. Therefore, the proposed project would not increase the demand for the kinds of public services that would support new residents, such as schools, parks, fire, police, or other public facilities.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Safety and Noise Chapter*. Consolidated in 2011.

4.15 RECREATION

RECREATION					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐	1,2
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐	1,2

Discussion

1, 2) **Less Than Significant Impact.** The project does not propose any construction or physical development which would affect existing recreational areas in the long-term. During construction, access to the trail along the existing levee adjacent to the creek would be temporarily closed. A detour route would be designated with signage along the levee surrounding the flood control basin. The detour would be temporary in nature and only occur during construction activities. For these reasons, the project would not have a significant impact on recreational facilities.

The project does not propose any development which would increase the use of or need for recreational areas. After construction the trail along the existing levee will be fully open to recreational users. The improvements to the existing pump station include replacing the existing natural gas service and propane tank with new electrical service, which operate quieter than the gas driven motors. This will enhance the experience for recreational users. Therefore, the proposed improvements to the pump station facility would not affect recreational uses.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Land Use and Transportation Chapter*. Consolidated in 2011.

4.16 TRANSPORTATION AND TRAFFIC

TRANSPORTATION/TRAFFIC					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?	☐	☐	☒	☐	1,2
2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐	1,2
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	1,2
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	☐	☐	☐	☒	1,2
5) Result in inadequate emergency access?	☐	☐	☐	☒	1,2
6) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒	1,2

Discussion

1, 2) **Less than Significant.** The project does not propose any new urban development, and therefore, would not generate traffic trips or impact circulation in the long-term. In addition, operation and maintenance would not result in an increase in numbers of permanent workers/employees, and as such, would not generate additional traffic trips. Because the project would not generate additional traffic trips, no additional analysis is necessary and impacts would be considered less than significant.

Additional traffic would be generated from workers coming to and from the site daily and from the delivery of construction equipment. The minor increase in traffic would be temporary in nature and only occur during construction activities. The proposed project would not generate additional permanent traffic trips or otherwise impact the transportation system.

3, 4) **No Impact.** The proposed project does not involve the use of air transit, nor is it expected to cause any change in air traffic patterns. The proposed project does not propose to make changes to roadways that would create road hazards or alter design features developed to mitigate such hazards.

5, 6) **No Impact.** The proposed project does not involve any physical changes to area roadways that could affect emergency access. In addition, construction equipment, vehicle parking, and the presence of construction workers would be located off of the main roadways to the project site, and therefore would not affect traffic in construction areas or temporarily create travel hazards.

The proposed project would not conflict with adopted plans, policies, or programs supporting alternative transportation.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Land Use and Transportation Chapter*. Consolidated in 2011.

4.17 UTILITIES AND SERVICE SYSTEMS

UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒	1,2
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒	1,2,14
3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	1,2,4
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒	1,2,14
5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒	1,2
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	1,2
7) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐	1,2

Discussion

1, 2, 4, 5) **No Impact.** The City of Sunnyvale receives approximately 45 percent of its water from the San Francisco Public Utilities Commission (SFPUC) and 45 percent from the SCVWD, with the remaining 10 percent derived from City-owned and operated wells for potable uses and recycled water produced by the Sunnyvale Water Pollution Control Plant (WPCP) for non-potable uses. The proposed project would not use any water during operation and would not create any new connections to the existing water system. The proposed project therefore, would not have any impact on the City water supply or freshwater treatment facilities.

The Sunnyvale Water Pollution Control Plant (WPCP), provides wastewater treatment for residents, businesses, and industries in the City of Sunnyvale. The WPCP is designed to treat

an average of 29.5 million gallons of wastewater per day (mgd) with a peak flow of 40 mgd. From 2004 to 2007, the average dry weather effluent flow was 14.2 mgd, well within the plant capacity. Sunnyvale's wastewater collection system has the capacity to convey all sewage and industrial wastes generated when the City is fully developed in accordance with the land use projections (approximately 55.7 million gallons per day [mgd]). During construction, portable toilets and wash areas would be used and the wastewater hauled and treated off-site. Since the proposed project would not produce any wastewater in operation, the project would have no impact on wastewater treatment capacity.

3) **Less than Significant.** The pump station receives stormwater from an 84-inch diameter pipe and from the surrounding wetlands. The 84-inch pipe conveys stormwater from a 500-acre area south of SR 237, and discharges the stormwater into the existing stormwater basin, which drains to the pump station. The pump station discharges into Calabazas Creek, which drains into San Francisco Bay via Guadalupe Slough. The proposed project would reduce the overall capacity of the pump station. The planned rehabilitated station would have a capacity of 100 cfs compared to the existing station capacity of 330 cfs. Reducing the peak discharge rate of the station and improving the creek outfalls would reduce the potential for erosion to occur within the banks of the creek.

   Modification of the existing junction structure at the angle point of the existing 84-inch pipe would allow for the release of stormwater from the 84-inch pipe into the County property during events higher than the 50-year storm event, and would allow for the return of released water back into the 84-inch pipe, which lets water into the pump station once the peak flow has passed. This modification would improve the flood control and drainage within the project area. Overall, the proposed project would improve the function and efficiency of the existing system to manage stormwater flows and would not require or result in the construction of additional off-site stormwater drainage facilities.

6, 7) **Less than Significant.** Specialty Solid Waste & Recycling (Specialty) transports solid waste to the SMaRT Station, located west of the County property. The SMaRT Station is owned by the City of Sunnyvale and serves the cities of Mountain View, Palo Alto, and Sunnyvale. Solid waste delivered to the SMaRT Station undergoes a materials recovery process that extracts recyclable materials. The SMaRT Station diverts from disposal 78 percent of the construction and demolition material delivered there. The solid waste that remains after the materials recovery process is hauled from the SMaRT Station to the Kirby Canyon Recycling and Disposal Facility (operated by Waste Management, Inc.), 27 miles away in San Jose. Sunnyvale has contracted for disposal capacity (with a maximum of 4,123,310 tons) ending on December 31, 2021. Kirby Canyon's remaining capacity is estimated to be approximately 57.2 million cubic yards, although its current permitted capacity is only 36 million cubic yards.

   Assembly Bill 939 (AB 939), enacted in 1989, requires each city's and county's Source Reduction and Recycling Element to include an implementation schedule to divert 50 percent of its solid waste from landfill disposal by January 1, 2000, through source reduction, recycling, and composting activities. As of 2009, (the most recent statistic available) waste diversion for Sunnyvale was 65 percent. In 2008, the City of Sunnyvale adopted a Zero

Waste Policy which requires the designing and managing of products and processes to reduce the volume and toxicity of waste and materials and to conserve and recover all resources.

Since the proposed project would not generate any solid waste in operation, it would not impact the capacity of the SMART station or the Kirby Canyon facility. Solid waste generated as a by-product of construction will be hauled off-site and would comply with applicable local, state, and federal laws governing solid waste management.

References

City of Sunnyvale. *City of Sunnyvale General Plan, Environmental Management Chapter*. Consolidated in 2011.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	1-16
2) 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)?	☐	☐	☒	☐	1-16
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	1-16

Discussion

1) Less than Significant with Mitigation.

The proposed project would result in temporary impacts to wetlands from project construction. However, these temporary impacts will be reduced by the mitigation measures identified in this IS. In addition, impacts to special status plant or wildlife species would be reduced by the mitigation measures included in this IS.

The proposed project site does not contain any known archaeological resources, but the project is located in an area which was historically occupied by Ohlone Indians (Posolmi) and is adjacent to a creek. As a result, the project site has a potential for unknown buried resources to be present. The proposed project includes mitigation measures to reduce impacts to undiscovered cultural resources that will reduce impacts to archaeological resources to a less than significant level.

2) **Less than Significant.** The project would result in temporary air quality and noise impacts during construction. With implementation of the standard measures identified in this Initial Study, construction impacts would be reduced. Because the nature of the identified impacts are temporary and will be reduced or avoided, the proposed project would not have a

cumulatively considerable impact on air quality or noise in the project area. There are no recently approved or reasonably foreseeable projects that, when combined with the proposed project, would result in a cumulatively considerable impact.

3) **Less than Significant with Mitigation.** Construction activities associated with the project could create a hazard to the public and/or the environment due to the transportation, use, and disposal of miscellaneous hazardous substances. Implementing the mitigation measures included in this IS would reduce the potential impacts from construction-related hazardous materials to a less than significant level.

CHECKLIST INFORMATION SOURCES

1. Professional judgment and expertise of the environmental specialist preparing this assessment, based upon a review of the site and surrounding conditions, as well as a review of the project plans.

2. City of Sunnyvale. *City of Sunnyvale General Plan.* Consolidated in 2011.

3. City of Sunnyvale. *Zoning Ordinance. Map – North of 101*. March 2008.

4. California Department of Transportation (Caltrans). *California Scenic Highway Mapping System*. Accessed June 19, 2013. Available at: http://dot.ca.gov/hq/LandArch/scenic_highways/index.htm

5. California Department of Conservation, Division of Land Resource Protection. *Santa Clara County Important Farmland 2010*. Map. June 2011.

6. Bay Area Air Quality Management District (BAAQMD). *Bay Area 2010 Clean Air Plan.* September 15, 2010.

7. BAAQMD. *CEQA Guidelines Update-Thresholds of Significance*. June 2010.

8. USGS. *Preliminary Quaternary Geologic Maps of Santa Clara Valley, Santa Clara, Alameda, and San Mateo Counties, California: A Digital Database Open-File Report 94-231*. Accessed June 20, 2013. Available at: http://pubs.usgs.gov/of/1994/of94-231/sccomap.pdf

9. County of Santa Clara Planning Office. *Santa Clara County Geologic Hazard Zones, Map #11*. October 26, 2012.

10. Association of Bay Area Governments (ABAG). *Liquefaction Hazard Map for Sunnyvale*. Accessed June 20, 2013. Available at: http://www.abag.ca.gov/cgi-bin/pickmapliq.pl

11. Department of Toxic Substance Control (DTSC). *Envirostar – Hazardous Waste and Substances Site List.* Accessed June 24, 2013. Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm

12. Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County, Moffett Federal Airfield*. Adopted November 2, 2012. Accessed June 24, 2013. Available at: http://www.sccgov.org/sites/planning/PlansPrograms/ALUC/Documents/ALUC_20121128_NUQ_CLUP_adopted.pdf

13. State Water Resources Control Board. *Geotracker Database Search for Baylands Park, CA.* Accessed June 24, 2013. Available at: http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=999+Caribbean+Drive%2C+Sunnyvale%2C+CA

14. Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel No. 06085C0061H,* May 18, 2009.

15. State Office of Mine Reclamation. *AB 3098 List*. April 1, 2013.

16. WRA, Inc. 2013. *Draft Biological Resources Assessment, Baylands Pump Station #2, Santa Clara County, California*. October 2013.

5.0 MITIGATION MEASURES IDENTIFIED IN THIS INITIAL STUDY

Biological Resources

MM BIO-1.1: Appropriately-timed surveys will be completed in April or early May (depending on the rainy season) prior to project construction to document the presence or absence of these special status plant species within the project construction areas. If special-status plant species are observed, they will be flagged by a qualified biologist for avoidance during construction. If avoidance is not feasible, individuals will be transplanted to suitable undisturbed habitat or seed will be collected for replanting following construction. The method of mitigation will be selected based on the specific species observed (if any) and the efficacy of each method in successfully re-establishing the observed species.

MM BIO-1.2: An exclusion fence will be placed around areas of active construction. The exclusion fence will be made of a material that does not allow SMHM to pass through and the bottom will be buried to a depth of six inches so that mice cannot crawl under the fence. All structural support for the exclusion fencing will be placed around areas of earthwork, including excavation and stockpiling of fill material in the drainage basin, and around the inlet improvement areas if ground disturbance will occur. . The coastal brackish marsh within the project area will be cleared of vegetation and surrounded by silt fence as an erosion control measure, and although it is unlikely that the SMHM would occur in this area, the erosion control measures, as described in Section 4.9 *Hydrology and Water Quality*, will double as extra assurance that SMHM will not enter the work area. All exclusion fences will be inspected daily for holes and gaps, and repaired as soon as deficiencies are detected.

MM BIO-1.3: If removal of any wetland or ruderal grassland vegetation is necessary, it will be conducted in the presence of a biological monitor using only hand tools during the SMHM breeding season (March 1 – November 30) or hand-held mechanized tools during the non-breeding season (December 1 – February 28).

The biological monitor will have demonstrated experience in monitoring sensitive resource issues on construction projects and knowledge of the biology of SMHM. The biological monitor will provide an endangered species training program to all personnel involved in project construction. The program will include a description of this species and its habitat needs, any reports of occurrences in the project area, an explanation of the status of the SMHM and their protection under state and federal legislation, and a list of measures being taken to reduce impacts to the SMHM during project construction. The biological monitor will be the contact person for any employee or contractor who might inadvertently kill or injure a SMHM or anyone who finds a dead, injured, or entrapped SMHM.

MM BIO-1.4: A biologist will conduct a pre-construction survey for burrowing owl within 14 days prior to the initiation of construction activities within the project area. If an active burrowing owl burrow is detected, the biologist will establish an exclusion buffer around the owl's burrow where no construction is permitted unless the owl is determined by the biologist to have migrated out of or abandoned its burrow in the project area. The biologist

may also decide that it is necessary to establish screens around the owl burrow, depending on its placement relative to construction activities and the time of year, to buffer this species from visual disturbance from construction activities.

MM BIO-1.5: The wetland boundaries and areas of disturbance in Calabazas Creek will be flagged prior to construction by a qualified biologist to guide installation of silt or exclusion fencing in the areas at the margins of areas of construction disturbance. Upon project completion, the temporarily disturbed areas would be modified to match the surrounding wetland grade and revegetated with appropriate native plants.

Measures were evaluated for revegetation in the areas of disturbance along Calabazas Creek and were determined to not be feasible due to the potential for those revegetation efforts to affect the function of the creek as a flood control channel. Revegetation would require the placement of soil and plant material in the interstitial spaces in the rip rap, and this unnatural deposition is anticipated to be washed away by discharge from the pump station outfalls. Additionally, the sediment and plant materials would enter and settle in Calabazas Creek, reducing the capacity of the creek to carry flood waters. As previously described, based on the abundance of sediment observed in the area of Calabazas Creek during the site visit, it is anticipated that the supplemental rip rap areas will fill with sediment and the bank slope will become revegetated naturally in the course of two to three growing seasons.

MM BIO-1.6: Construction during the active nesting season for breeding birds (February 1 – August 31) will be avoided as much as possible in areas that are not currently developed. For areas where direct impacts to vegetation will occur, impacts to birds can be avoided by removing vegetation outside of the bird breeding season to avoid potential delays in construction schedule due to breeding activity. If construction during the breeding season cannot be avoided, pre-construction breeding bird surveys will be conducted within 14 days of ground disturbance to avoid disturbance to active nests, eggs, and/or young of ground-nesting birds. Surveys can be used to detect the nests of special status as well as non-special status birds. An exclusion zone where no construction would be allowed will be established around any active nests of any avian species found in the project area until a qualified biologist has determined that all young have fledged. Suggested exclusion zone distances differ depending on species, location, and placement of nest, and will be at the discretion of the biologist and, if necessary, USFWS and CDFW.

Cultural Resources

MM CUL–1.1: In the event of the inadvertent exposure of prehistoric or historic cultural resources during construction, all work within 50 feet of the discovery shall be stopped to allow for the identification and evaluation of the significance of the cultural materials by a qualified archaeologist meeting the Secretary of the Interior's standards (CEQA Guideline 15064.5(f)). If the cultural materials are determined to be significant, a qualified archaeologist shall develop an appropriate treatment plan in consultation with the City to mitigate impacts to materials to a less than significant level. The plan could include avoidance and preservation measures to preserve the materials in place; scientific collection and analysis; preparation of a professional report in accordance with current professional

standards; and/or, professional museum curation of collected cultural materials and resource documentation.

MM CUL-1.2: The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity within the project area shall comply with applicable State laws. Pursuant to Section 7050.5 of the California Health and Safety Code, and California Public Resources Code (PRC) Section 5097.94, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Medical Examiner shall be immediately notified and shall make a determination as to whether the remains are Native American.

In the event of the coroner's determination that the human remains are Native American, notification of the Native American Heritage Commission (NAHC) is required who shall appoint a Most Likely Descendant (MLD) (PRC Section 5097.98). The archaeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5(d)). The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. California Public Resources Code allows 48 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the reburial method, the project will follow PRC Section 5097.98(b) which states that ". . . the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance."

Hazards and Hazardous Materials

MM HAZ-1.1: *Store, Handle, Use Hazardous Materials in Accordance with Applicable Laws.* The City shall ensure that all construction-related hazardous materials and hazardous wastes shall be stored, handled, and used in a manner consistent with relevant and applicable federal, state, and local laws. In addition, construction-related hazardous materials and hazardous wastes shall be staged and stored away from stream channels and steep banks to prevent them from entering surface waters in the event of an accidental release.

Hydrology and Water Quality

MM HYDRO-1.1: Prior to construction and grading for the proposed land uses, the contractorwill file a Notice of Intent (NOI), if necessary, to comply with the NPDES General Permit for Construction Activities (No. 2009-0009-DWQ) administered by the RWQCB and will prepare a Stormwater Pollution Prevention Plan (SWPPP) which addresses measures that would be included in the project to minimize and control construction runoff.

6.0 APPENDIX

A. Biological Resources Assessment

B. Notice of Availability of an Initial Study/Mitigated Negative Declaration

APPENDIX A

BIOLOGICAL RESOURCES ASSESSMENT

Biological Resources Assessment

BAYLANDS PUMP STATION #2, SANTA CLARA COUNTY CALIFORNIA

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Date:
November 2013

WRA Project No. 22204

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LIST OF ACRONYMS AND ABBREVIATIONS

BCDC	San Francisco Bay Conservation and Development Commission
CCH	Consortium of California Herbaria
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Corps	U.S. Army Corps of Engineers
County	County of Santa Clara
ESA	Federal Endangered Species Act
Inventory	CNPS Inventory of Rare and Endangered Plants
OHWM	Ordinary High Water Mark
Rank	California Rare Plant Rank
RWQCB	Regional Water Quality Control Board
SMaRT	Sunnyvale Water Pollution Control Plant, Materials Recovery and Transfer Station
SMHM	Salt marsh harvest mouse
SR	State Route
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WRA	WRA, Inc.

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EXECUTIVE SUMMARY

The purpose of this report is to provide an analysis of natural community and special-status species issues at the Baylands Pump Station #2 (Study Area) in Sunnyvale, Santa Clara County, California.

On August 22, 2012, and May 22, 2013, WRA, Inc. (WRA) conducted a biological resources assessment within the Baylands Pump Station #2 Facility. Two sensitive biological community types (seasonal wetlands and coastal brackish marsh) covering 8.99 acres of the Study Area were identified. Six special-status wildlife species and three special-status plant species have a moderate or high potential to occur within the Study Area.

No permanent impacts to wetlands, waters, or other sensitive biological communities are anticipated to result from Project activities. Temporary impacts to wetlands may result from project construction; however, these temporary impacts will be mitigated by re-establishment of wetlands in impacted areas, or re-establishment of wetlands in other areas off-site if in-place re-establishment is not feasible. No significant impacts to special-status plants or wildlife are anticipated if suitable avoidance and minimization measures are incorporated into the Project design and schedule. Avoidance and minimization measures for special-status plants and wildlife include pre-construction surveys, avoidance of active nests and burrows, installation of temporary exclusion fencing, and biological monitoring.

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1.0 INTRODUCTION

On August 22, 2012, and May 22, 2013, WRA visited the 17-acre Study Area in Sunnyvale, Santa Clara County, California for the purposes of completing an assessment of biological resources at the site (Appendix A). The Study Area is located in Sunnyvale Baylands Park and can be accessed via the East Caribbean Drive/Lawrence Expressway exit off State Route (SR) 237. The purpose of the assessment was to gather information necessary to complete a review of biological resources and potential regulatory constraints for the City of Sunnyvale in support of California Environmental Quality Act documentation for proposed modifications to the existing on-site flood control facility. The primary goal of this study is to evaluate potential impacts to special-status species and sensitive biological resources that may occur as a result of the proposed project, and identify potential avoidance, minimization, and mitigation measures for those potential impacts.

A biological resources assessment provides general information on the potential presence of sensitive species and habitats. The biological assessment is not an official protocol-level survey for listed species that may be required for project approval by local, state, or federal agencies. This assessment is based on information available at the time of the study and on site conditions that were observed on the dates of the site visits.

2.0 PROJECT SETTING

The City of Sunnyvale is planning to rehabilitate the Baylands Pump Station #2, including improvements to the function of the flood control basin. The pump station is located along the eastern levee of a 5-acre property owned by the City, adjacent to a 230-acre property owned by the County of Santa Clara (County). The County property currently consists of Baylands Park, Twin Creeks Sports Complex, a flood control basin, and the Baylands Seasonal Wetland Preserve. Baylands Park is located on approximately 65 acres in the western portion of the property (Figure 1). The City of Sunnyvale manages and maintains Baylands Park under agreement with the County. Twin Creeks Sports Complex is located on the northwestern 60 acres of the property and appears to be leased and operated by a private company. The approximately 22-acre flood control basin (formerly referred to as a “dredge spoils basin”) is located in the northeastern corner of the property, north of the Study Area. A 105-acre seasonal wetlands preserve is located in the eastern portion of the property, and is surrounded by levees.

The County property is bounded by Calabazas Creek to the east; Guadalupe Slough to the north; a mix of developed office parks, drainage sloughs, and Caribbean Drive to the west; and SR 237 to the south. In this reach, Calabazas Creek primarily functions as a flood control channel, though it has become filled with sediment and currently supports vegetation. A public use pathway circumvents the County property and is located immediately east of the flood control basin. North of the sloughs are salt ponds owned by the U.S. Fish and Wildlife Service and east of Calabazas Creek is a vacant property. Industrial, commercial, and mobile home uses are south of SR 237 and west of Caribbean Drive. The City of Sunnyvale Water Pollution Control Plant, Materials Recovery and Transfer Station (SMaRT), and sanitary landfill are also located west of the County property.

The Study Area includes a 3.8-acre flood control basin, the existing Pump Station #2, and a portion of Calabazas Creek containing existing outfalls for the pump station. The pump station, which was built in 1966 and expanded in 1990, receives stormwater from developed areas to the south via an 84-inch diameter pipe, and runoff from the surrounding marshlands and part of Baylands Park via a 36-inch diameter pipe. The 84-inch pipe was installed in a 25-foot wide

Figure 1. Study Area Location Map

N
W E
S

0 500 1,000
Feet

City Pump Station Improvements
Sunnyvale, California

wra
ENVIRONMENTAL CONSULTANTS

Map Date: November 2013
Map By: Derek Chan
Base Source: ESRI/National Geographic

Path: L:\Acad 2000 Files\22000\22204\ArcMap\BRA\Fig1_LocMap_20131115.mxd

storm drain and ingress and egress easement dedicated to the City in 1964 to convey stormwater from a 500-acre area south of SR 237, and discharge into the existing City-owned flood control basin, which drains into the pump station. The pump station discharges into Calabazas Creek, which drains into San Francisco Bay via Guadalupe Slough. The origins and purpose of the 36-inch diameter pipe are not clear, and it appears to receive drainage via a pit just west of the flood control basin in the Baylands Seasonal Wetland Preserve, and carries that drainage to the pump house. It is thought that the 36-inch pipe is not fully functioning and may be broken in some areas along its reach.

3.0 PROJECT DESCRIPTION

The mechanical equipment at the pump station has reached the end of its useful life and needs to be replaced. Currently, the 84-inch pipe can accommodate a 100-year storm if all of the existing pumps are functional and the control levels are set low in the wet well. However, the outflow pipes from the pump house do not currently fully support this function. As an apparent result of sedimentation in Calabazas Creek, the outflow pipes are located below grade of the creek. Some pipes have filled with sediment and others receive backwater flow from high tides and storm flows in Calabazas Creek, taxing the pump house equipment.

The proposed improvements to Baylands Pump Station No. 2 include upgrades to the existing pump station structure and the flood control basin on City property, an existing junction structure between the 84-inch flood control pipe and the flood control basin outlet, and the outfalls to the creek (Figure 2). The planned rehabilitated station would have a pumping capacity of 133.7 cubic feet per second (cfs) compared to the existing station design pumping capacity of 220 cfs. Reducing the peak discharge rate of the station and improving the creek outfalls would reduce the potential for erosion to occur within the banks and levees of Calabazas Creek. The improvements would also reduce the amount of air pollution emissions generated by the gas powered pump engines, and the overall operation and maintenance costs of the facility. Improvements to existing junction structure would also occur within the existing storm drain easement within the Seasonal Wetland Preserve to maintain the existing function of the drainage facility with a reduced capacity pump house. The City has determined that the reduced capacity would still meet the storm water needs of northern Sunnyvale. During rare, severe storms greater than the 50-year event, the flood control basin may become full, causing stormwater to release from the 84-inch junction structure onto the seasonal wetland area. Once the storm peak flow subsides, the water would reenter the junction structure and continue to the flood control basin. As designed, flood waters released into the seasonal wetlands area would subside within 24 hours. Each of these project elements is described in further detail below.

3.1 Improvements to the Existing Pump Station Structure

Rehabilitation of the existing pump station structure includes both interior improvements and exterior improvements. Interior improvements include replacing five (5) high-flow and one (1) low-flow existing pumps and engine drive units with three (3) high-flow pumps and two (2) low-flow pumps. The existing natural gas service and propane tank would be replaced with new electrical service, including a new Main Switch Board & Motor Control Center. The Main Switch Board would include an auto transfer switch for stand-by power. The stand-by engine generator would be installed at a size sufficient to run three (3) large pumps and one (1) small pump. The engine generator would include an in-frame fuel storage tank. The existing trash racks would also be replaced. The new trash racks and landing would be positioned to be above the flood control basin design water level.

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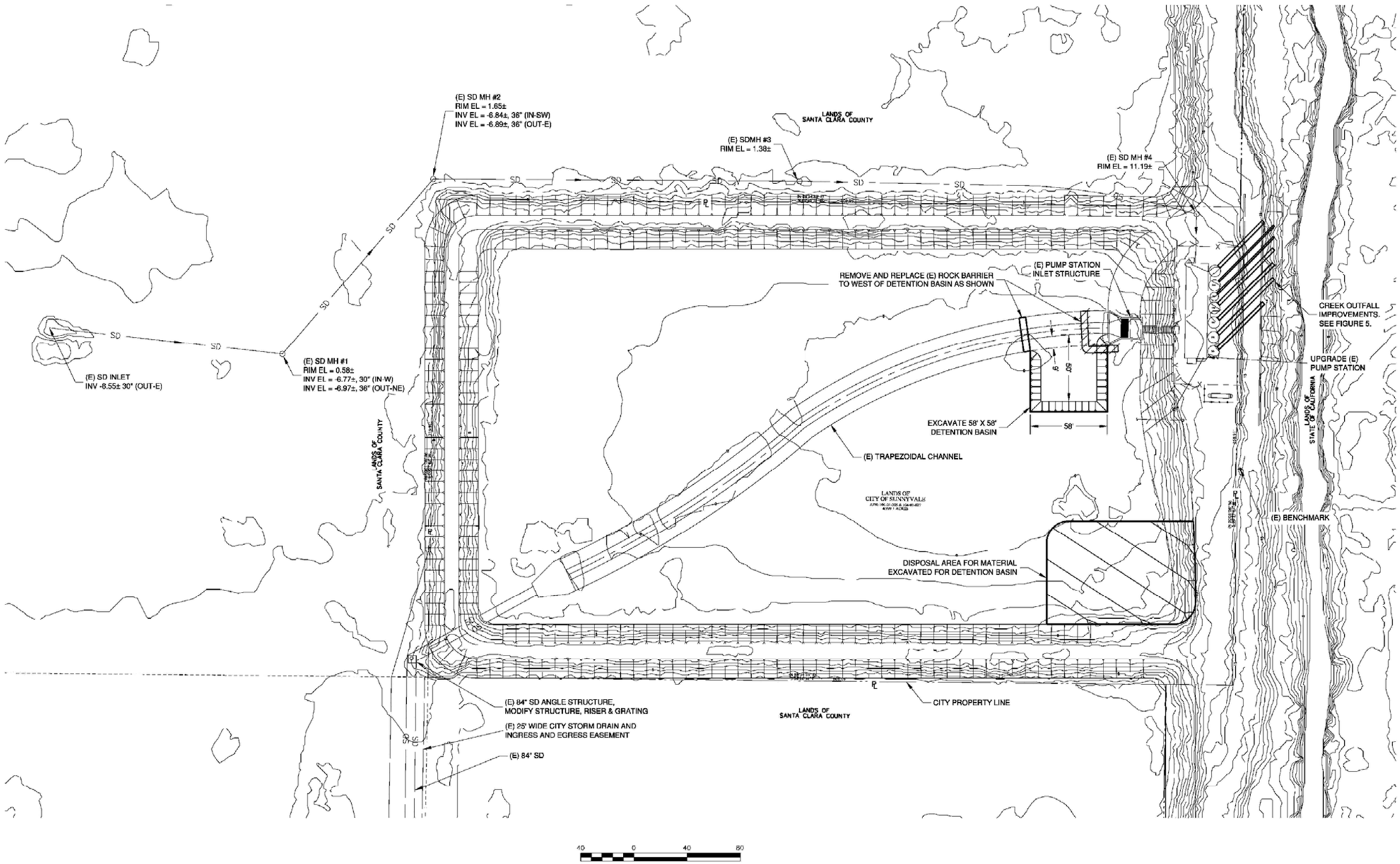
ENVIRONMENTAL CONSULTANTS

City Pump Station Improvements

Sunnyvale, California

Figure 2.

Proposed Baylands Pump Station No. 2 Improvements



Map Date: October 2013
Source: Schaaf & Wheeler, 10/13

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The existing wet well (a concrete structure where water is retained prior to pumping) would also be rehabilitated as part of the station structure upgrades. The slide gate between the wet wells would be removed and a divider wall would be added within the building to isolate the wet well openings from the building interior. The divider wall would prevent wet well gases or fumes from entering the electrical room.

3.2 Improvements to the City-Owned Flood Control Basin and Creek Outfalls

The existing low-flow detention basin, a concrete well within the flood control basin at the inlet to the pump station, would be expanded. The expanded detention basin, approximately 58 feet by 58 feet, would be excavated in the existing flood control basin on City property. The purpose of the new low-flow detention basin is for operational storage to prevent short pump cycling. The material excavated for the expanded low-flow detention basin would be disposed of at the southeast corner of the flood control basin, and erosion control measures would be implemented to preserve water quality, including re-seeding disturbed areas with hydroseed. The existing rock barrier weir to the west of the low-flow detention basin would be relocated to the outer boundary of the expanded detention basin.

The existing seven (7) creek discharge outfalls, which discharge near the bottom of the creek's bank would be replaced with five new outfalls. Currently, sakrete and riprap exist around the station outfall. The five new structures (three (3) high-flow and two (2) low-flow) would discharge near the top of the creek bank, as shown in Figure 3. The creek bank would be excavated to remove the old pipes and install the new outfalls. The existing rock slope protection would be supplemented with new rock slope protection (1/2-ton) within the excavated footprint along the creek bank to the elevation of the existing bottom of the channel. Geowebbing may be used to stabilize the rock slope protection, which would not be grouted. Flap-gates would be installed on all the discharge pipes. Based on the heavy cover by vegetation in surrounding areas and the abundance of sediment in Calabazas Creek, it is expected that the area of the outfall improvements will revegetate naturally over the course of three to five years.

3.3 Improvements in the Baylands Seasonal Wetland Area Currently Existing on County Property

During storm events above the 50-year event, the pump station requires additional storage. To account for possible flooding, a new storm inlet structure would be installed at the existing junction structure at the angle point of the existing 84-inch pipe near the southwest corner of the flood control basin, as shown in Figure 2. Modification to the junction structure would take place entirely within an existing City easement on County property. Modification of the 84-inch junction structure allows for the release of storm water from the 84-inch pipe into the Seasonal Wetland Preserve during events higher than the 50-year storm event and allows for the return of released water back into the 84-inch pipe to flow to the pump station once the peak flow has passed. During a storm of this magnitude, the seasonal wetlands area would likely already be inundated with water and the volume released from the City system would return to the pump station within 24 hours after the storm subsides. After project construction, the area of temporary disturbance surrounding the inlet will be revegetated with the appropriate mix of native vegetation, and temporarily disturbed areas would be graded to match existing grade.

Figure 3. Proposed Outfall Modification Construction Detail. (prepared by Schaaf & Wheeler).