City of Santa Barbara
California

PLANNING COMMISSION
STAFF REPORT

REPORT DATE: March 13, 2014

AGENDA DATE: March 20, 2014

PROJECT ADDRESS: 520 E. Yanonali St (MST2013-00482)
El Estero Wastewater Treatment Plant
Secondary Treatment Process Improvements Project

TO: Planning Commission

FROM: Planning Division, (805) 564-5470, extension 4558
Renee Brooke, AICP, Senior Planner RLB
Steven Greer, Project Planner/Environmental Analyst

I. PROJECT DESCRIPTION

The project consists of improvements/upgrades of the existing Secondary Treatment complex at the El Estero Wastewater Treatment Plant. The existing secondary treatment complex and related facilities encompass approximately 100,000 square feet of area. Improvements/upgrades will occur within the existing secondary filtration complex structure. The exception would be exterior trenching for replacement piping and installation of outlet piping. No modifications or expansions to the exterior of the structure are proposed. The improvements would upgrade the existing secondary treatment system from a conventional activated sludge process to a "step-feed" Biological Nitrogen Removal (BNR) process. The project would upgrade the existing aeration system by replacing the blowers, piping, mixers, diffusers, and changes to the selector zones. The project would also include construction of cut-throat flumes to provide passive, true flow splitting to the secondary clarifiers and upgrade the existing secondary clarifier sludge withdrawal system with larger suction pipes, better flow measurement and control, new Return Activated Sludge (RAS) pumps, and replacement of existing Waste Activated Sludge (WAS) and RAS force mains. Other included project upgrades would address foam accumulation, odor and clarifier performance issues.

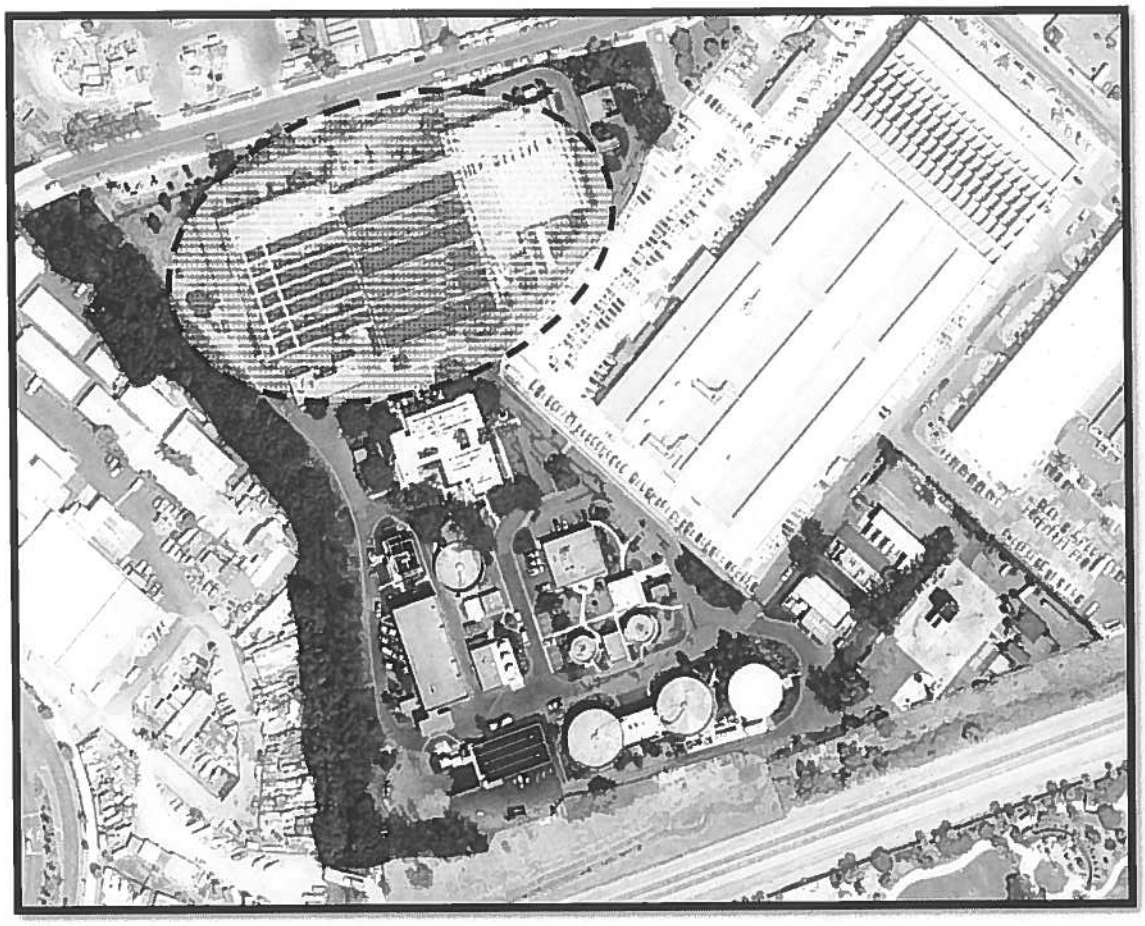
II. REQUIRED APPLICATIONS

The discretionary application required for this project is a Coastal Development Permit (CDP2013-00011) to allow the proposed project in the Appealable Jurisdiction of the City's Coastal Zone (SBMC §28.44.060);

APPLICATION DEEMED COMPLETE: February 10, 2014
DATE ACTION REQUIRED: April 10, 2014

III. RECOMMENDATION

If approved as proposed, the project would conform to the City's Zoning and Building Ordinances and policies of the General Plan and Local Coastal Plan, as discussed in Section VII of this report. Therefore, Staff recommends that the Planning Commission approve a Coastal Development Permit, allowing for the proposed project, making the findings outlined in Section X of this report, and subject to the conditions of approval in Exhibit A.



El Estero Wastewater Treatment Plant – Secondary Treatment Facilities

IV. BACKGROUND

The El Estero Wastewater Treatment Plant that was initially constructed in 1951. At that time it operated as a "screening plant" with ocean discharge, where mechanically operated screens removed solids and debris immediately before the untreated wastewater was discharged into the ocean. Since then, upgrades have occurred in 1973 (completed in 1979), which provided secondary treatment, and again in 1988 to include tertiary treatment. The plant has primary sedimentation, secondary treatment, tertiary filtration, and disinfection processes. The plant treats approximately 8 million gallons of wastewater per day.

In 2010 the City hired a firm to provide an assessment report, and subsequently, preliminary design services for improvements/upgrades of the existing Secondary Treatment complex. The project objectives were to address El Estero's highly variable secondary effluent, so that secondary effluent could be effectively filtered for recycled water production, and to address the longstanding issues with operational inflexibility, energy inefficiency, non-uniform flow distribution to the secondary clarifiers, and secondary treatment capacity. The preliminary design work identified significant secondary process improvements to El Estero's current processes and, as a result, the City has instead decided to change the existing secondary treatment operating strategy to a "step-feed" Biological Nitrogen Removal (BNR) process.

The City is currently pursuing a California Regional Water Quality Control Board (CRWQCB) State Revolving Fund (SRF) Loan in the amount of $20 million to fund the project.

V. SITE INFORMATION AND PROJECT STATISTICS

A. SITE INFORMATION

Applicant:	City of Santa Barbara Public Works Department		
Property Owner:	City of Santa Barbara		
Site Information			
Parcel Number:	017-113-005	**Lot Area:**	227,900 square feet
General Plan:	Institutional	**Zoning:**	OM-1/S-D-3
Local Coastal Plan:	Major Public and Institution		
Existing Use:	Wastewater treatment	**Topography:**	Minor slope, less than 1%
Adjacent Land Uses			
North - Industrial **South** – Railroad/Chase Palm Park		**East** – Industrial/Commercial **West** – Laguna Creek Channel, Industrial	

VI. ISSUES

Staff recommends that the Planning Commission focus on the issues of Biological resources, Archaeological resources, and Water Quality, which are described in detail in this Staff Report.

While the site has been identified as being located within a FEMA designated Flood Zone, no component of the proposed project would alter the existing footprint or location of structures.

The existing aeration basins are developed above the base flood elevation (BFE) projected for a 100-year storm event. A portion of the existing complex is developed below BFE, beneath the basins. Potential storm water run-off impacts identified during review of the project will be addressed by the implementation of a master drainage plan to be developed in conjunction with the previously approved tertiary plant replacement project as described in Section VIII of this report.

VII. POLICY AND ZONING CONSISTENCY ANALYSIS

A. ZONING ORDINANCE CONSISTENCY

1. OM-1 Ocean-Oriented Light Manufacturing

Pursuant to SBMC Sections 28.73.030.A. and 28.73.030.D., El Estero is nonconforming to the requirement that wastewater/sanitation treatment facilities require a Conditional Use Permit in the OM-1 Zone. As allowed by SBMC §28.87.030.E., a nonconforming use may be maintained and continued, provided there is no increase or enlargement of the floor area of the buildings or structures on site, and no increase in the intensity of use. The upgrades will occur within the existing secondary treatment complex and ancillary facilities. The project does not propose an enlargement of building floor area, increase in capacity, or intensification of use and, therefore, is not subject to a conditional use permit at this time.

2. Coastal Overlay Zone – S-D-3 Zone Designation

SBMC Section 28.44.060 states that any development, not subject to one of the exclusions or exemptions specified in the chapter, requires a coastal development permit. Due to its location, within 50 feet of the Laguna Creek Channel, the project does not qualify for either an exclusion or exemption. Hence, the subject coastal development permit (CDP2013-00010) is required prior to project development.

B. LOCAL COASTAL PLAN CONSISTENCY

The project site is located in Component Five of the Local Coastal Land Use Plan (LCP). Other existing uses in this component are primarily light industrial, limited commercial, and some scattered residential. The LCP designation of Major Public and Institutional provides for public facilities uses, including waste water treatment facilities.

The project would not reduce convenience of access to or along the coast during construction or after construction because the site does not currently provide any public access. Similarly, the availability of recreational or visitor-serving uses would not be affected by the project. LCP policies applicable to this project are discussed below and attached as Exhibit D.

Biological Resources

LCP Policies 6.8, 6.9 and 6.10 serve to protect biological productivity and water quality of the City's riparian resources. The biological resources adjacent to the project site (Laguna Creek Channel environ) would not be impacted with the implementation of standard minimization measures applied to projects in proximity of said resources. Redesign of the plant's on-site storm water drainage system, as described in Section VIII - Environmental

Review, will further reduce potential impacts to these resources, consistent with policies of the LCP.

Additionally, the proposed project would improve the quality of water utilized for recycled water delivery, requiring less potable water to be mixed with tertiary treated water, prior to conveyance.

Visual Resources

LCP Policy 9.1 protects views to, from, and along the ocean and scenic coastal areas. The project would not alter any views available from public viewpoints because the upgrades would not be visible from a public viewpoint. Proposed improvements would be within the existing secondary filtration complex structure and shielded from public views by the existing facilities.

C. CALIFORNIA COASTAL ACT

The Coastal Act defines land within the Coastal Zone as part of a valuable natural resource of vital and enduring interest to all the people. The Coastal Act prescribes policies for protecting the Coast through environmental protection and land-use restrictions. The project as described would be consistent with the applicable policies of the California Coastal Act.

1. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

The California Coastal Act requires that environmentally sensitive habitat areas (ESHA) be protected (Public Resources Code [PRC] §30240). The project site is adjacent to the Laguna Creek Channel, which has previously been identified as ESHA. While no development is proposed within the identified ESHA, implementation of protective measures recommended in the Biological Survey report will further assure that the project will have no direct or indirect impacts to the adjacent resource. Therefore, the proposed project is consistent with this policy.

2. FLOODING

California Coastal Act (PRC §30236) states that substantial alterations to rivers or streams are only allowed for flood control or water supply projects necessary to protect public safety and existing development. It further states that alterations must incorporate the best mitigation measures feasible. The proposed project would not alter the Laguna Creek Channel. Therefore, the project would be consistent with this policy.

3. PUBLIC WORKS PROJECTS

The Coastal Act states that new and expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of the Act (PRC §30254). The proposed project would not preclude services to coastal-dependent land uses, essential public services and basic industries vital to the economic health of the region, state, or nation. Nor would it preclude public recreation, commercial recreation, or visitor-serving land uses. Therefore, the project would be consistent with this policy.

4. **COASTAL VISUAL RESOURCES**

California Coastal Act states that coastal scenic visual resources shall be protected (PRC §30251). The proposed project would not obstruct scenic views afforded to the waterfront or surrounding area. Therefore, the project would be consistent with this policy.

VIII. ENVIRONMENTAL REVIEW

The proposed project is subject to California Environmental Quality Act (CEQA) review and the Environmental Analyst has determined that the project would be categorically exempt pursuant to CEQA Guidelines §15302(c) (Replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity). In addition to CEQA review, the CRWQCB SRF loan application package required adherence to NEPA environmental review process protocol. Review of the Santa Barbara Master Environmental Assessment (MEA) identified the following categories for specific evaluation.

1. **CULTURAL RESOURCES**

The project site is within the boundaries of the American Period and the Early 20th Century Period. The archaeological survey report completed for the project concluded that due to the extensive ground disturbance that has previously occurred on the site (i.e. grading, excavation, construction, pile driving and imported fill) there was very low potential to impact cultural resources (Dudek, November 2013). To satisfy CRWQCB policies relating to cultural resources, monitoring by a qualified archaeologist has been included as a condition of approval. The project description utilized for the archaeological survey report conducted for the current project proposal also included the recently approved Tertiary Treatment Plant project.

2. **BIOLOGICAL RESOURCES**

While the project footprint is not in a sensitive resource area, an existing outdoor storage area, proposed for project construction staging, is adjacent to the Laguna Creek Channel, identified in the City's MEA as containing several biological resources. A biological survey conducted for the project indicated that, with implementation of recommended minimization measures as part of the project description, potential impacts to these resources would be minimized to a less than significant level (Dudek, October 2013). The project description utilized for the biological survey report conducted for the current project proposal also included the recently approved Tertiary Treatment Plant project.

3. **STORM WATER RUN-OFF**

In conjunction with the recently approved tertiary plant replacement project, the Public Works Department is required to develop a master drainage and treatment plan for the entire project site. The plan will include modifications to the existing drainage system that will direct conveyance of all storm water run-off to the "front end" of the plant as influent to be treated prior to discharge. An interim measure has been included as a condition of approval to address potential storm water run-off impacts that may occur prior to implementation of the master drainage and treatment plan.

The Creeks Division supports the previously approved El Estero Tertiary Replacement Project approach of draining all storm water runoff from the project site to a self contained storm water drainage and treatment system, rather than maintaining the onsite storm drains that currently drain into the adjacent Laguna Creek Channel. The intent of the State/City storm water requirements is to appropriately manage storm water runoff volumes and rates and protect surface water quality by capturing and treating storm water runoff. The existing on site drainage system already conveys the majority of storm water run-off back through the plant to be treated. Eliminating direct conveyance of storm water run-off from this area of the site into the adjacent Laguna Creek Channel will further reduce potential impacts to biological resources identified within/along the channel corridor.

4. POTENTIAL TSUNAMI IMPACTS

The plant is identified in the City's MEA as within the tsunami "run-up" area. Available data indicates that the probability of significant tsunami event in the Santa Barbara coastal area is low. In 2009, the California Emergency Management Agency (CalEMA) and the California Geological Survey completed inundation maps for all the at-risk portions of the California coastline. These maps show the maximum inundation predicted from an event, either historical or based on a scenario, from many different sources. Assumptions included credible source scenarios for both distant and local events, at mean high tide, to produce a worst case scenario inundation line. Run-ups go to about 10 feet in elevation onshore for the maximum distant event, and up to 20+ feet from a potential local off-shore earthquake/landslide source. Based on these projections and review of local mapping, a tsunami generated from a distant event (significant earthquake) would not reach the secondary treatment facility aeration basins, but may reach the lower level gallery. In the unlikely case of a significant local off-shore event (earthquake triggering undersea landslide), in addition to the inundation of the lower level gallery, the secondary treatment structure could be surrounded by sea water at a depth of about five feet, but because the facilities are contained in a reinforced concrete structure, potential impacts would likely be less than significant.

5. SEA LEVEL RISE POTENTIAL IMPACTS

While not currently addressed in the City's MEA, sea level rise (SLR) has been a growing concern at both a global and local level. The most recent available data indicates that during the estimated 30 - 35 year life expectancy of the proposed project, a rise in sea level would range from a minimum of 5 inches to a maximum of 24 inches (National Resource Council 2012 & Ocean Protection Council 2013, Sea Level Rise Projections for Year 2050). Based on these projections and review of local SLR mapping, although there would likely be an increase in occurrences of storm events, and potential sea level rise affecting the adjacent Laguna Channel and surrounding properties over the next 35 years, the plant, including the upgraded secondary treatment facilities, would not be significantly impacted.

IX. DESIGN REVIEW

Because the project does not propose any expansion or modifications to the exterior of the Secondary Treatment Process facilities, ABR review and approval is not required.

X. FINDINGS

The Planning Commission finds the following:

A. COASTAL DEVELOPMENT PERMIT (SBMC §28.44.150)

1. The project is consistent with the policies of the California Coastal Act, as described in Section VII.C of the Staff Report. This includes, but is not limited to, consistency with requirements that environmentally sensitive habitat areas (ESHA) be protected and that proposed development should neither preclude services to coastal-dependent land uses, essential public services and basic industries vital to the economic health of the region, state, or nation, nor preclude public recreation, commercial recreation, or visitor-serving land uses. The project would be consistent with these policies.

2. The project is consistent with all applicable policies of the City's Local Coastal Plan, all applicable implementing guidelines, and all applicable provisions of the Code, as described in Sections VII.A and B of the Staff Report. This includes, but is not limited to, consistency with LCP Policies 6.8, 6.9 and 6.10 which serve to protect biological productivity and water quality of the City's riparian resources and LCP Policy 9, which protects views to, from, and along the ocean and scenic coastal areas.

Exhibits:

A. Conditions of Approval
B. Site Plan
C. Site Photographs
D. Applicant's letter, dated November 15, 2013
E. Applicable Coastal Act and Local Coastal Plan Policies

PLANNING COMMISSION CONDITIONS OF APPROVAL

520 E. YANONALI STREET
EL ESTERO WASTEWATER TREATMENT PLANT
(SECONDARY TREATMENT PROCESS IMPROVEMENTS)
COASTAL DEVELOPMENT PERMIT
MARCH 20, 2014

I. In consideration of the project approval granted by the Planning Commission and for the benefit of the El Estero Waste Water Treatment Plant and occupants of its property, the owners and occupants of adjacent real property and the public generally, the following terms and conditions are imposed on the use, possession, and enjoyment of the project site:

A. **Order of Development.** In order to accomplish the proposed development, the following steps shall occur in the order identified:

1. Pay Land Development Team Recovery Fee.
2. Permits - Submit an application for and obtain a Building Permit (BLD) for construction of approved development and complete said development.
3. Submit an application for and obtain a Building Permit (BLD) to demolish any structures / improvements and/or perform rough grading. Comply with condition E "Construction Implementation Requirements."

Details on implementation of these steps are provided throughout the conditions of approval.

B. **Written Agreement.** The Applicant shall submit a letter to the Planning Division indicating the following:

1. **Approved Development.** The development approved by the Planning Commission on March 20, 2014 is limited to upgrades to the existing EEWWTP secondary treatment complex, and the related improvements shown on the plans signed by the chairperson of the Planning Commission on said date and on file at the City of Santa Barbara.
2. **Use Limitations.** Due to the proximity to biological resources, uses other than those related to secondary treatment operations or uses previously established are not permitted at this location without further environmental and/or Planning Commission review and approval. Prior to initiating a change of use, the Applicant shall submit a letter to the Community Development Director detailing the proposal, and the Director shall determine the appropriate review procedure and notify the Applicant.
3. **Storm Water Pollution Control and Drainage System Maintenance.** The owner/applicant shall implement and maintain the drainage system and storm water pollution control devices in a functioning state. Should any of the project's surface or subsurface drainage structures or storm water pollution control methods fail to capture, infiltrate, and/or treat water, or result in increased erosion, the Public Works Division shall be responsible for any necessary repairs to the system and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the Applicant shall submit a repair and restoration plan to the Community Development Director to

determine if an amendment or a new Coastal Development Permit is required to authorize such work. The Public Works Division is responsible for the adequacy of any project-related drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health, or damage to the Real Property or any adjoining property.

4. **BMP Training.** Training on the implementation of Best Management Practices (BMPs) shall be provided to every employee of the El Estero Waste Water Treatment Plant by the Applicant/management in order to prevent or reduce the discharge of pollutants to storm water from buildings and ground maintenance. The training shall include using good housekeeping practices, preventive maintenance and spill prevention and control at outdoor loading/unloading areas in order to keep debris from entering the storm water collection system.

C. **Biological Resources Minimization Measures.** The following minimization measures, recommended in the Biological Resource Study prepared for the proposed project (Dudek, October 2013), shall be included as part of the project description:

1. **Pre-construction Nesting Bird Survey. (BIO-1)** A pre-construction survey for nesting birds shall be conducted by a qualified biologist to determine if active nests of special-status birds, or common bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, are present in the construction zone or within 300 feet of the construction zone. The survey shall be conducted within one week prior to construction or site preparation activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March 1 through August 30).

2. **Nesting Bird Buffers and Requirements.** If active nests are found, a no construction buffer shall be established at a minimum of 100-foot (this distance may be greater depending on the bird species and construction activity, as determined by the biologist) around the nest site where it overlaps with exterior work areas. Clearing and construction within no-construction buffer shall be postponed or halted, at the discretion of the biologist, until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting.

D. **Requirements Prior to Permit Issuance.** The Applicant shall submit the following, or evidence of completion of the following, for review and approval by the Department listed below prior to the issuance of any permit for the project. Some of these conditions may be waived for demolition or rough grading permits, at the discretion of the department listed. Please note that these conditions are in addition to the standard submittal requirements for each department.

1. **Creeks Division.**

a. **Construction Staging Area Plan**. The Applicant shall submit a plan to the Creeks Division identifying a construction staging area. The plan shall include measures (i.e. construction fencing) to protect the adjacent Laguna Channel riparian habitat. The plan shall be approved prior to construction activities commencing.

As a component of the plan, silt fencing, straw wattles, and/or sand bags should be used in conjunction with other methods to prevent turbid waters or other contaminants from entering adjacent stream channel (see SWPPP requirements below).

b. **Stormwater Pollution Prevention Plan (SWPPP).** The Applicant shall retain a Qualified SWPPP Developer (QSD) to prepare and submit a SWPPP to minimize the potential for discharge of pollutants from the project during construction and operational activities. The SWPPP shall be designed to meet the requirements of the City and RWQCB's General Construction Permit (GCP). The SWPPP shall include both structural and non-structural best management practices (BMPs) including straw wattles around storm drains, silt fencing and or other physical controls to divert flows from exposed soil, spill prevention methods, and clean housekeeping methods for storing and refueling machinery.

c. Filter/treatment inserts shall be installed on all storm drain inlets that have not been routed to the plant/sewer for treatment and shall be maintained per the manufacturer's specifications until the storm drain inlets are routed to the plant for treatment.

2. **Community Development Department.**

a. **Written Agreement**. Provide the written instrument that includes all of the conditions identified in Condition B "Written Agreement" to the Community Development Department prior to issuance of any building permits.

b. **Archaeological Monitoring Contract.** Submit to the Planning Division a contract with an archaeologist from the most current City Qualified Archaeologists List for monitoring during all ground-disturbing activities associated with the project, including, but not limited to, grading, excavation, trenching vegetation or paving removal and ground clearance in the areas identified in the Archaeological Survey Report prepared for this site by Dudek, dated December 2013. The contract shall be subject to the review and approval of the Environmental Analyst.

The archaeologist's monitoring contract shall include the provisions identified in condition F.2.c "Requirement for Archaeological Resources" below.

c. **Requirement for Archaeological Resources.** The following information shall be printed on the site plan:

If archaeological resources are encountered or suspected, work shall be halted or redirected immediately and the Planning Division shall be notified. The archaeologist shall assess the nature, extent, and significance of any discoveries and develop appropriate management recommendations for archaeological resource treatment, which may include, but are not limited to, redirection of grading and/or excavation activities, consultation

and/or monitoring with a Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List, etc.

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

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

d. **No-Rise Certificate.** The Applicant shall provide a Base Flood Elevation and show compliance with applicable flood proofing as required by SBMC §22.24.160 prior to issuance of a Building Permit.

e. **Contractor and Subcontractor Notification.** The Applicant shall notify in writing all contractors and subcontractors of the site rules, restrictions, and Conditions of Approval. Submit a draft copy of the notice to the Planning Division for review and approval.

f. **Conditions on Plans/Signatures.** The final Resolution shall be provided on a full size drawing sheet as part of the drawing sets. Each condition shall have a sheet and/or note reference to verify condition compliance. If the condition relates to a document submittal, indicate the status of the submittal (e.g., Construction Staging Plan submitted to Creeks Division for review). A statement shall also be placed on the sheet as follows: The undersigned have read and understand the required conditions, and agree to abide by any and all conditions which are their usual and customary responsibility to perform, and which are within their authority to perform.

g. Signed:

Applicant		Date
Contractor	Date	License No.
Architect	Date	License No.
Engineer	Date	License No.

E. **Construction Implementation Requirements.** All of these construction requirements shall be carried out in the field by the Applicant and/or Contractor for the duration of the project construction, including demolition and grading.

1. **Riparian Protection.** All construction-related activities, including, but not limited to demolition, construction, staging area, and access routes shall be located a minimum of 50 feet from riparian habitat associated with Laguna Channel and El Estero Swale, when possible. In locations where the construction or staging activities encroach within this buffer, it is important to provide further protection to riparian vegetation and the wetland and aquatic habitats of Laguna Channel to the greatest extent possible. Specifically, these protection measures shall include the following:

   a. The Contractor shall establish a temporary barrier between riparian habitat using highly visible construction fencing to ensure that trees and other vegetation are visible during construction.

   b. If direct impacts to riparian vegetation cannot be avoided, a CDFW Streambed Alteration Agreement (SAA) pursuant to Section 1600 et seq. of the California Fish and Game Code should be acquired before initiation of construction.

2. **Best Management Practices (BMPs).** The Contractor shall install appropriate BMPs to control sediment, coarse particles, concrete, and other materials exposed during construction and staging to protect aquatic, wetland, and riparian habitats adjacent to construction site. Erosion control measures should be implemented to prevent runoff of these materials into Laguna Channel. Silt fencing, straw bales, and/or sand bags should be used in conjunction with other methods to prevent turbid waters from entering stream channels.

   During construction activities, washing of concrete, paint, or equipment shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Washing will not be allowed in locations where the tainted water could enter Laguna Channel or El Estero Swale.

3. **Pre-Construction Conference.** Not less than 10 days or more than 20 days prior to commencement of construction, a conference to review site conditions, construction schedule, construction conditions, and environmental monitoring requirements (see condition No. E.4 below), shall be held by the General Contractor. The conference shall include representatives from the Public Works Department Engineering and Transportation Divisions, Community Development Department Building and Planning Divisions, the Creeks Division, Contractor and each Subcontractor.

4. **Construction Storage/Staging.** Construction vehicle/equipment/materials storage and staging shall be done on-site. No parking or storage shall be permitted within the identified "no disturbance buffer" adjacent to the Laguna Creek Channel, unless specifically permitted by the Creeks Division.

5. **Construction Parking.** During construction, free parking spaces for construction workers shall be provided on-site.

6. **Air Quality and Dust Control.** The following measures shall be shown on grading and building plans and shall be adhered to throughout grading, hauling, and construction activities:

   a. During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.

   b. Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.

   c. If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.

   d. Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.

   e. After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.

   f. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.

   g. All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.

   h. Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.

i. All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

j. Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.

k. Diesel powered equipment should be replaced by electric equipment whenever feasible.

l. If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.

m. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.

n. All construction equipment shall be maintained in tune per the manufacturer's specifications.

o. The engine size of construction equipment shall be the minimum practical size.

p. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time. Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

7. **Asbestos & Lead-Containing Materials.** Pursuant to Air Pollution Control District (APCD) Rule 1001, the applicant is required to complete and submit an Asbestos Demolition / Renovation Notification form for each regulated structure to be demolished or renovated. The completed notification shall be provided to the Santa Barbara County APCD with a minimum of 10 working days advance notice prior to disturbing asbestos in a renovation or starting work on a demolition. Any abatement or removal of asbestos and lead-containing materials must be performed in accordance with applicable federal, State, and local regulations. Disposal of material containing asbestos and/or lead shall be in sent to appropriate landfills that are certified to accept this material.

F. General Conditions

1. **Compliance with Requirements.** All requirements of the City of Santa Barbara and any other applicable requirements of any law or agency of the State and/or any government entity or District shall be met. This includes, but is not limited to, the

Endangered Species Act of 1973 and any amendments thereto (16 Uq.), the 1979 Air Quality Attainment Plan, and the California Code of Regulations.

2. **Land Development Team Recovery Fee Required.** The land development team recovery fee (30% of all planning fees, as calculated by staff) shall be paid at time of building permit application.

NOTICE OF COASTAL DEVELOPMENT PERMIT TIME LIMITS:

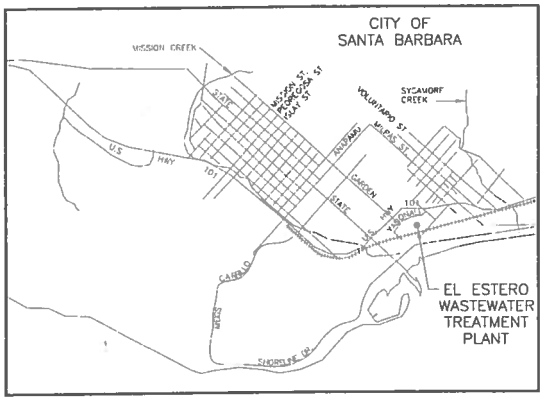
The Planning Commission action approving the Coastal Development Permit shall expire two (2) years from the date of final action upon the application, per Santa Barbara Municipal Code §28.44.230, unless:

1. Otherwise explicitly modified by conditions of approval for the coastal development permit.
2. A Building permit for the work authorized by the coastal development permit is issued prior to the expiration date of the approval.
3. The Community Development Director grants an extension of the coastal development permit approval. The Community Development Director may grant up to three (3) one-year extensions of the coastal development permit approval. Each extension may be granted upon the Director finding that: (i) the development continues to conform to the Local Coastal Program, (ii) the applicant has demonstrated due diligence in completing the development, and (iii) there are no changed circumstances that affect the consistency of the development with the General Plan or any other applicable ordinances, resolutions, or other laws.

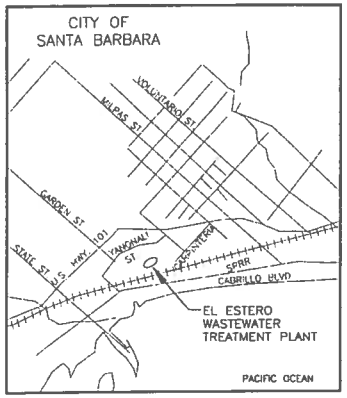
BROWN AND CALDWELL
IRVINE, CALIFORNIA
LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

CITY OF SANTA BARBARA

EL ESTERO WASTEWATER TREATMENT PLANT
SECONDARY TREATMENT PROCESS IMPROVEMENTS



LOCATION MAP
N.T.S.



VICINITY MAP
N.T.S.

IMPORTANT NOTICE
ALL UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR IS TO NOTIFY UNDERGROUND SERVICE ALERT TWO WORKING DAYS PRIOR TO STARTING ANY EXCAVATION OR RESURFACING.
CALL TOLL FREE 1-800-422-4133

SUMMARY OF WORK:

THE WORK CONSISTS OF:

1. UPGRADE THE SECONDARY PROCESS TO BNR WITH THE CAPABILITY OF SWITCHING TO SLUDGE REAERATION MODE DURING PERIODS OF HIGH FLOW
2. UPGRADE THE EXISTING AERATION SYSTEM BY REPLACING THE BLOWERS, PIPING, MIXERS, DIFFUSERS, AND CHANGES TO THE SELECTOR ZONES.
3. CONSTRUCTION OF CUT THROAT FLUMES TO PROVIDE PASSIVE, TRUE FLOW SPLITTING TO THE SECONDARY CLARIFIERS REGARDLESS OF HOW MANY AERATION BASINS AND SECONDARY CLARIFIERS ARE IN OPERATION.
4. UPGRADE THE EXISTING SECONDARY CLARIFIER SLUDGE WITHDRAWAL SYSTEM WITH LARGER SUCTION PIPES, BETTER FLOW MEASUREMENT AND CONTROL, NEW RAS PUMPS, AND REPLACE EXISTING WAS AND RAS FORCE MAINS.
5. ADOPT MIXED LIQUOR WASTING TO CONTROL THE SRT IN THE SECONDARY SYSTEM. INTEGRATE A SURFACE WASTING STRUCTURE (CLASSIFYING SELECTOR) TO MITIGATE THE FOAM ACCUMULATION WITHIN THE SYSTEM.
6. IMPLEMENT NITRATE RETURN BY RECYCLING A PORTION OF SECONDARY EFFLUENT BACK TO THE HEADWORKS TO ADDRESS ODOR AND CLARIFIER PERFORMANCE ISSUES AND REDUCE CHEMICAL COSTS.

APN: 017-540-005
PARCEL OWNER: CITY OF SANTA BARBARA
520 E. YANONALI STREET, SANTA BARBARA, CA
SITE NET AREA: 7.99 ACRES
ZONING: OM-1/SD-3
GENERAL PLAN: INSTITUTIONAL
HIGH FIRE: NO

FLOOD PLAIN: YES
AVERAGE SLOPE OF PROPERTY: <1%
CUT: Ø
FILL: Ø
AMOUNT EXPORT: Ø
EXISTING PARKING: 50
PROPOSED PARKING: 50

NOTES:

1. NO SETBACKS ARE REQUIRED.
2. THE SITE STATISTICES ARE AS FOLLOWS:

LOT COVERAGE	EXISTING (SF)		PROPOSED (SF)	
BUILDING	100,000	43.90%	100,000	43.90%
PAVING/DRIVEWAY	127,900	56.10%	127,900	56.10%
LANDSCAPING	0	0%	0	0%
TOTAL LOT AREA	227,900	100%	227,900	100%

SHEET INDEX

Sheet #	Sheet Designation	Title	Description
1	T1	TITLE AND SHEET INDEX	-
2	G1	SECONDARY IMPROVEMENTS	SITE PLAN AND STAGING AREA
3	G1A	SECONDARY IMPROVEMENTS	SITE PLAN 1
4	G1B	SECONDARY IMPROVEMENTS	SITE PLAN 2
5	G1C	SECONDARY IMPROVEMENTS	SITE PLAN 3
6	G1D	SECONDARY IMPROVEMENTS	SITE PLAN 4
7	G2	RAS AND AERATION BASINS	SITE PLAN
8	G3	WML & WAS	SITE PLAN
9	D4	OVERALL AERATION BASINS	DEMO SITE PLAN
10	M1	BLOWER AND COMPRESSOR ROOM	PLAN AND SECTION

FUND MANAGER DATE

REGISTERED ENGINEER DATE

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
APPROVED: CITY ENGINEER DATE
ORIGINAL SIGNED DATE
DESIGN
DRAWN
CHECKED
10% DRAFT
APPROVED DATE
NO. REVISIONS

EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS

TITLE AND SHEET INDEX

PERF. NO. 141973
PROJ. NO. SHT. DES. T1
DWG. NO.
SHT. 1 OF 43

EXHIBIT B

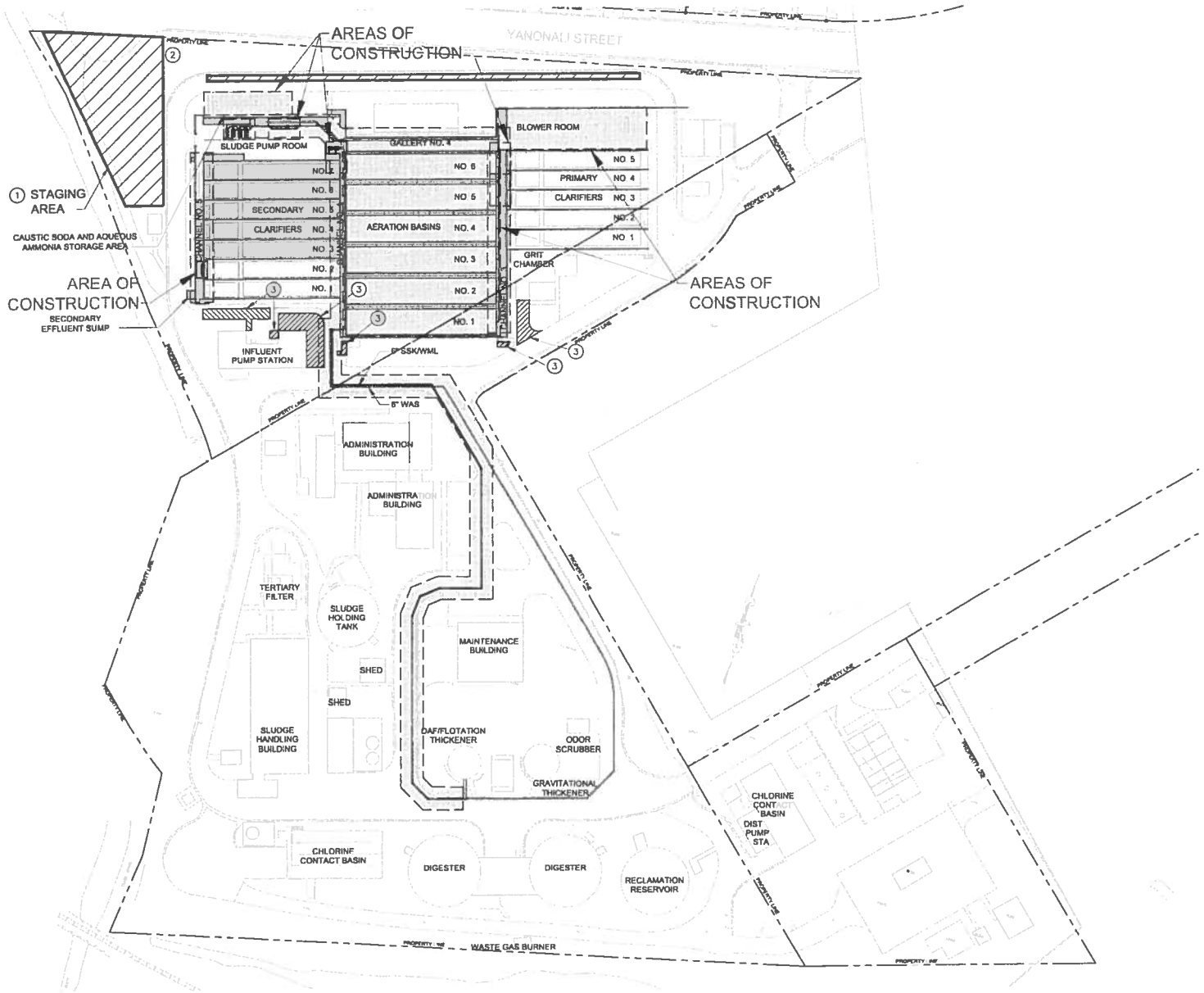
BROWN AND CALDWELL
IRVINE, CALIFORNIA

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"=SCALE ACCORDINGLY)

SCALE 1" = 50'

KEY NOTES:

1. STAGING AREA FOR THE PROJECT
2. CONTRACTOR PARKING AREA.
3. AREA TO KEEP CLEAR



PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
APPROVED
CITY ENGINEER
ORIGINAL SIGNED DATE
DESIGN
DRAWN
CHECKED
10% DRAFT

NO.	DATE	APPROVED	REVISIONS

EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS

SECONDARY IMPROVEMENTS
SITE PLAN AND STAGING AREA

PBW NO.
141973 G1
PROJ. NO. SHT. DES.
DWG. NO.
SHT. 2 OF 43

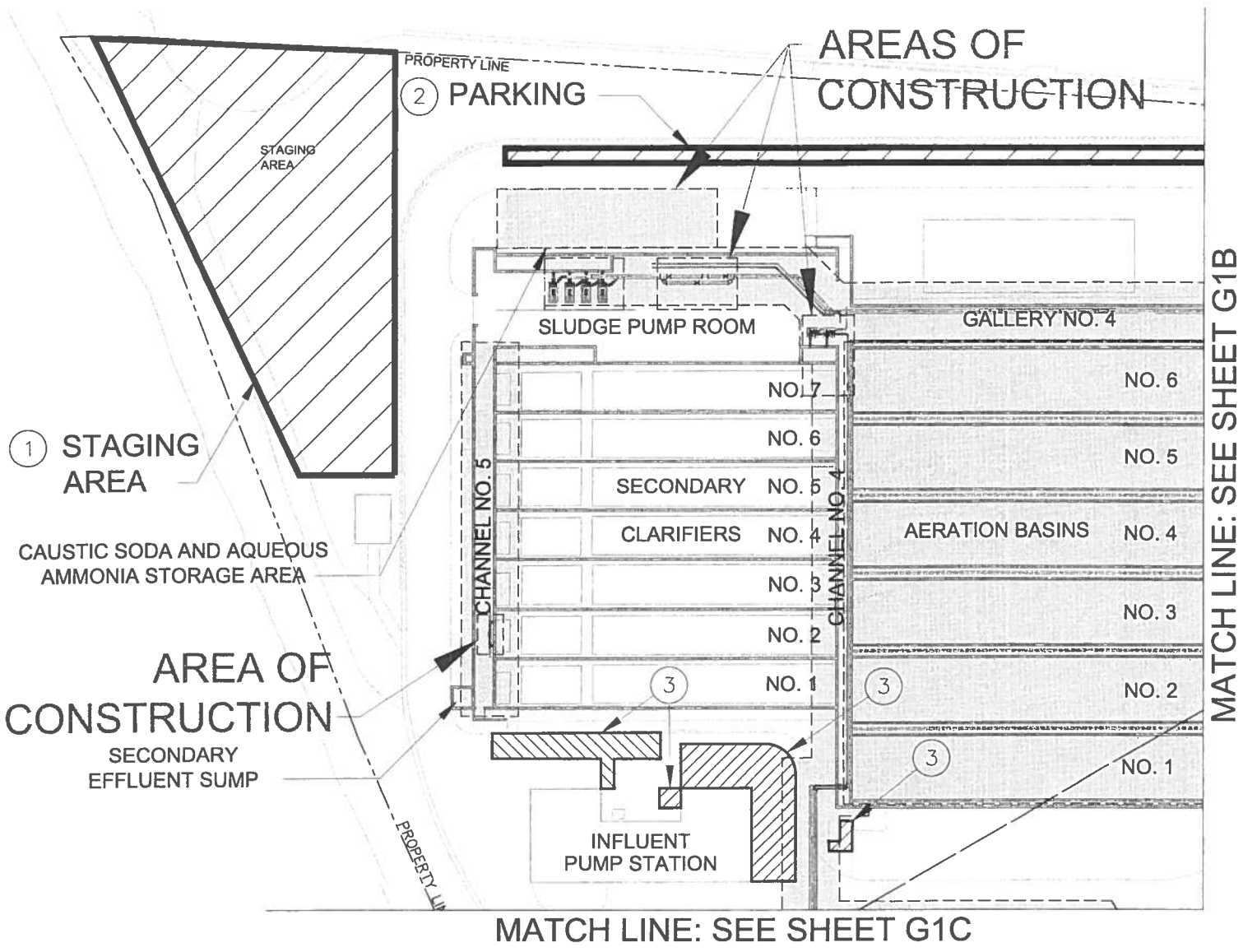
BROWN AND CALDWELL
IRVINE, CALIFORNIA

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

SCALE: 1" = 20'

KEY NOTES:

1. STAGING AREA FOR THE PROJECT
2. CONTRACTOR PARKING AREA.
3. AREA TO KEEP CLEAR



PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: DATE -
CITY ENGINEER ORIGINAL SIGNED DATE

DESIGN
DRAWN
CHECKED
10% DRAFT

APPROVED DATE
NO. REVISIONS

EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS

SECONDARY IMPROVEMENTS

SITE PLAN 1

PSW NO. -
PROJ. NO. 141973
SHT. DES. G1-A
DWG. NO. -
SHT. 2 OF 43

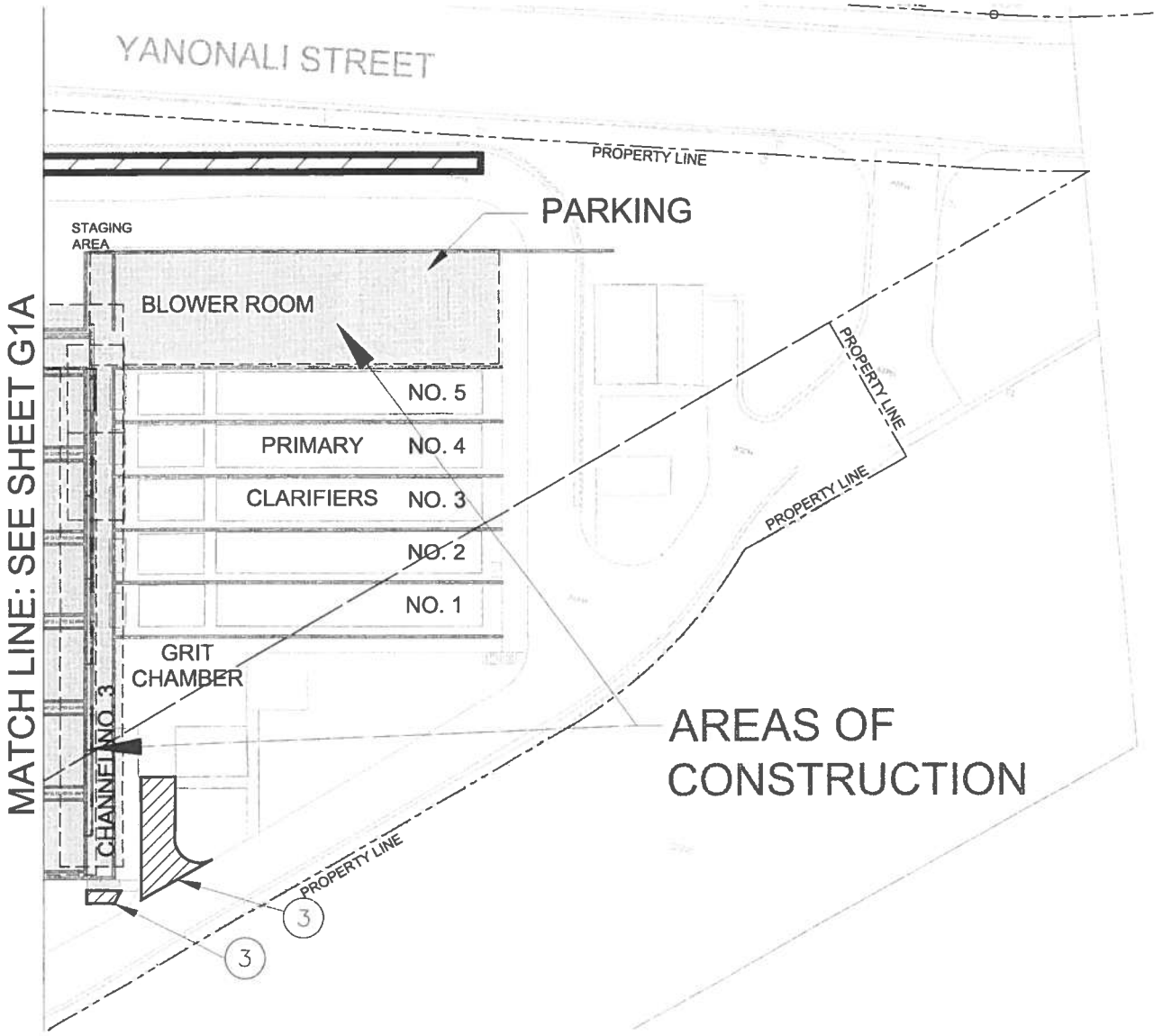
BROWN AND CALDWELL
IRVINE, CALIFORNIA

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

SCALE: 1" = 20'

KEY NOTES:

1. STAGING AREA FOR THE PROJECT.
2. CONTRACTOR PARKING AREA.
3. AREA TO KEEP CLEAR



PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: CITY ENGINEER DATE

ORIGINAL SIGNED DATE

DESIGN
DRAWN
CHECKED

10% DRAFT

NO.	DATE	APPROVED	REVISIONS

EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS

SECONDARY IMPROVEMENTS

SITE PLAN 2

PROJ. NO. 141973 | SHT. DES. G1-B

CHNG. NO.

SHT. 2 OF 43

BROWN AND CALDWELL
IRVINE, CALIFORNIA

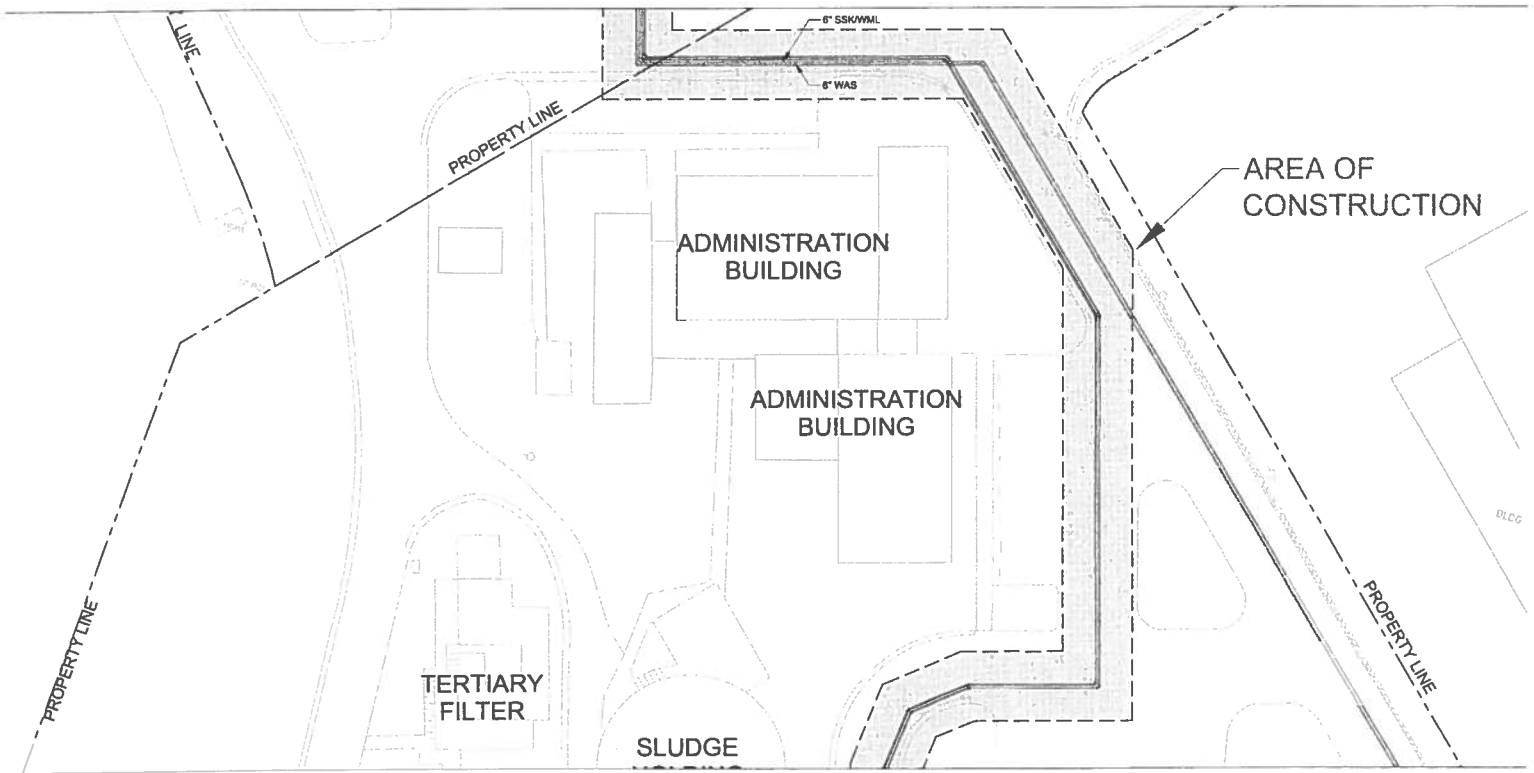
LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

SCALE: 1" = 20'

KEY NOTES:

1. STAGING AREA FOR THE AERATION SYSTEM IMPROVEMENTS PROJECT.
2. CONTRACTOR PARKING AREA.
3. AREA TO KEEP CLEAR

MATCH LINE: SEE SHEET G1A



MATCH LINE: SEE SHEET G1D

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

APPROVED: DATE

CITY ENGINEER ORIGINAL SIGNED DATE

DESIGN
DRAWN
CHECKED

10% DRAFT

NO. DATE APPROVED REVISIONS

EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS

SECONDARY IMPROVEMENTS

SITE PLAN 3

PSW. NO. -

PROJ. NO. 141973 SHT. DES. G1-C

DWG. NO. -

SHT. 2 OF 43

REGISTERED ENGINEER DATE

BROWN AND CALDWELL
IRVINE, CALIFORNIA

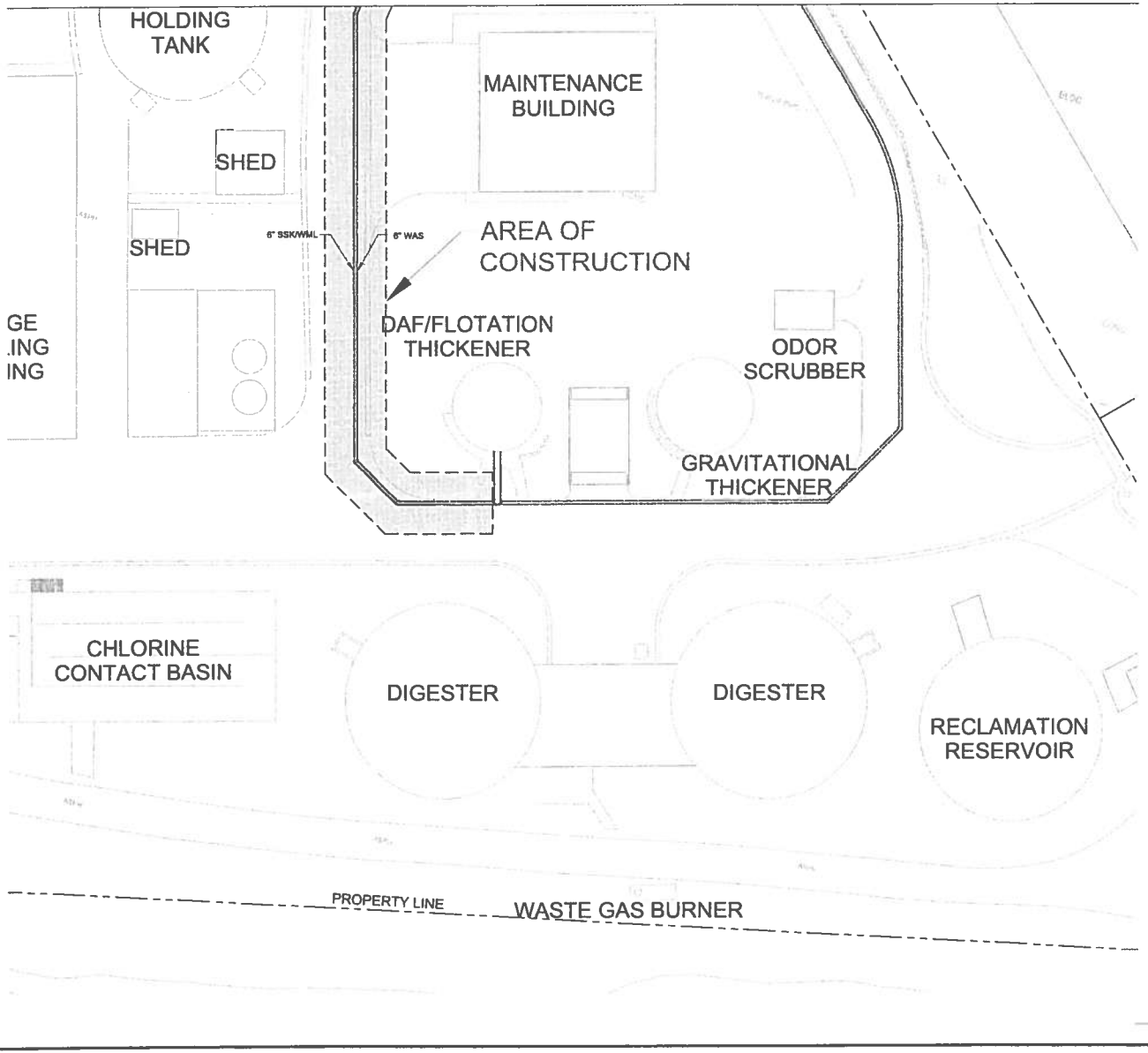
LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

SCALE: 1" = 20'

KEY NOTES:

1. STAGING AREA FOR THE AERATION SYSTEM IMPROVEMENTS PROJECT.
2. CONTRACTOR PARKING AREA.
3. AREA TO KEEP CLEAR

MATCH LINE: SEE SHEET G1C



REGISTERED ENGINEER _____ DATE _____

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____ DATE _____
CITY ENGINEER
ORIGINAL SIGNED DATE

DESIGN
DRAWN
CHECKED
APPROVED
DATE

10% DRAFT

NO. REVISIONS

EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS

SECONDARY IMPROVEMENTS

SITE PLAN 4

PSW NO.
141973 PROJ NO
G1-D SHT DES

DWG NO.

SHT 2 OF 43

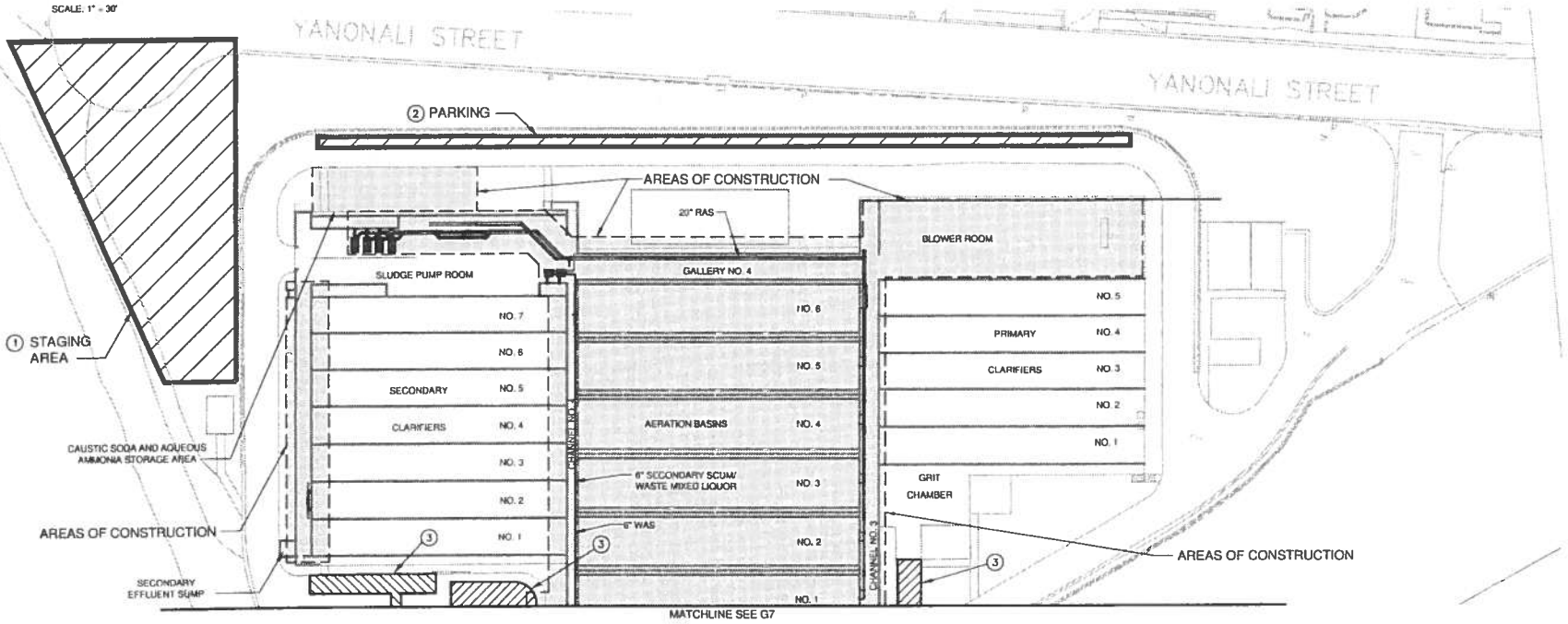
BROWN AND CALDWELL
IRVINE, CALIFORNIA

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

KEY NOTES:

1. STAGING AREA FOR THE AERATION SYSTEM IMPROVEMENTS PROJECT.
2. CONTRACTOR PARKING AREA.

SCALE: 1" = 30'



PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

APPROVED: - -
CITY ENGINEER DATE -
ORIGINAL SIGNED DATE -

DESIGN - -
DRAWN - -
CHECKED - -

10% DRAFT

NO.	REVISIONS	DATE	APPROVED

EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENT

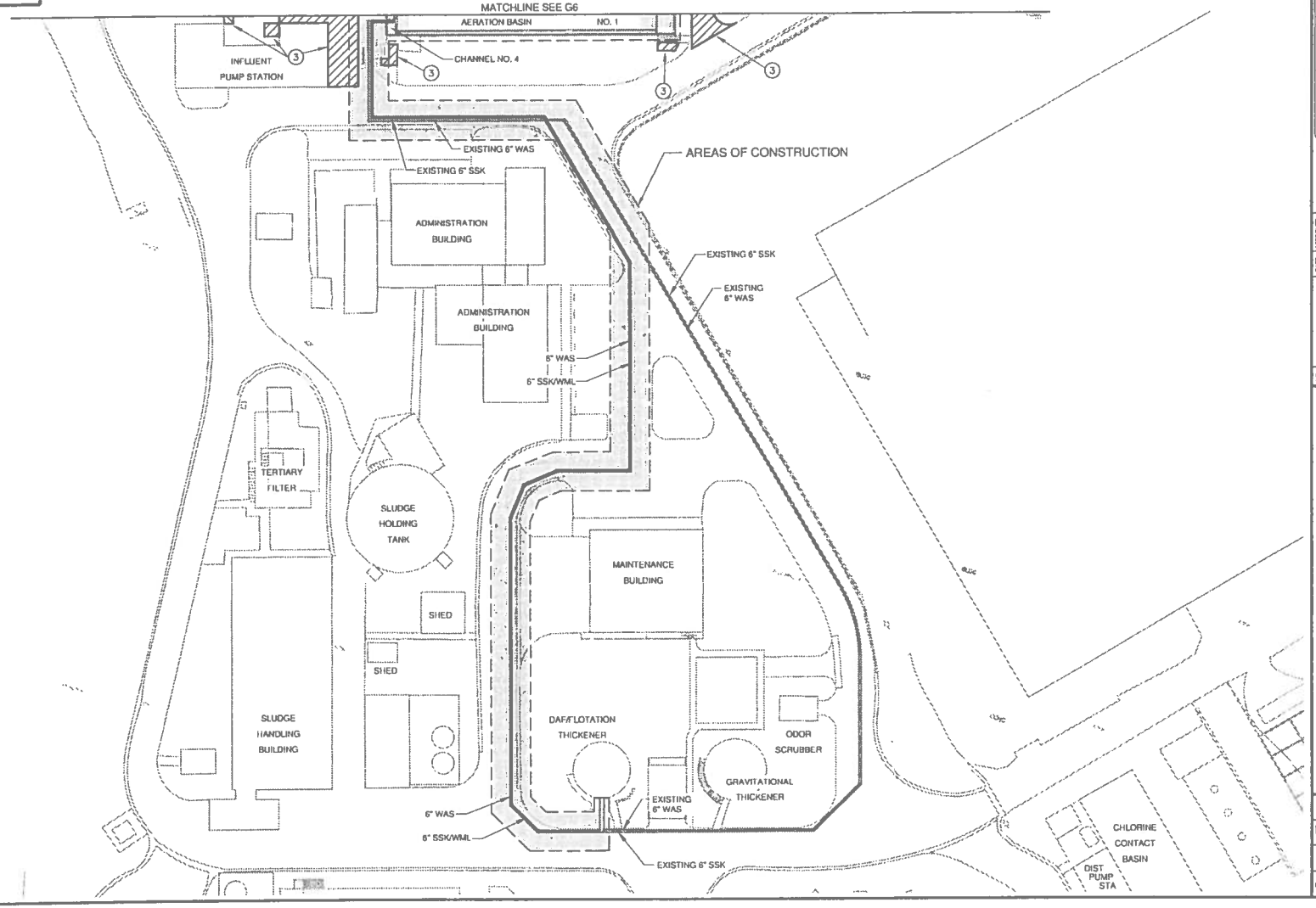
RAS AND AERATION BASINS SITE PLAN

PROJ NO 143962 | SHT DES G2
DWG NO X-X-XXXX
SHT 3 OF 43

BROWN AND CALDWELL
IRVINE, CALIFORNIA

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" SCALE ACCORDINGLY)

SCALE: 1" = 30'



PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
APPROVED:
CITY ENGINEER DATE
ORIGINAL SIGNED DATE

DESIGN
DRAWN
CHECKED

10% DRAFT

NO.	REVISIONS	DATE	APPROVED

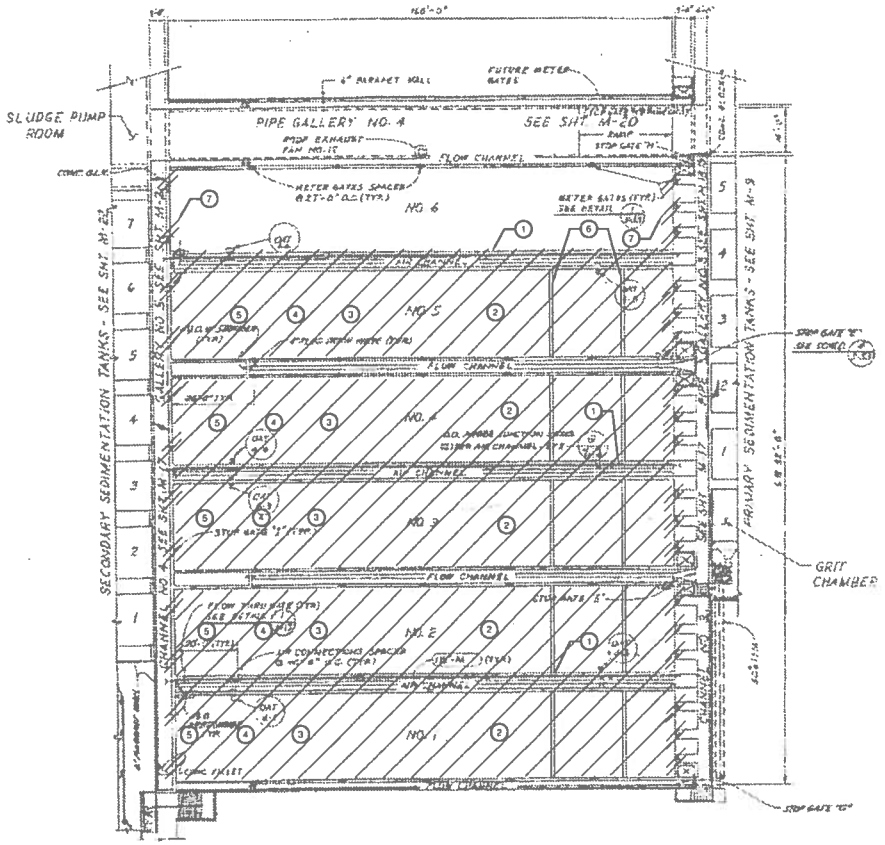
EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS

WML & WAS SITE PLAN

PWE NO. -
PROJ NO. 143962 SHT DES G3
DWG NO. X-X-XXXX
SHT. 4 OF 43

BROWN AND CALDWELL
IRVINE, CALIFORNIA

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)



KEY PLAN - AERATION TANKS
NOT TO SCALE

KEY NOTES:

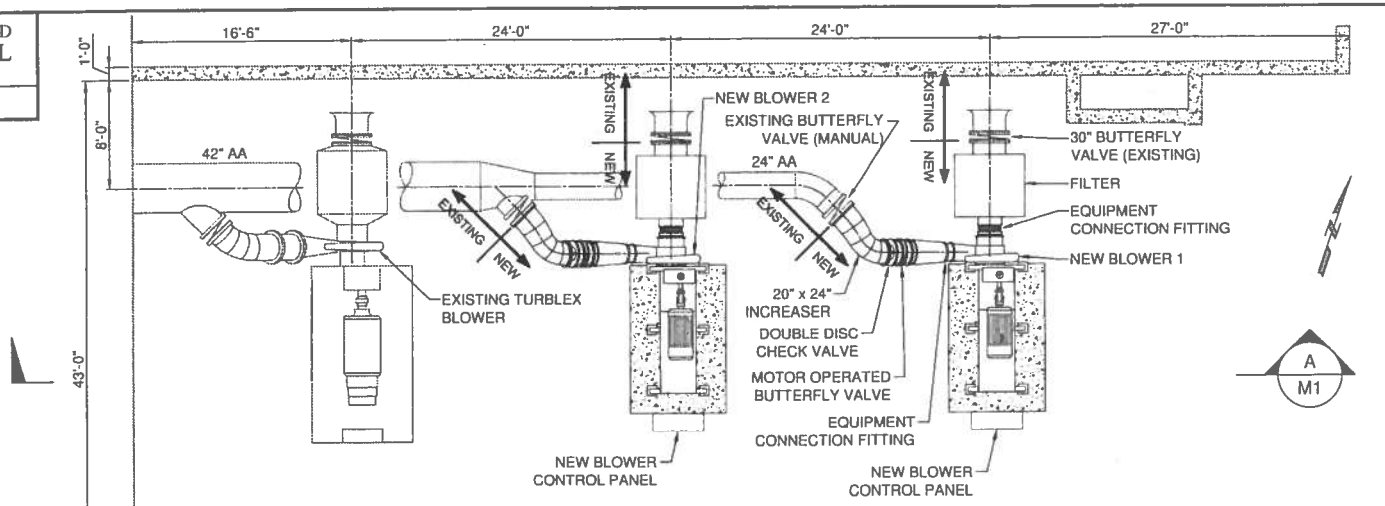
1. REMOVE AERATION AIR PIPING FROM AIR CHANNEL. PIPING IS 20"Ø AT THE EAST SIDE, REDUCING DOWN TO 10"Ø AT THE WEST SIDE.
2. REMOVE DIFFUSERS, AIR DISTRIBUTION GRID, PIPING, VALVES, SUPPORTS. TYP OF BASINS 1-6.
3. SALVAGE EXISTING SIDE MOUNTED MIXERS FROM EACH BASIN AND HAND OVER TO CITY. REMOVE EXISTING MIXER SUPPORTS, CONTROL PANELS, AND APPURTENANCES. TWO MIXERS PER BASIN. TYP OF BASINS 1 5.
4. REMOVE EXISTING POWER AND CONTROL FOR DO ANALYZERS AND MIXERS BACK TO SOURCE. REMOVE EXISTING CONDUITS UP TO BASIN WALL.
5. SALVAGE DO ANALYZERS AND HAND OVER TO CITY.
6. REMOVE UPSTREAM AND DOWNSTREAM FRP BAFFLES AS SHOWN.
7. REMOVE THREE INFLUENT AND TWO EFFLUENT GATES PER BASIN. TYPICAL OF AERATION BASINS 1 THRU 6.

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
APPROVED — DATE —
CITY ENGINEER — DATE —
ORIGINAL SIGNED DATE —
DESIGN
DRAWN
CHECKED
10% DRAFT
DATE APPROVED
NO. REVISIONS

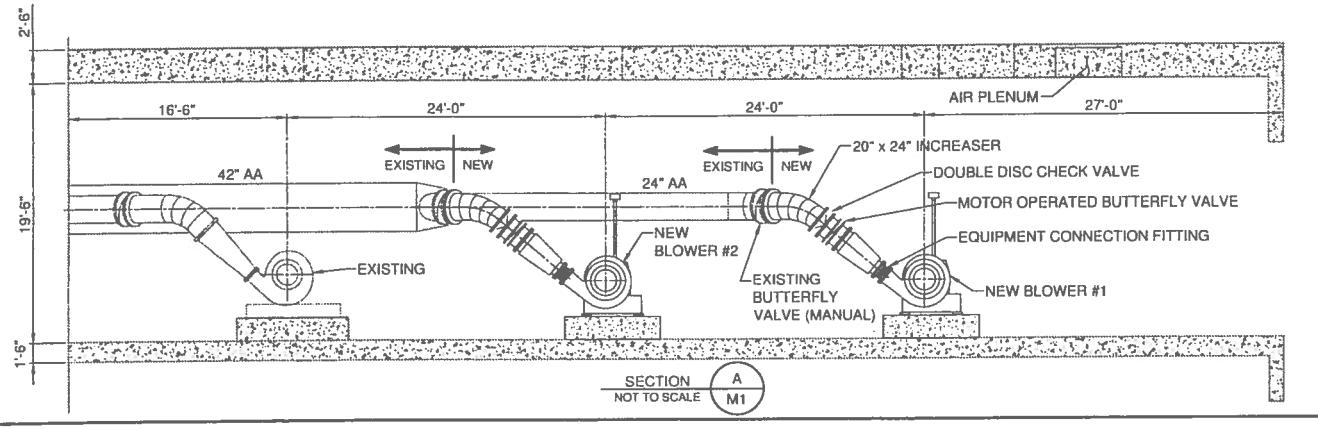
EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS
OVERALL AERATION BASINS
DEMO SITE PLAN

PROJ. NO. 141973
PROJ. NO. D4
DWG. NO.
SHT. 13 OF 43

BROWN AND CALDWELL
IRVINE, CALIFORNIA



PARTIAL PLAN - BLOWER BUILDING
NOT TO SCALE



SECTION A/M1
NOT TO SCALE

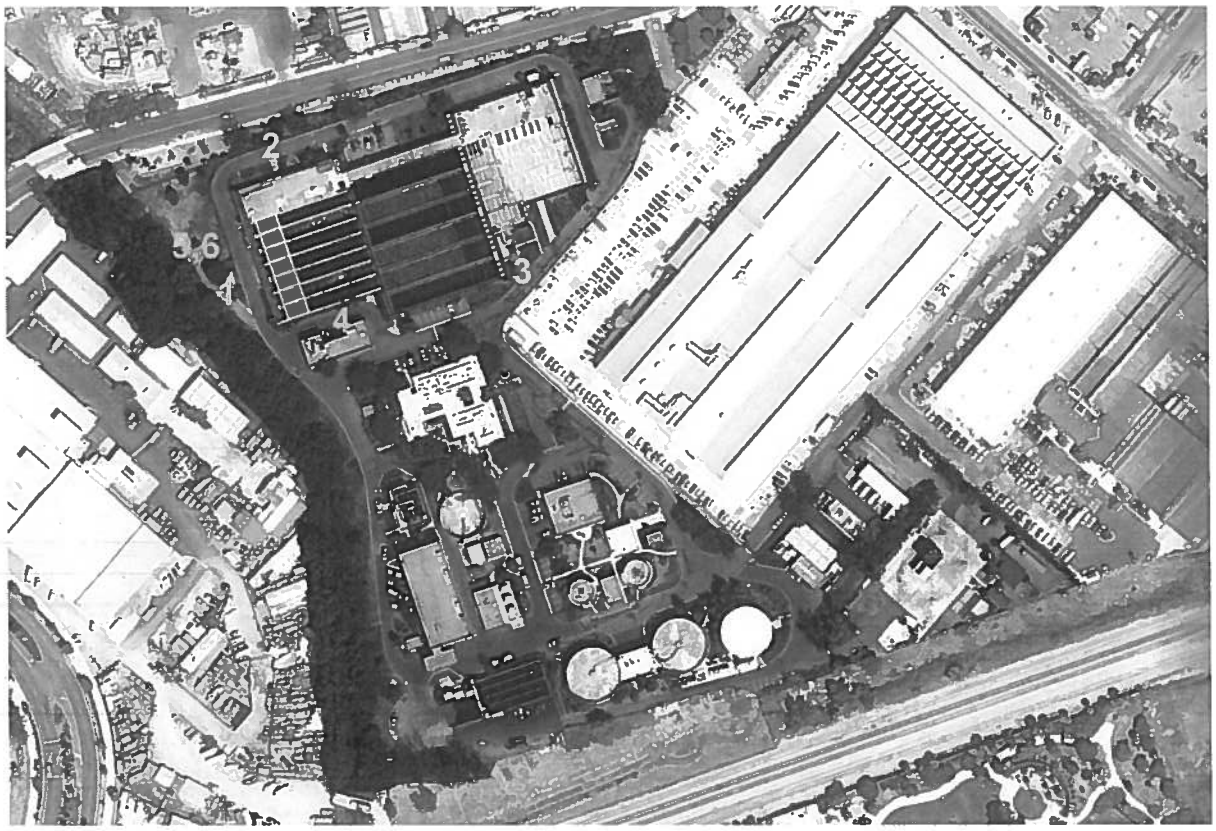
EL ESTERO WWTP SECONDARY SYSTEM IMPROVEMENTS
BLOWER AND COMPRESSOR ROOM
PLAN AND SECTION

10% DRAFT

141973 M1

SHT. 18 OF 43

Attachment: Photographs



El Estero Waste Water Treatment Plant Vicinity Map, 520 East Yanonali

EXHIBIT C

1. West Elevation, 520 East Yanonali

2. Northern Elevation, 520 East Yanonali

3. East Elevation, 520 East Yanonali

4. South Elevation, 520 East Yanonali

5. Panoramic, Facing West, 520 East Yanonali

6. Panoramic, Facing Laguna Channel 520 East Yanonali

City of Santa Barbara
Public Works Department
www.SantaBarbaraCA.gov

November 15, 2013

Main Office
630 Garden Street
P.O. Box 1990
Santa Barbara, CA
93102-1990

Administration
Tel: 805.564.5377
Fax: 805.897.2613

Engineering
Tel: 805.564.5363
Fax: 805.564.5467

Facilities
Tel: 805.564.5415
Fax: 805.897.2577

Street Maintenance
Tel: 805.564.5413
Fax: 805.897.1991

Transportation
Tel: 805.564.5385
Fax: 805.564.5467

Water Resources
Tel: 805.564.5387
Fax: 805.897.2613

Santa Barbara Planning Commission
City of Santa Barbara
630 Garden Street
Santa Barbara, California 93101

SUBJECT: Submittal of Coastal Development Permit Application for the El Estero Wastewater Treatment Plant Secondary Treatment Process Improvements Project (APN 017-540-005)

Dear Commissioners:

The City of Santa Barbara Public Works Department is pleased to submit a Coastal Development Permit application for your review and consideration for the El Estero Wastewater Treatment Plant (El Estero) Secondary Treatment Process Improvements Project (Project) at 520 East Yanonali Street.

Discretionary Approval Requested

A Coastal Development Permit to allow development in the Appealable Jurisdiction of the City's Coastal Zone (SBMC Section 28.44).

Per the requirements of 14 CCR §13252 (a) (3), as the Project is partially within 50 feet of the top of bank setback of the Laguna Channel, and is in the appealable jurisdiction of the Coastal Zone (SBMC 28.44), the City requests a Coastal Development Permit for the proposed Project from the City of Santa Barbara Planning Commission.

Background and Purpose

The purpose of the proposed Project is to complete improvements to existing wastewater treatment plant secondary processes at El Estero.

El Estero is an activated sludge treatment plant that treats approximately 8 million gallons of wastewater per day. Built in the 1970s, El Estero includes preliminary treatment, primary treatment, secondary treatment, chlorination and dechlorination facilities, ocean outfall, and a solids handling unit process.

In 2010, the City hired Brown and Caldwell to provide an assessment report, and subsequently, preliminary design services for the Project. The Project objectives were to address El Estero's highly variable secondary effluent, so that secondary

effluent could be effectively filtered for recycled water production, and to address the longstanding issues with operational inflexibility, energy inefficiency, non-uniform flow distribution to the secondary clarifiers, and secondary treatment capacity. The preliminary design work identified significant secondary process improvements to El Estero's current processes; and as a result, the City has decided to change the existing secondary treatment operating strategy to a step-feed Biological Nitrogen Removal (BNR) process.

The City is currently pursuing a State Revolving Fund (SRF) Loan to fund this $20 million dollar project. The SRF loan program provides 20-year loans at an interest rate lower than the State General Obligation Bond rate. This low interest rate offers significant savings for wastewater ratepayers.

Project Site

El Estero is located at 520 East Yanonali Street in the City of Santa Barbara, between Garden Street and Calle Cesar Chavez. The main access to El Estero is through an access gate just off Yanonali Street on the northeast side. A secondary access gate is located on the southeast side of El Estero off Quinientos Street. The main access road and various secondary access roads provide vehicular access to the various process areas within El Estero.

Other Projects at El Estero

Currently, the Public Works Department has submitted plans to restore the drainage on El Estero's property, south of the main facility. This project is currently in the 30-Day DART review process with the Community Development Department for a Coastal Development Permit (MST2013-00433).

In addition, the Public Works Department recently submitted plans to replace the tertiary filtration system at El Estero. This project is also in the 30-Day DART review process with the Community Development Department for a Coastal Development Permit (MST2013-00388). This project is tentatively scheduled to start construction in spring 2014 with an estimated completion date of summer 2015.

Lastly, the Public Works Department recently initiated development of a Master Drainage Plan for El Estero with the ultimate goal of retaining all stormwater on-site, by routing all stormwater runoff back to the front of El Estero, where it will be treated prior to ocean discharge. This Master Drainage Plan will be incrementally implemented over the course of several years with various planned Capital Improvement Projects.

Zoning and Land Use Designations

El Estero is located within the City of Santa Barbara Zone OM-1 (Ocean Oriented Light Manufacturing), S-D-3 (Coastal Zone), and has a General Plan Land Use Designation of Institutional. U.S. Highway 101 is directly north of the project site, and the Union Pacific Railroad is south of the site.

Zoning and land use designations surrounding the site are as follows:

- Northwest of the Project site:
  - Zoning designation: M-1, S-D-3 (Light Manufacturing, Coastal Zone)
  - General Plan Land Use: Industrial

- West of the Project site:
  - Zoning designation: OM-1, S-D-3 (Ocean Oriented Light Manufacturing, Coastal Zone)
  - General Plan Land Use: Ocean Related Industrial

- South of the Project site:
  - Zoning designation: HRC-2, SP-1, S-D-3 (Hotel Related Commerce, Specific Plan, Coastal Zone)
  - General Plan Land Use: Parks/Open Space

- East of the Project site:
  - Zoning designation: OM-1, S-D-3 (Ocean Oriented Light Manufacturing, Coastal Zone).
  - General Plan Land Use: Ocean Related Industrial

See the Project Vicinity Map on Sheet 1 (Cover Sheet) of the attached project plans (Attachment 1).

Existing Facilities

The existing facilities at El Estero include various process equipment and yard piping, surface drainage features, an access road, and parking within a fenced site. Currently, storm water flows at the site are discharged to a reinforced concrete storm drain system or directly off-site. The storm drain system discharges into Laguna Channel located on the east side of El Estero.

The existing secondary system is a conventional activated sludge process consisting of six rectangular aeration basins and seven rectangular secondary clarifiers. There are two single-stage Roots blowers, or compressors, and one Turblex blower for aeration. These blowers provide process air to the aeration basins, as well as the grit chamber and channel aeration. One of the six aeration basins has been converted to a flow equalization basin. Each aeration basin is equipped with fine bubble diffusers. The original plant was designed with coarse bubble diffusers.

Each aeration basin (with the exception of the flow equalization basin) is equipped with a two-stage selector. The selector is divided into two equal volume compartments separated by Fiberglass-Reinforced Panels. The total selector volume equates to 25 percent of the total aeration basin volume.

Return Activated Sludge (RAS) is removed from each on-line secondary clarifier by hydrostatic pressure. From the secondary clarifiers, the RAS flows to a wet well. RAS is pumped to the aeration basins from this wet well. Waste activated sludge (WAS) is also pumped from this wet well to the DAFT for thickening prior to discharge to the anaerobic digesters.

Project Description

The Project would include modifications to El Estero's secondary treatment processes, which are divided into the following categories:

- Upgrade the secondary process to BNR with the capability of switching to sludge re-aeration mode during periods of high flow.
- Upgrade the existing aeration system by replacing the blowers, piping, mixers, diffusers, and changes to the selector zones.
- Construction of cut-throat flumes to provide passive, true flow splitting to the secondary clarifiers, regardless of how many aeration basins and secondary clarifiers are in operation.
- Upgrade the existing secondary clarifier sludge withdrawal system with larger suction pipes, better flow measurement and control, new RAS pumps, and replace existing WAS and RAS force mains.
- Adopt mixed liquor wasting to control the Solids Retention Time (SRT) in the secondary system. Integrate a surface wasting structure (classifying selector) to mitigate the foam accumulation within the system.
- Implement nitrate return by recycling a portion of secondary effluent back to the headworks to address odor and clarifier performance issues and reduce chemical costs.

The Project would include zero cubic yards of cut and zero cubic yards of fill. The average slope of the property is 0.08%.

Biology

The Project is located in close proximity to Laguna Channel in the City of Santa Barbara. The existing and proposed building footprint is within the 50-foot setback from the top of the bank. A Biological Report has been prepared by Dudek, Incorporated (Attachment 2). Biological protection measures suggested in the Biological Assessment are incorporated in this Project's description.

Landscaping

No landscaping will be removed as part of the Project.

Parking

El Estero currently has 52 parking spaces. There are no specific parking requirements in the OM-1, SD-3 zone. As the use of the secondary treatment facility is not changing, there will be no change in parking demand as a result of the Project.

Lighting

No lighting changes are proposed as part of the Project.

Archaeology

An Archaeological Survey Report was prepared for the Project by Dudek (Attachment 3) in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations found in 36 CFP 800, which requires federal agencies to take into account the effects of their projects on historic properties.

The Archaeological Survey Report found that no previously unrecorded prehistoric or historic cultural resources were recorded during the intensive archaeological survey. The Project would occur entirely within previous fill soils.

The Archaeological Survey Report recommended that if any unexpected, redeposited, buried cultural materials are encountered during construction, work should stop in the area until a qualified archaeologist can evaluate the nature and significance of the find.

Construction

The proposed Project would be constructed on previously developed areas within El Estero. No changes would be made to existing topography.

- No foundation work;
- Some concrete demolition within the existing structure;
- Reconfiguring flow paths within the aeration basins;
- Modification from plug flow to step fed biological nitrogen removal.

An abbreviated summary of construction activities is below:

- Demolish existing aeration equipment and wye-wall air piping in Aeration Basins 1 through 5, along with baffles in Aeration Basins 1 through 6;
- Eliminate the three inlet gates and five step-feed gates to each aeration basin. Construct two appropriately sized cut-throat flumes per each basin;
- Motorize the gates to cut-throat flumes so that the switch to sludge re-aeration mode can be implemented remotely using SCADA;
- Construct new concrete baffle walls to create an anaerobic selector zone at the

beginning of each aeration basin, and to create the step-feed anoxic selector zone in the middle of each basin;
- Divide each anoxic selector zone into two zones using baffles;
- Aerate the aerobic zones using fine bubble diffusers;
- Install three pH probes to monitor pH;
- Install two DO probes in each aeration basin;
- Replace the two existing Roots blowers with two new gear-drive high-speed single-stage centrifugal blowers (22,000 actual cubic feet per minute each) ,and provide control logic to new aeration system;
- Construct cut-throat flumes to improve flow distribution to the secondary clarifiers;
- Overhaul the hydrostatic sludge withdrawal system from the secondary clarifiers with larger suction pipes and better flow measurement and control;
- Implement nitrate return by recycling a portion of secondary effluent back to the headworks.

Construction Schedule:

Construction would likely begin in 2015 and would occur over a 2-year period. The contractor would sequence work such that El Estero would continue to operate and treat wastewater. In addition, the following will be contractor requirements:

- All Asphalt Concrete and Portland Cement Concrete debris will be taken to a recycling facility and will not be disposed at a landfill.

- An orange temporary construction fence would be installed at the edge of the adjacent riparian habitat associated with the Laguna Channel. The fence would be installed, elevated two inches above ground, so that species such as frogs and snakes could pass through the corridor. The fence would be removed post-construction.

- No lead-based paint or asbestos is expected to be encountered during the Project. No hazardous materials would be used or generated as part of the construction of the Project.

- The contractor is expected to have a trailer and port-a-potty in their staging area. In addition, the type of equipment expected to be used consists of dump trucks, pick-ups, tractors, and trailers.

- Construction would be limited to eight hours per day, five days a week. There will be an occasion for night work, and during all night work, construction lighting will be shielded away from the creek.

Staging:

A temporary construction lay down area would be located in a dirt covered area in the

northwestern portion of the Project site (see Sheet 2 of Attachment 1). The site is currently used as a contractor yard and will continue to be used as such after completion of the Project. The temporary lay down area is within 50 feet of the top of bank of Laguna Channel. In order to protect the riparian area adjacent to the lay down area, all hazardous materials will be stored outside of the 50-foot creek setback, orange construction fencing will be placed along the dripline of the riparian habitat in order to delineate the sensitive habitat and erosion control devices such as straw wattle will be placed at the toe of the orange fencing. The contractor will be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and implement the SWPPP prior to starting construction. Best practices erosion control details are located on Sheet 21 of the Project plans (Erosion Control Details). Additional information regarding the SWPPP is explained below.

Biological Protection Measures:

The following biological protection measures will be used to avoid adverse impacts to riparian habitat and biological resources within and adjacent to the Project, as provided by Dudek in their Biological Assessment dated October 28, 2013 (Attachment 2).

BIO – 1. Pre-construction Nesting Bird Survey. A pre-construction survey for nesting birds will be conducted by a qualified biologist to determine if active nests of special-status birds, or common bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 300 feet of the construction zone within one week prior to construction or site preparation activities that occur during the nesting/breeding season of native bird species (March 1 through August 30).

BIO – 2. Nesting Bird Buffers and Requirements. If active nests are found, a non-construction buffer will be established at a minimum of 100 feet (this distance may be greater depending on the bird species and construction activity, as determined by the biologist) around the nest site where it overlaps with work areas. Clearing and construction within the no-construction buffer shall be postponed or halted, at the discretion of the biologist, until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting. In addition, all active nests will be mapped with a GPS unit and nest locations with 100-foot buffers overlain on aerial photographs (See Attachment 5) to provide regular updated maps to inform the Project manager/engineer and construction crew of areas to avoid. The City appointed biologist should also serve as a construction monitor during the breeding season to ensure that there are no inadvertent impacts to nesting birds.

Operation

The proposed Project would be operated within the existing El Estero's boundary. No additional employees would be required to operate the upgraded secondary facility.

Pre-Application Reviews

Architectural Board of Review (ABR)

The proposed Project does not require ABR review as there are no changes to the exterior of the structure, nor any changes to the footprint or surrounding landscaping.

Thank you for your consideration. Please feel free to contact me at 564-5486 or larroyo@santabarbaraca.gov if you have any questions or require additional information.

Sincerely,

Lisa Arroyo
Supervising Civil Engineer

LA/sk

cc (without attachments):
Chris Toth, Wastewater System Manager

Attachments:
1. Select sheets from the Project Plans (6 sheets, 10 copies)
2. Biological Report - El Estero Waste Water Treatment Plant Tertiary Treatment (Dudek, 2013)
3. Archaeological Survey Report - El Estero Wastewater Treatment Plan Tertiary Filtration Replacement and Secondary Treatment Improvement Projects (Dudek, 2013)
4. State Revolving Fund Checklist for the Project
5. Color Photographs of the Site

APPLICABLE COASTAL ACT PUBLIC RESOURCES CODE SECTIONS

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

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

Section 30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30254. New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal-dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

APPLICABLE LOCAL COASTAL PLAN POLICIES

GENERAL POLICIES

Policy 1.1 The City adopts the policies of the Coastal Act (Public Resources Code Sections 30210 through 30263) as the guiding policies of the land use plan.

Policy 1.2 Where policies within the land use plan overlap, the policy which is the most protective of the resources, i.e. water, air, etc. shall take precedence.

Policy 1.3 Where there are conflicts between the policies set forth in the land use plan and those set forth in any other element of the City's existing General Plan or existing regulations, the policies of the land use plan take precedence.

ACCESS POLICIES

WATER AND MARINE ENVIRONMENTS POLICIES

General Biotic Resources

Policy 6.1 The city, through ordinance, resolutions, and development controls, shall protect, preserve, and, where feasible, restore the biotic communities designated in the City's Conservation Element of the General Plan and any future annexations to the City, consistent with PRC Section 30240.

Action

- City to enact necessary ordinances, resolutions, and development controls.

Creek Environments

Existing policies relating to creeks have been cited in this section and the section relating to "Hazards". The following recommendations serve to augment those already in effect.

Policy 6.8 The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.

Actions

- The feasibility and advisability of using reclaimed water for the purpose of enhancing creek flow, in the event a tertiary wastewater treatment system is developed, shall be studied; if it is deemed feasible and advisable, use of reclaimed water for creek flow enhancement shall be implemented.
- The City shall make application to all Federal and State agencies, as necessary, including the California Coastal Conservancy, for the purpose of funding the following projects:
    - Planning for and implementation of the restoration, enhancement, and maintenance of the coastal zone sections of the City creeks.

Policy 6.9 The City shall support the programs, plans, and policies of all governmental agencies, including those of the Regional Water Quality Control Board with respect to best management practices for Santa Barbara's watersheds and urban areas.

Policy 6.10 The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.

Action

- The City shall conduct site specific investigation of Arroyo Burro Creek, Mission Creek, Sycamore Creek, and the Central Drainage Channel within the coastal zone to determine the required setbacks to be installed in the future development.

OCEAN DEPENDENT ACTIVITIES POLICIES

In order to address the issues identified in Section II of this chapter, to provide solutions to existing plans and policies, and to conform with Coastal Act Policies 30220, 30224, 30234 and 30255, the following policies are proposed.

Policy 7.5 Land area inland of the proposed easterly breakwater shall be designated to permit and encourage ocean-oriented industrial uses.

Actions

- The area bordered by Garden Street on the west, proposed Yanonali Street extension on the north, the City Wastewater Treatment Plant to the east, and the existing railroad right-of-way to the south shall be rezoned to permit and encourage ocean-dependent and ocean-related industrial and commercial uses such as fish processing, boat sales, boat storage and repairs. Other general commercial and industrial development shall be permitted by special use permit if it can be found that such use would:
  - (1) Be compatible with ocean-dependent or related uses, and;
  - (2) The property would have no economic value if limited to ocean-dependent or related uses. This finding shall be substantiated by competent evidence determined by the City to be objective which indicates no present or future demand for ocean-dependent or related uses.

VISUAL QUALITY POLICIES

Policy 9.1 The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced. This may be accomplished by:

(1) Acquisition of land for parks and open space;

(2) Requiring view easements or corridors in new development;

(3) Specific development restrictions such as additional height limits, building orientation, and setback requirements for new development;

(4) Developing a system to evaluate view impairment of new development in the review process.

Actions

- Explore Federal, State, and local funding sources for park and open space acquisition.
- Delineate view corridor locations on new construction/development plans by additional building limits, building orientation, and setback requirements.
- Establish standards of acceptable view protection to be utilized by developers, City staff, and discretionary bodies to ascertain a project's height, setback, and clustering of buildings.

CULTURAL RESOURCES POLICIES

In that existing City policy generally meets the purpose of the relevant Coastal Act Policy, the following actions are recommended in order to fully address this issue on conformance with the intent of the Act:

Actions

- Amend the policies of the Conservation Element to the General Plan where necessary to include the protection of important paleontological resources, or provide adequate mitigation measures for any adverse impacts upon these resources.
- Develop the necessary amendments to the City's Zoning ordinance to provide for the protection and preservation of significant archaeological and paleontological resources.