PLANS FOR
SAN MATEO WWTP NUTRIENT REMOVAL AND WET WEATHER FLOW
MANAGEMENT UPGRADE AND EXPANSION PROJECT
CITY OF SAN MATEO, SAN MATEO COUNTY, CALIFORNIA
CITY PROJECT NO. 46T003

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2. G.02  SHEET LIST
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4. C2.01  AREA 1 GRADING PLAN
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81. L2.67  LANDSCAPE SITE PLAN
82. L2.68  LANDSCAPE SITE PLAN
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NOT TO SCALE
ARIA 5 GRADING PLAN

C2.05

7 55

SAN MATEO WWTP NUTRIENT REMOVAL AND WET WEATHER FLOW MANAGEMENT UPGRADE AND EXPANSION PROJECT

CITY PROJECT No. 46T003

SHEET NO.

SHEET OF

REV. NO. DESCRIPTION BY DATE

SAN MATEO WWTP

EXISTING DIGESTERS

EXISTING ELECTRICAL SHOP

WAREHOUSE

PROPERTY LINE (TYP)

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REMOVE EXISTING DIGESTERS

REMOVE EXISTING ELECTRICAL SHOP

SPECIAL USE PERMIT FORMAL APPLICATION PACKAGE - NOVEMBER 17, 2017
San Mateo WWTP Nutrient Removal and Wet Weather Flow Management Upgrade and Expansion Project

City Project No. 46T003

AREA & GRADING PLAN

SPECIAL USE PERMIT FORMAL APPLICATION PACKAGE - NOVEMBER 17, 2017

- REMOVE EXISTING FILTERS
- CONVERT EXISTING AERATION BASINS TO FLOW EQUALIZATION

DIMENSIONS IN FEET

SCALE: 1" = 60'
San Mateo WWTP Nutrient Removal and Wet Weather Flow Management Upgrade and Expansion Project
City Project No. 46T003

LIGHTING SHEET
E1.01

LIGHTING SCHEDULE

<table>
<thead>
<tr>
<th>TYPE</th>
<th>DESCRIPTION</th>
<th>MANUFACTURER</th>
<th>MODEL</th>
<th>WATTS</th>
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<tbody>
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<td>A</td>
<td>WALL MOUNTED LIGHT</td>
<td>LITHONIA LIGHTING</td>
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<td>18W</td>
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<td>B</td>
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<td>LITHONIA LIGHTING</td>
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DUAL USE CLARIFIERS
BIOLOGICAL NUTRIENT REMOVAL BASINS
MEMBRANE FILTRATION BASINS
MBR EQUIPMENT BUILDING
BIOLOGICAL NUTRIENT REMOVAL BASINS
ADMIN BUILDING
HEADWORKS
DUCTS

NOT FOR CONSTRUCTION
LANDSCAPE DESIGN SUMMARY
The landscaping for the Nutrient Removal and Wet Weather Flow upgrade for the San Mateo Wastewater Treatment Plant highlights the conceptual juxtaposition of the plant and natural water treatment systems. Transparency in both the architecture and landscape create educational opportunities for site users. A pedestrian path through the site allows users to see the processes of wastewater treatment in contrast to that of a bioswale. Native plants, open sight lines, and a strengthened pedestrian access connect this site to the greater Bay Area.

PROJECT GOALS
1. Integrate the functional requirements of the facility
2. Form an identity for the WWTP inspired by
   - The Bay Area's design legacy and technological innovation
   - The City's sustainable initiative for healthy environmental, economic, and social development
3. Maximize open space
   - Balance the built and natural environment
4. Enhance the community
   - With pedestrian connection
   - Improved visual aesthetics
   - Education opportunities
5. Create an architectural landmark in the Bay Area

LANDSCAPE DESIGN SUMMARY
The landscaping for the Nutrient Removal and Wet Weather Flow upgrade for the San Mateo Wastewater Treatment Plant highlights the conceptual juxtaposition of the plant and natural water treatment systems. Transparency in both the architecture and landscape create educational opportunities for site users. A pedestrian path through the site allows users to see the processes of wastewater treatment in contrast to that of a bioswale. Native plants, open sight lines, and a strengthened pedestrian access connect this site to the greater Bay Area.
DESIGN CONCEPT

The San Mateo Wastewater Treatment Plant is designed to be "The Gem of the Bay." It celebrates both the necessary industrial infrastructure of the treatment plant and the natural treatment system of nature.

The plant itself is a sculptural feature not to be hidden but to be revealed. Screens curve around the edge of the structures highlighting the architectural form and shape of the plant. Installed on these screens are educational demonstrations that highlight the treatment process.

The front edge of the plant is landscaped with a native grassland. Bioswales in the grassland treat the site's stormwater naturally. This natural system reflects the Historic wetland marshes that treat and filter water along the bay organically. It is juxtaposed by the industrial cleaning system of the treatment plant which is necessary to clean the wastewater in a major urban area.

A public path brings pedestrians up to the plant and curves through the natural area. Along the path are educational demonstrations informing the public of the ecological processes in the landscape and the similar treatment processes occurring in the plant.

The view from the road toward the treatment plant has been framed with trees. The plant is left visible, to celebrate its sculptural form, and the all important function to treat and clean our wastewater before returning it to the natural environment.
SITE OVERVIEW

From this bird's eye view, the juxtaposition of the industrial architecture and the natural landscape is revealed. Rather than attempting to use landscape to screen and hide the plant, it has been designed to complement the architecture. Together they tell an educational story about the mirrored cleaning processes of the wastewater treatment plant and nature.

A pedestrian path brings the public along the treatment plant and through the recreated natural area. The path crosses bioswales that infiltrate and treat the site's stormwater. The path continues to the new Administration Building that will have an educational area. A publicly accessible bridge provides a unique opportunity for people to walk from the educational area over to the facilities, where they can look at the treatment processes. From the Administration Building, the path continues south to the parks, dog park, and school beyond the plant.

The landscape design provides pedestrian access along the treatment plant with educational demonstrations and connectivity between surrounding neighborhoods and the Bay Trail.
SITE ENTRY AND HEADWORKS

This is the view for pedestrians as they enter the site from Detroit Drive and East Third Avenue. The sculptural form of the facility architecture stands out adjacent to the bay side landscape. Translucent screening around the headworks allows features of the plant to be visible, yet softened. Lighting across the translucent screening can create a dramatic effect. Educational diagrams and exhibits can be designed along the building edge.

The sidewalk along Detroit Drive has been widened, and trees have been planted to create shade. This provides a safe and pleasant connection between the neighborhoods south of the plant and the Bay Trail. To the southeast, the path next to the bioswale area can be seen.
CLARIFIER AND BIOSWALE
A path anchors the industrial plant to the natural environment. A widened area with seating and interpretive signage creates an outdoor classroom. The contrast between the natural bioswales and the plant will create a unique place where visitors can learn about nature’s ecological systems and the work of the plant to clean wastewater and return it safely to the Bay. The clarifiers are screened with a translucent material that can be lit to reveal the sculptural form of the plant.
THE ADMINISTRATION BUILDING

The new Administration Building serves as the public interface for the plant. An entry plaza and terrace provide a space for visitors to gather outside the main lobby. An educational area is located on the first floor and a bridge to the facility allows visitors a view into the operating plant.

The theme of native and climate-adapted shrubs and grasses is continued in the landscaping around the Administration Building. Trees along the sidewalk provide shade and a safety barrier between traffic and pedestrians.
SOUTH BIRD'S EYE
A new sidewalk is located on the west side of Detroit Drive. The widened path improves connectivity and safety for pedestrians walking from the surrounding neighborhoods to the Bay Trail. Trees planted along the path create shade and a protective barrier between pedestrians and the trucks entering the plant. The sidewalk has been placed across the street from the new plant to provide maximum security for the plant. Gates and a secure fence surround the plant.
BIOSWALE PATH

A dual-use pedestrian and bicycle path allows visitors to interact with bioswales by creating overlooks, seating, access steps, and signage. The signage will tell the story of clean water both by way of the wastewater treatment plant and nature. The 10-foot minimum wide path plays off the curves of the treatment plant clarifiers. Surrounding the path is a palette of native bioswale grasses and shrubs.
LANDSCAPE SITE PLAN

L3.05

LIMIT OF WORK

MBR BASINS

MBR EQUIPMENT BLDG

POLE LIGHT, TYP, BED

MEMBRANE FILTRATION BASINS

CNG FILLING STATION

CNG EQUIPMENT

(N) CONCRETE PEDESTRIAN PATH

(N) PLANTING, TYP

(E) TRANSFORMER

(E) TREES TO REMAIN

PROPERTY LINE, TYP

(E) WALL TO REMAIN

100

(E) DIGESTERS

LIMIT OF WORK

MBR ELECTRICAL BLDG

MATCHLINE, SEE SHEET L3.06

MATCHLINE, SEE SHEET L3.03

MATCHLINE, SEE SHEET L3.02

DIGESTERS

SAN MATEO WWTP NUTRIENT REMOVAL AND WET WEATHER FLOW MANAGEMENT UPGRADE AND EXPANSION PROJECT

CITY PROJECT NO. 46T003

SPECIAL USE PERMIT FORMAL APPLICATION PACKAGE - NOV 17, 2017

DESIGNED BY:

DRAWN BY:

QC CHK'D BY:

PROJECT NO:

SCALE:

SUBMITTAL:

DATE:

DATE:

DATE:

S:\Active Job Files\San Mateo WWTP SD and FD 17007A\CAD\02-SUP\RHAA\Plot\L3.05 Landscape Site Plan.dwg

11/16/2017 4:58 PM Megan Dale

2 2 5  M i l l e r  A v e n u e ,  M i l l  V a l l e y ,  C A  9 4 9 4 1

T 415 383 7900 F 415 383 1433 www.rhaa.com
### New Administration Building Parking

<table>
<thead>
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<tbody>
<tr>
<td>Short Term Parking (S x 1')</td>
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<tr>
<td>Visitor (V)</td>
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<tr>
<td>ADA Spaces (1)</td>
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<tr>
<td>Flex Use (2)</td>
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<tr>
<td>Staff Parking (32)</td>
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<td>Flxible (4)</td>
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<td>Trash &amp; Recycling (4)</td>
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<td>Entry Plaza (2)</td>
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<tr>
<td>Plant (6)</td>
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<td>City (6)</td>
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<td>Lab Delivery (2)</td>
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<td>Flexible (4)</td>
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<td>Total Parking (67)</td>
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### EV Vehicle Charging Stations

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<tbody>
<tr>
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The total parking required for the Administration Building is 1 space per 325 square feet. At 16,000 sf, the required spaces to meet code is 48. When accounting for needed uses, the total needed parking is 49, which is 1 above the number required to meet code (Code 27.64.160 Section 7.B).

### Bike Parking

<table>
<thead>
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<tr>
<td>Long Term (2)</td>
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The required bike parking is 1 short term space per 20,000 sf and 1 long term space per 10,000 sf. At 16,000 sf, 1 short term and 2 long term are required for the Administration Building (Code 27.64.262.7B).

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**Note:** The Plan was prepared by RHAA, Inc. A copy of the original AutoCad file is available upon request. The Plan is for the purpose of Preliminary Engineering Review and should not be used for construction purposes.
LANDSCAPE SITE PLAN

EXISTING MAINTENANCE BLDG PARKING

- **EXISTING**
  - Staff Vehicles: 8
  - Plant Vehicles: 5
  - **TOTAL NEEDED**: 13

THE (E) MAINTENANCE BUILDING IS THE ONLY BUILDING THAT NEEDS PARKING OTHER THAN THE ADMINISTRATION BUILDING. SINCE IT IS EXISTING, THE PARKING COUNT IS CALCULATED UPON CURRENT USES. THE 18 EXISTING WILL BE USED TO COVER THE 13 NEEDED SPACES.

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