San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

# Civic Design Review Phase 3

## Westside Recycled Water Project

Oceanside WPCP, San Francisco

May 16, 2016

# Civic Design Review Phase 2

## Westside Recycled Water Project

**Project Objective:**

The San Francisco Westside Recycled Water Project will design and construct treatment and distribution system facilities required to produce and deliver recycled water to serve irrigation and other non-potable uses in the western area of the City. The use of recycled water will offset the current use of groundwater, and domestic supplies for non-drinking use. The project will serve Golden Gate Park, Lincoln Park Golf Course, and Presidio Trust Properties.

**Design Constraints:**

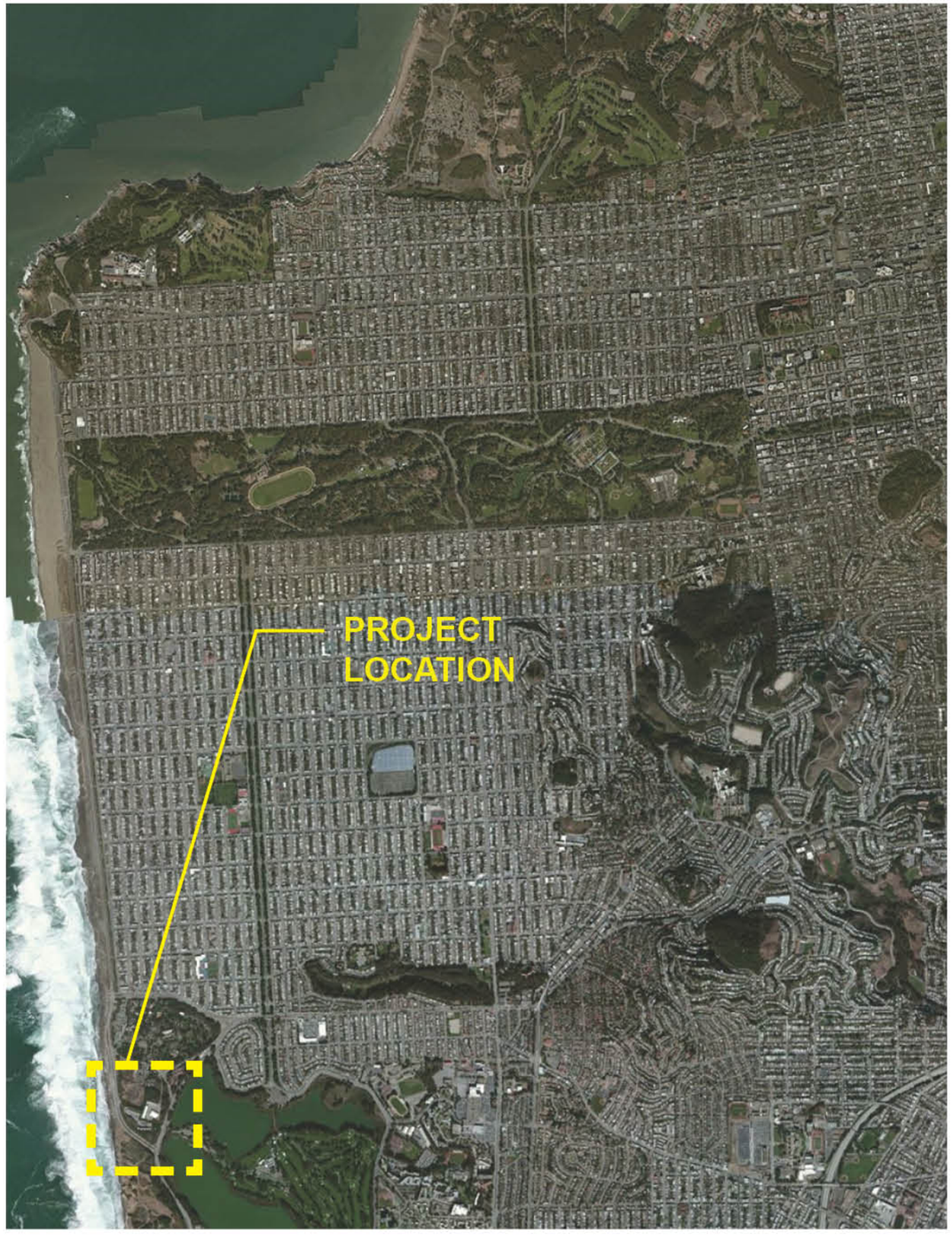
The new recycled water facility must fit into the existing Oceanside Water Treatment Plant. Impact to the existing water treatment facility is to be minimized. The existing plant is contained within 45' high retaining walls that visually screen the plant from the surroundings. These retaining walls will limit access to service and replace equipment. Equipment replacement on the 2nd floor will require the use of a crane from a second story exterior landing.

**Building Solution:**

A 26,700 sq. ft. two story structure located at the northeast corner of the existing administration building. The second floor will be aligned with the existing promenade. A north/south service corridor will be used to access equipment. The west elevation will consist of a removable wall system for access to the microfiltration and reverse osmosis units.

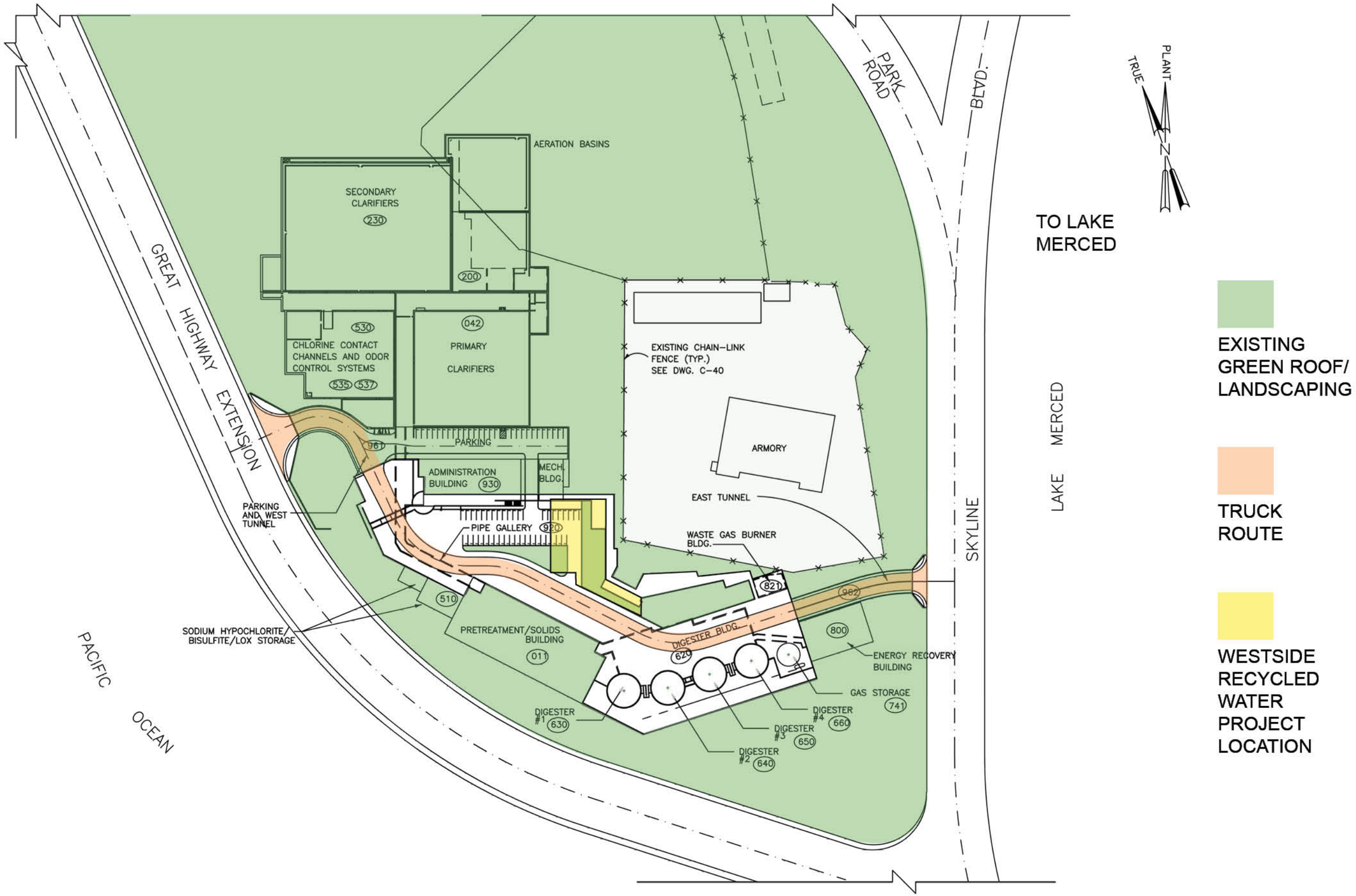
**Building/Landscape Design Objectives:**

Transparency in Water Conservation Processes: The new structure will emerge from the existing promenade and culminate into a westward translucent wall that silhouettes water recycling mechanics. Removable light transmission panels will be provided in the west elevation for the replacement of reverse osmosis and microfiltration skids. Building design and aesthetics will be contemporary in harmony with the existing treatment Plant. The new structures will be reinforced concrete and glass. Material will be corrosive resistant. A green roof will enhance LEED aspects of the project and fit into the existing OWPCP. Water treatment educational display panels can be provided at the site for tours.

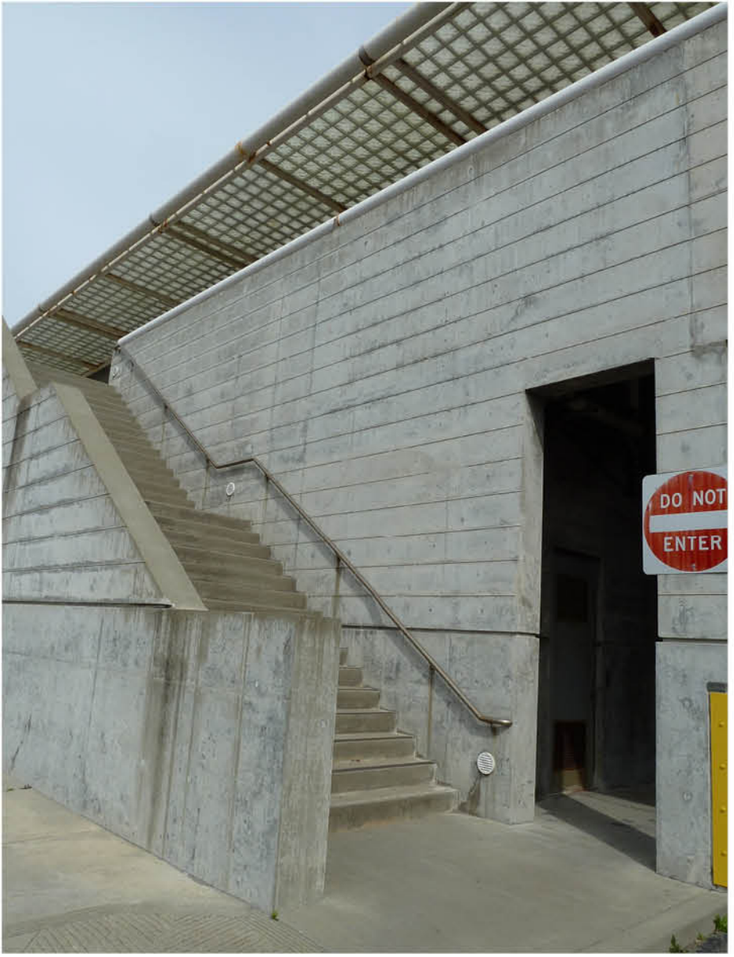

PROJECT
LOCATION


National Cemetery
Presidio Golf Course
Existing Presidio Golf Course Pump Station
Public Health Service District
Lincoln Park
Existing Lincoln Park Irrigation Pump Station
Point of Connection to Presidio
Point of Connection to Lincoln Park
Existing Central Storage, Existing Pump Station to GGP
Golden Gate Park
New Central Storage, New Pump Station to Lincoln Park and Presidio
New Recycled Water Treatment Facility at Oceanside WPCP
Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013
CUSTOMER AREA SERVED
PREFERRED PIPELINE ALIGNMENT
0 1,500 3,000 Feet

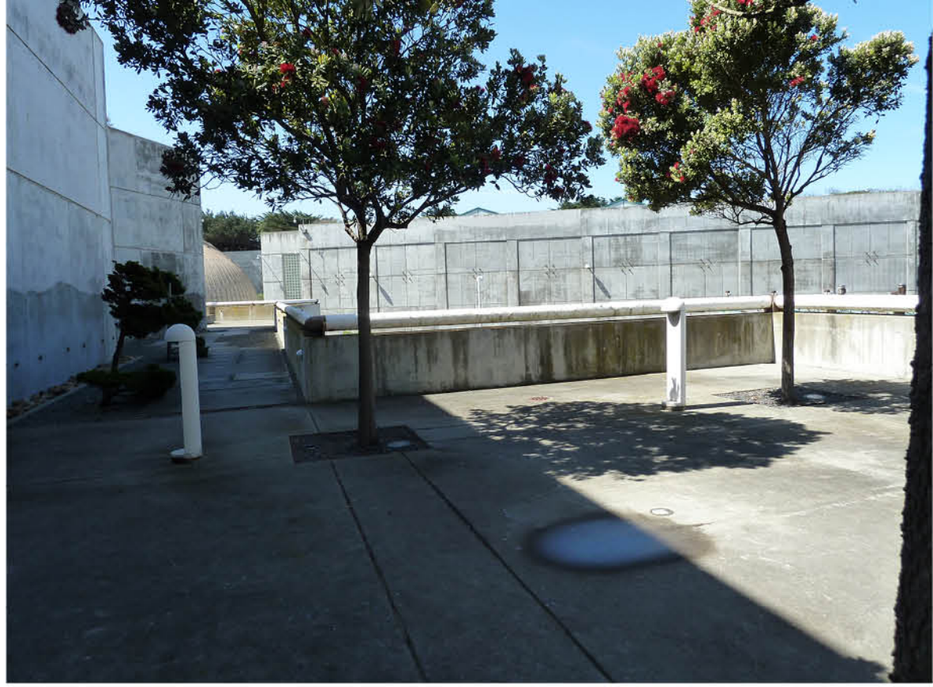

SAN FRANCISCO ZOO
San Francisco Zoological Gardens
San Francisco Zoo
WESTSIDE RECYCLED WATER PROJECT
PACIFIC OCEAN
LAKE MERCED
Great Hwy
Skyline Blvd
Lake Merced Blvd
Sunset Blvd
Lakeshore Dr
Brookhaven
Country Club Dr
Huntington Dr
Bonnie Brae
Gellert Dr
Harding Rd
Herbst Rd
National Guard Armory
Little Learners at the San Fra...
Probert Art
Janet Pomeroy Center
35


GREAT HIGHWAY EXTENSION
PARK ROAD
BLVD.
SKYLINE
PACIFIC
OCEAN
LAKE MERCED
TO LAKE MERCED
TRUE
PLANT
N
AERATION BASINS
SECONDARY CLARIFIERS
230
200
042
PRIMARY CLARIFIERS
530
CHLORINE CONTACT CHANNELS AND ODOR CONTROL SYSTEMS
535
537
EXISTING CHAIN-LINK FENCE (TYP.) SEE DWG. C-40
ARMORY
EAST TUNNEL
PARKING
961
ADMINISTRATION BUILDING
930
MECH. BLDG.
PARKING AND WEST TUNNEL
PIPE GALLERY
920
WASTE GAS BURNER BLDG.
821
962
510
SODIUM HYPOCHLORITE/ BISULFITE/LOX STORAGE
PRETREATMENT/SOLIDS BUILDING
011
DIGESTER BLDG.
620
800
ENERGY RECOVERY BUILDING
GAS STORAGE
741
DIGESTER #1
630
DIGESTER #2
640
DIGESTER #3
650
DIGESTER #4
660
EXISTING GREEN ROOF/ LANDSCAPING
TRUCK ROUTE
WESTSIDE RECYCLED WATER PROJECT LOCATION


25 m
© 2013 Microsoft Corporation Pictometry Bird's Eye © 2012 Pic


DO NOT
ENTER


510 CHEMICAL STORAGE
NO SMOKING
WITHIN 50 FT.
DANGER




MECHANICAL EQUIPMENT

CIRCULATION

CONTROL ROOM

VIEWS FROM CONTROL ROOM

ENTRY & EXIT

(E) BLDG #961
PARKING & WEST TUNNEL

(E) VENTILATION PILLAR

(E) ROOF ACCESS

(E) SKYLIGHT

(E) GREEN ROOF

(E) BLDG #930
ADMINISTRATION

(E) BLDG #930
MECHANICAL

20.3

24

H.6

(E) EXHAUST PIPE

(E) PEDESTRIAN BRIDGE

(E) PARKING MEDIAN
& PLANTER

(N) CURB &
PLANTER

(N) BLDG #580
RECYCLED WATER
TREATMENT FACILITY

(E) GREENSCAPE

(E) RETAINING WALL

(E) PEDESTRIAN
PROMENADE

(N) BLDG #581
TRANSMISSION
PUMP ROOM

T

F

30' - 0"
(E) TRUCK ROUTE

(E) BLDG #510
STORAGE

A

(E)CONCRETE PAD

(E) BLDG #510
CHEMICAL ROOM
& (N) CONSTRUCTION

1

(E) GREEN ROOF

3

(E) BLDG #011
SOLIDS & PRETREATMENT

(E) UNDER GROUND
12 kV

BERM MOUND

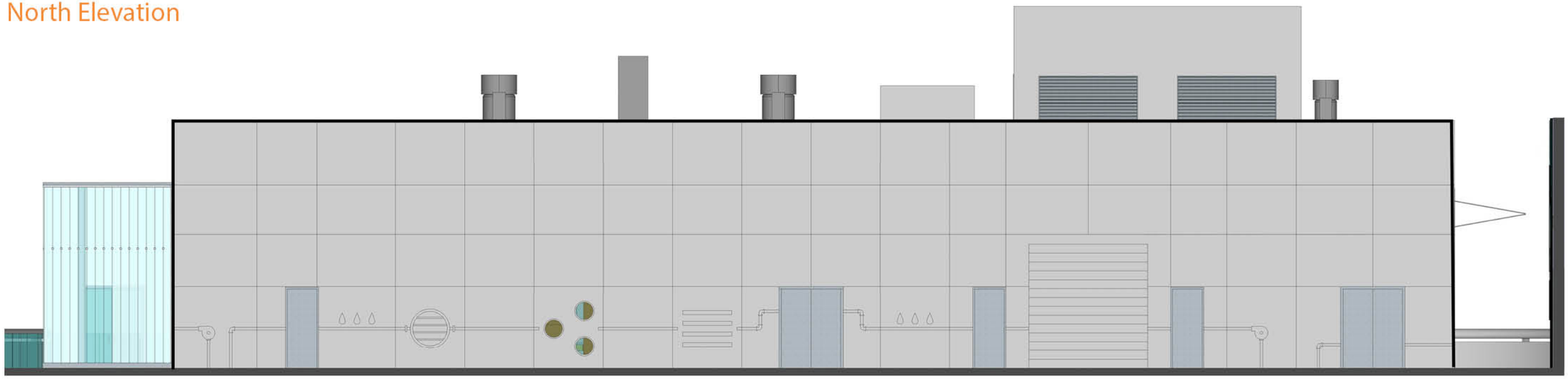
(E) CURB

(E) CHEMICAL UNLOADING
STATION

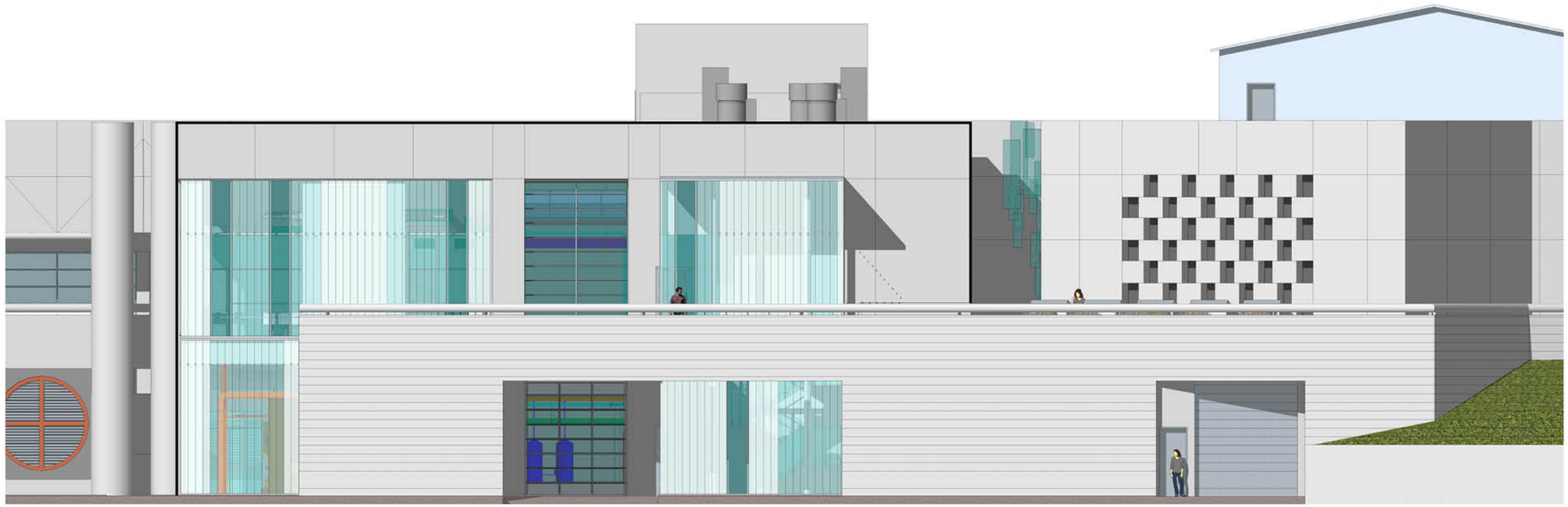
TRUE N

## 1 SITE PLAN
1/16" = 1'-0"

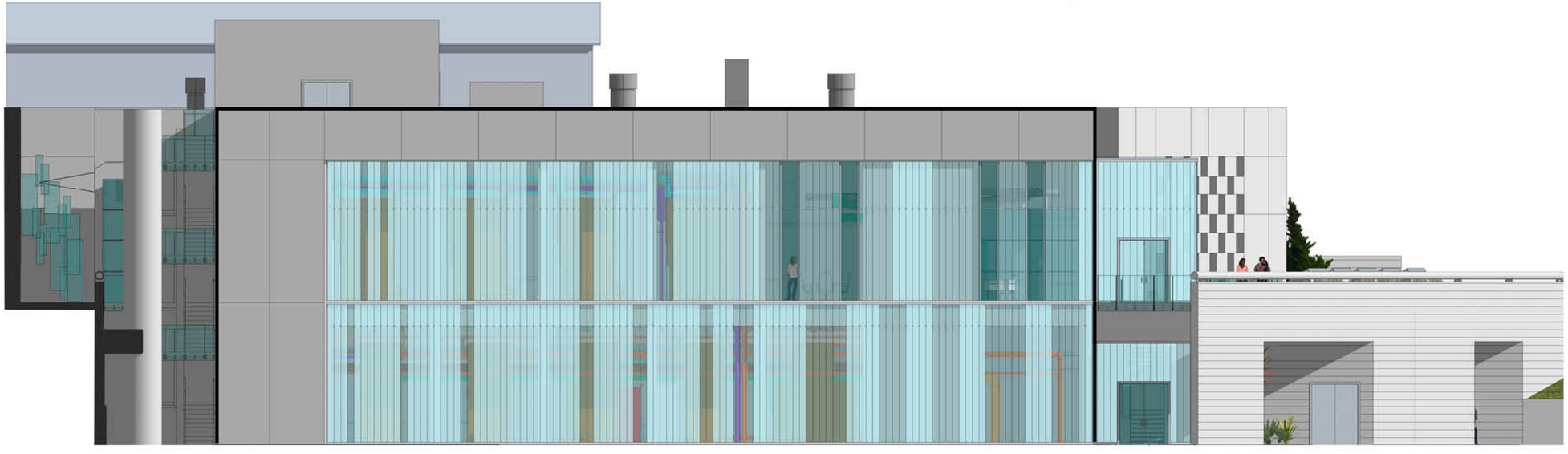
North Elevation



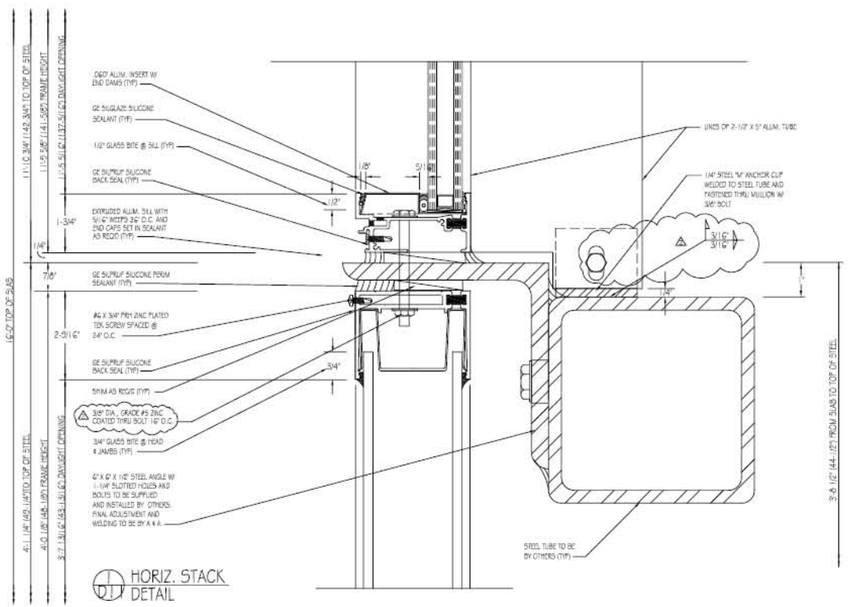
East Elevation

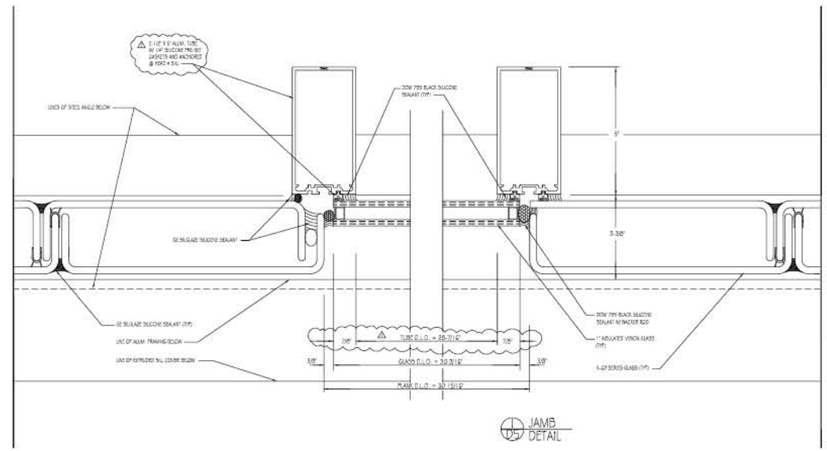


South Elevation



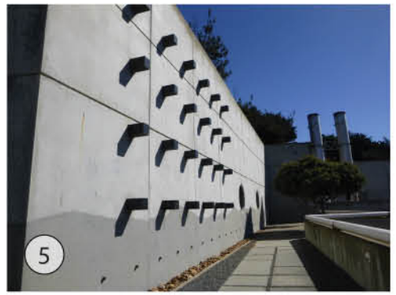
West Elevation


HORIZ. STACK DETAIL


JAMB DETAIL

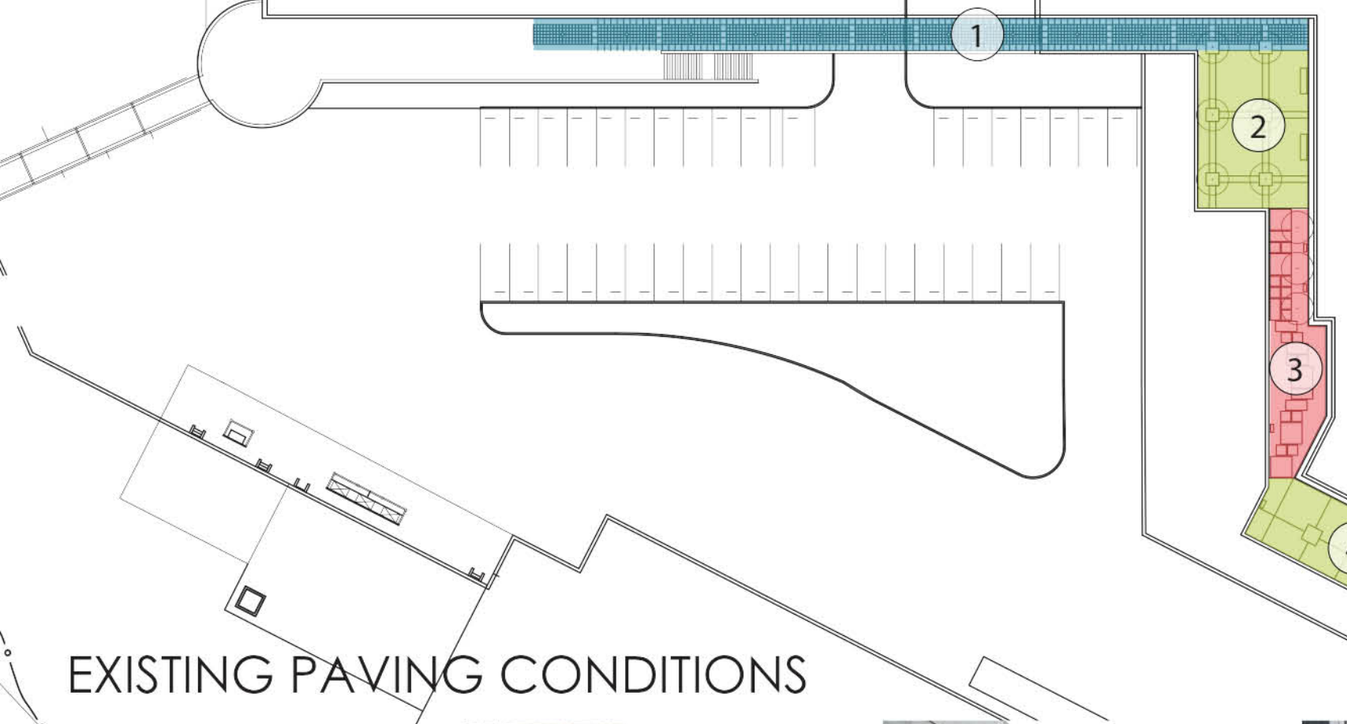








## EXISTING WALL FOCAL ELEMENTS

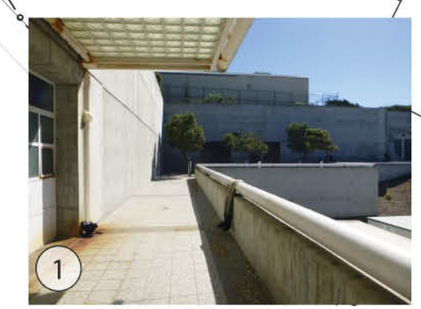



GRANITE PAVERS

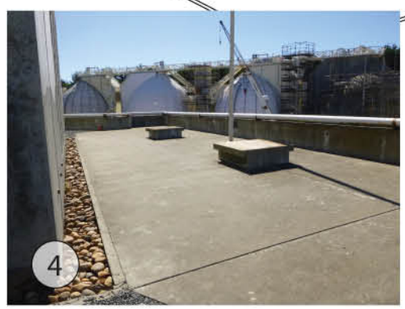
CONCRETE PAVING

PAVERS WITH GRAVEL

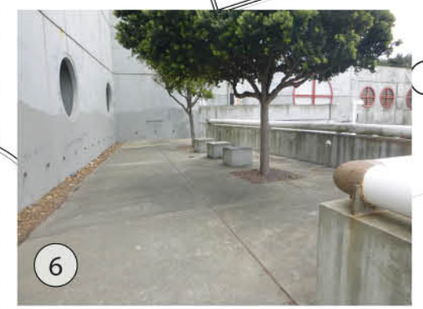
## EXISTING PAVING CONDITIONS





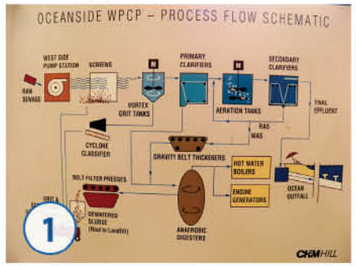



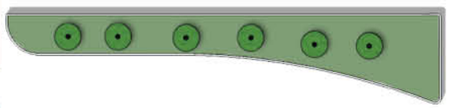


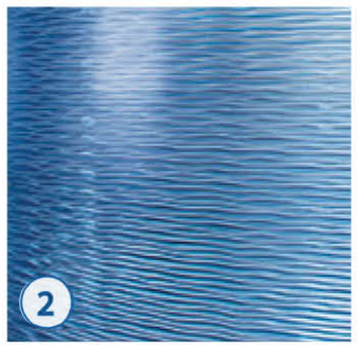


# FOCAL ELEMENTS - EXISTING AND PROPOSED

Elements on the wall that reference the stages of the water treatment process.

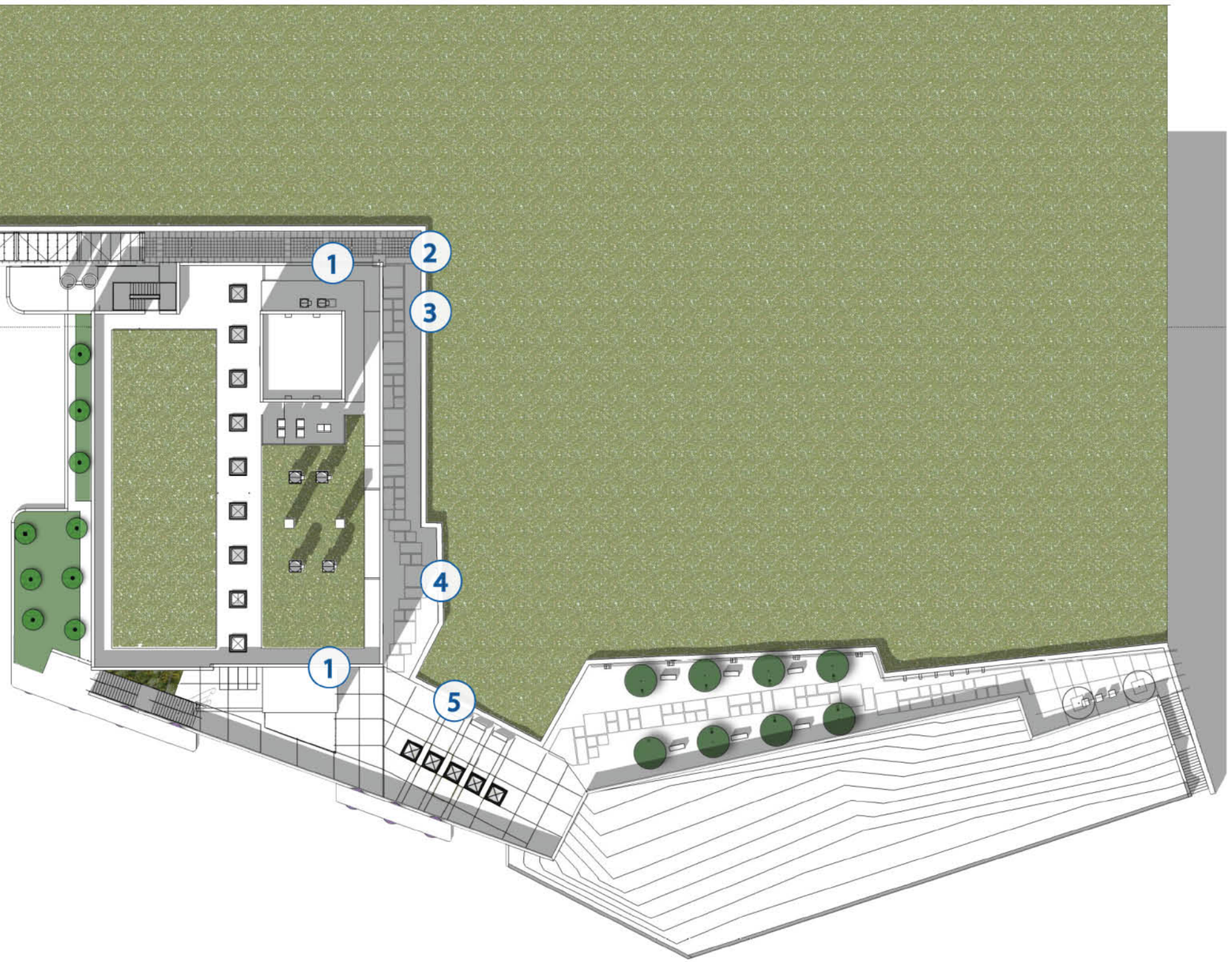










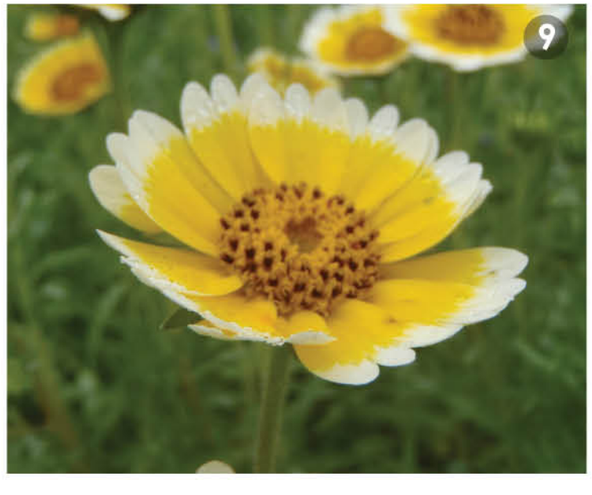
# FOCAL ELEMENT #5












# PLANT PALETTE - ROOF

1. *Nemophila menziesii*
   Baby Blue Eyes
2. *Festuca idahoensis*
   Idaho Fescue
3. *Eriophyllum confertiflorum*
   Golden Yarrow
4. *Stachys bullata*
   Hedge Nettle
5. *Eschscholzia californica*
   California Poppy
6. *Dudleya caespitosa*
   Sea Lettuce
7. *Aster chilensis*
   California Aster
8. *Erigeron glaucus*
   Seaside Daisy
9. *Layia platyglossa*
   Tidy Tips

Recycled Glass

# PLANT PALETTE
## PARKING LOT

1. *Dracaena draco*
   Dragon Tree
2. *Cordyline australis*
   Red Star
3. *Agave attenuata*
   Foxtail Agave
4. *Phormium tenax*
   Yellow Wave Flax
5. *Phormium tenax*
   Margaret Jones