

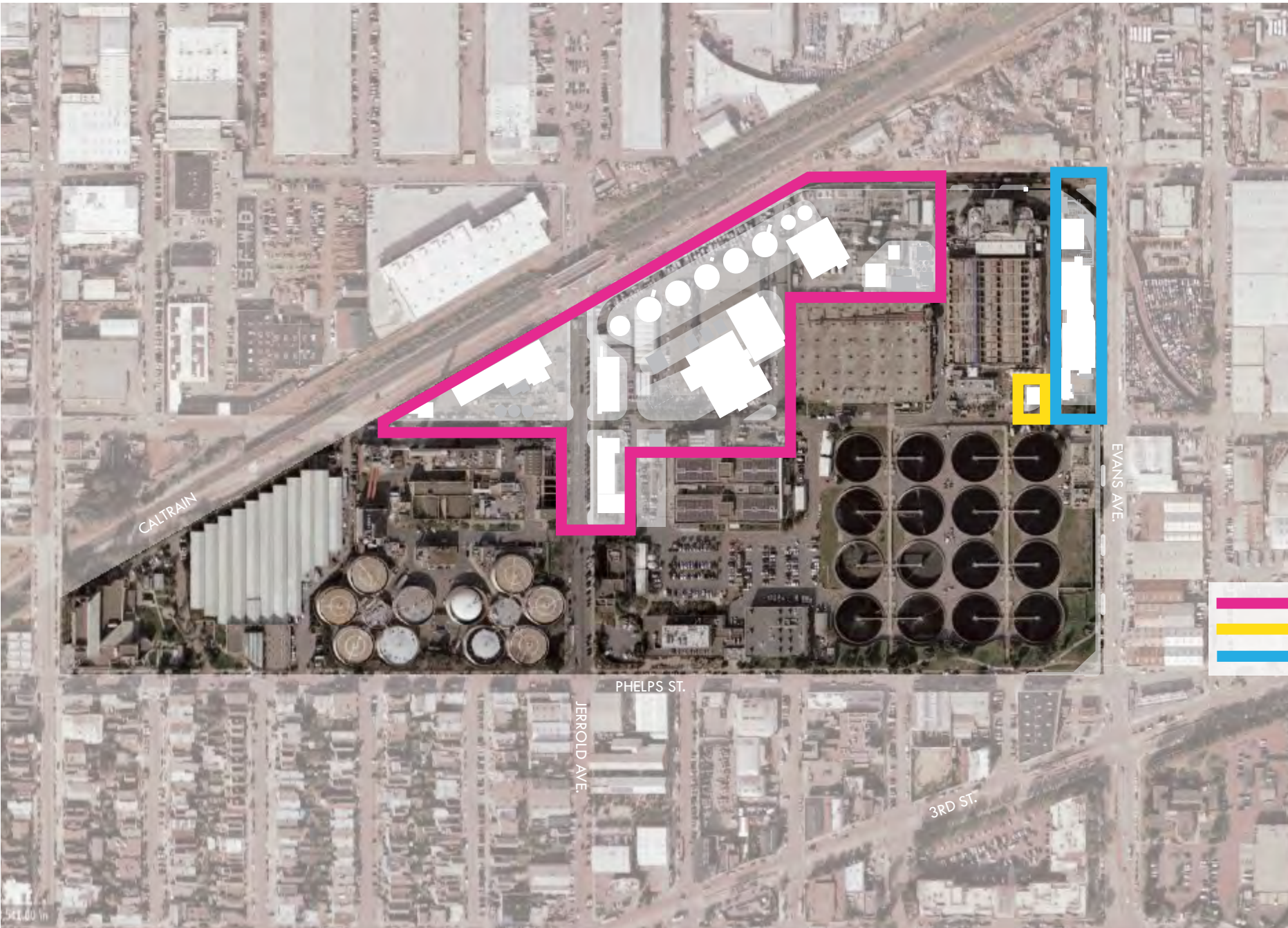
SEP BIOSOLIDS

INFORMATIONAL PRESENTATION

JUNE 2020

MAJOR SOUTHEAST PROJECTS

PREVIOUS SCHEME



- BIOSOLIDS
- ELECTRICAL BLDG
- HEADWORKS

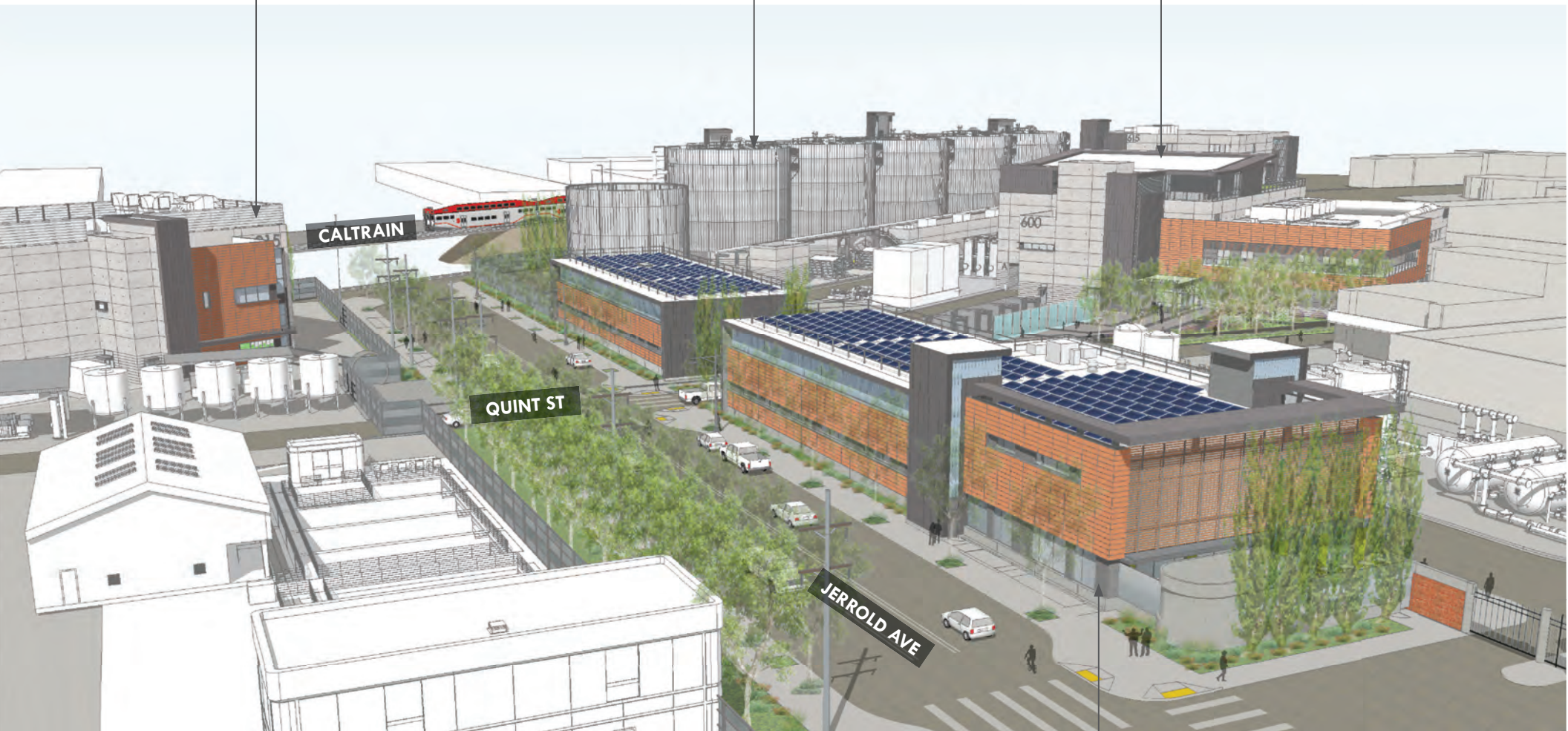
BIOSOLIDS - PREVIOUS SCHEME

CAMPUS AERIAL VIEW FROM EAST

ENERGY RECOVERY

ANAEROBIC DIGESTION

SOLIDS PRETREATMENT



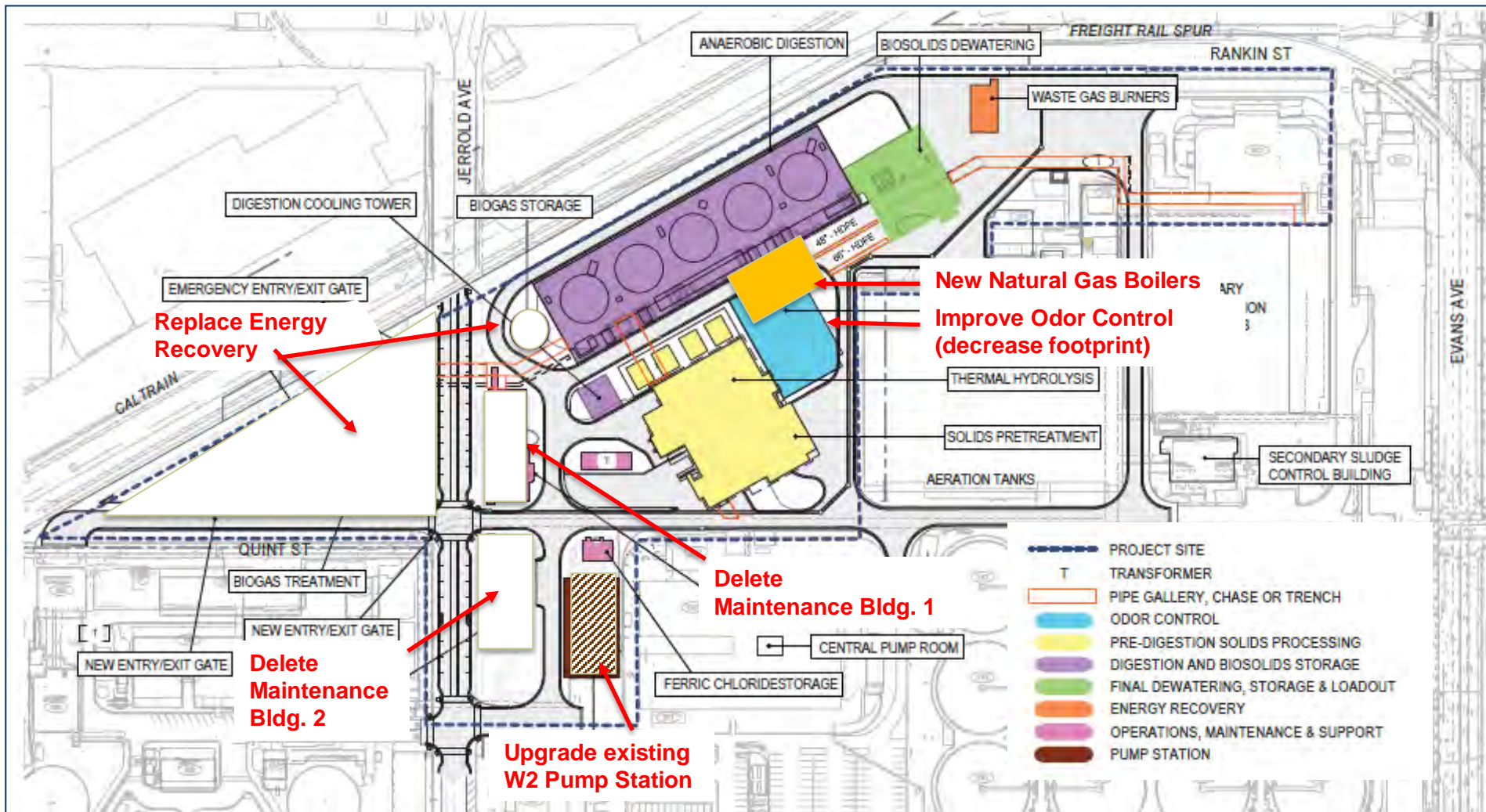
MAINTENANCE SHOPS 1&2

VE CHANGES

Estimated Total Project Cost

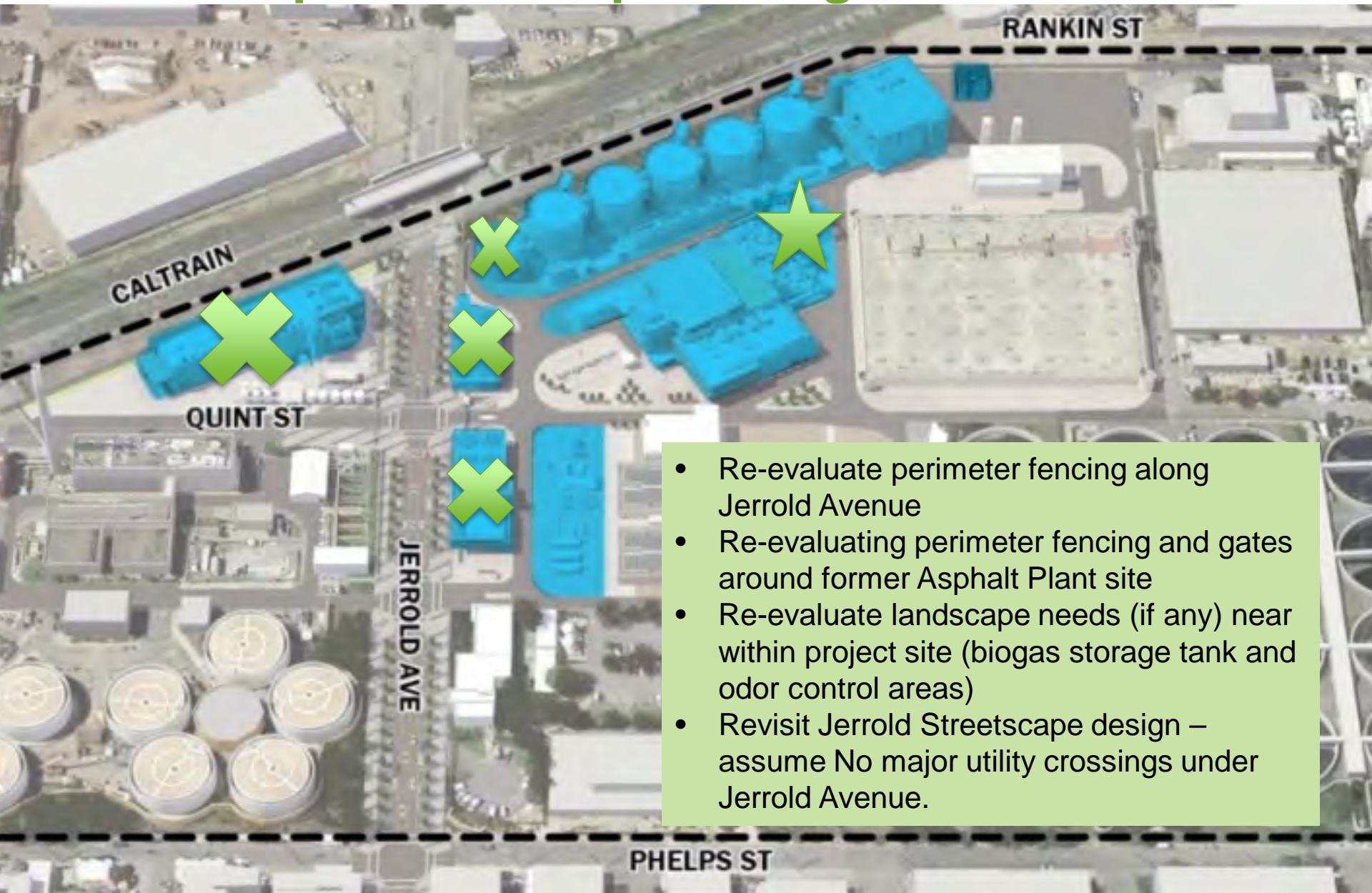
Cost in \$ millions	2018 SSIP Budget Mar 2018	95% Cost Estimate Oct 2019	BDFP Revised Budget Mar 2020
Total Construction Cost	\$ 994	\$ 1,862	\$ 1,290
Project Delivery Costs	\$ 283	\$ 416	\$ 391
TOTAL PROJECT COST	\$ 1,277	\$ 2,278	\$ 1,681
Construction Duration	6 Years	9 Years	7.9 Years

Scope Changes/ Project Improvements Site Layout



Biosolids Digester Facilities Project (BDFP)

Landscape/Streetscape Changes



- Re-evaluate perimeter fencing along Jerrold Avenue
- Re-evaluating perimeter fencing and gates around former Asphalt Plant site
- Re-evaluate landscape needs (if any) near within project site (biogas storage tank and odor control areas)
- Revisit Jerrold Streetscape design – assume No major utility crossings under Jerrold Avenue.

BIOSOLIDS - PREVIOUS SCHEME

CAMPUS AERIAL VIEW FROM EAST

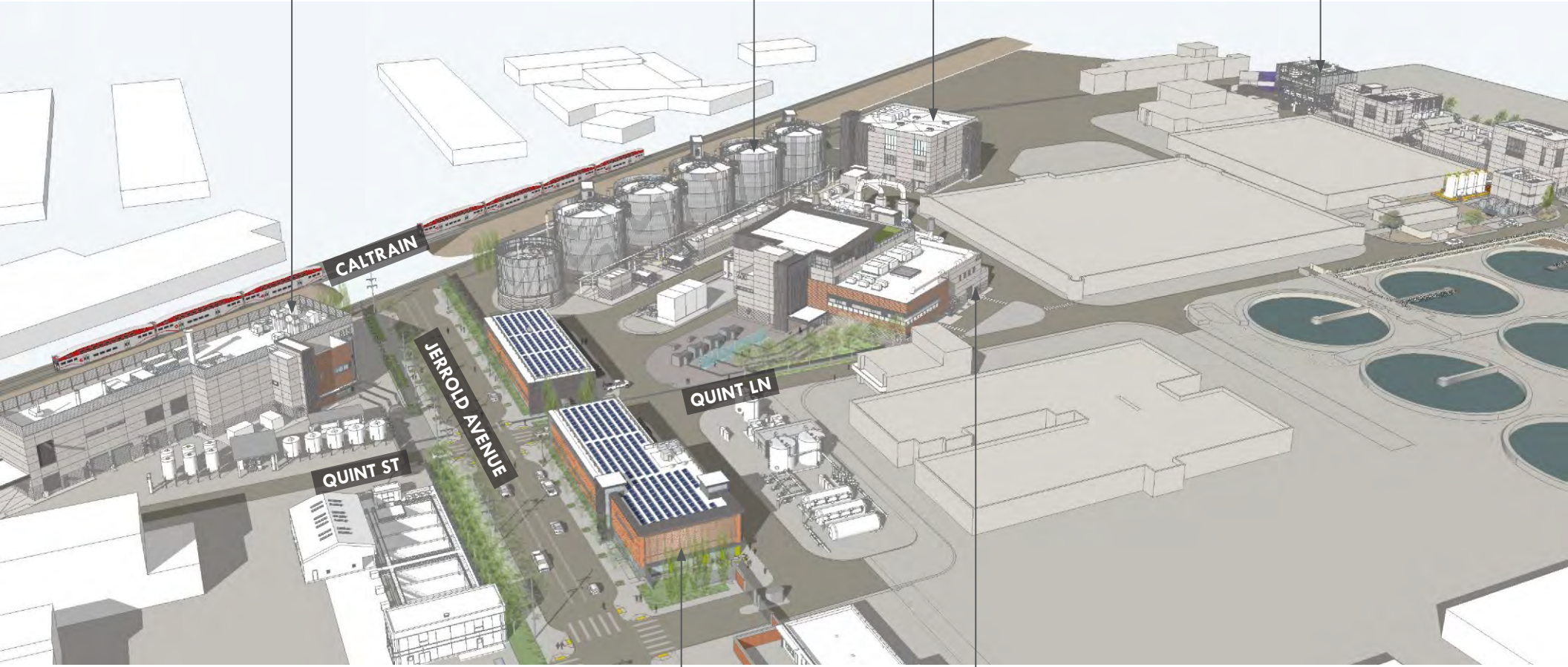


ENERGY RECOVERY

ANAEROBIC DIGESTION

BIOSOLIDS DEWATERING

HEADWORKS



MAINTENANCE SHOPS 1&2

SOLIDS PRETREATMENT

BIOSOLIDS - PROPOSED SCHEME

CAMPUS VIEW



JERROLD STREETSCAPE - PROPOSED SCHEME

PERSPECTIVE VIEW



JERROLD STREETSCAPE - PROPOSED SCHEME

PERSPECTIVE VIEW FROM QUINT GATE



PROCESS BUILDINGS REMAINING

SOLIDS PRETREATMENT

PERSPECTIVE VIEW FROM COURTYARD & FOUNTAIN



SOLIDS PRETREATMENT

PERSPECTIVE VIEW



DEWATERING

PERSPECTIVE VIEW



DEWATERING

PERSPECTIVE VIEW

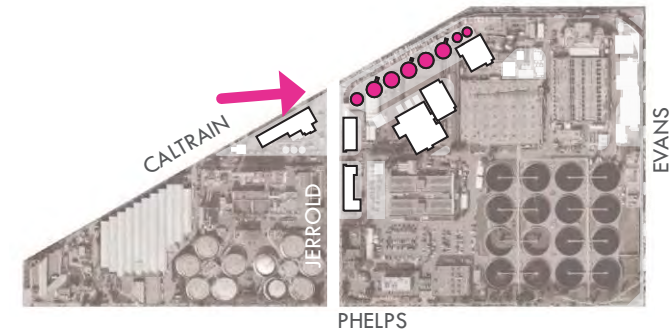


DIGESTER CLADDING DESIGN CHANGES

ANAEROBIC DIGESTION PREVIOUS SCHEME

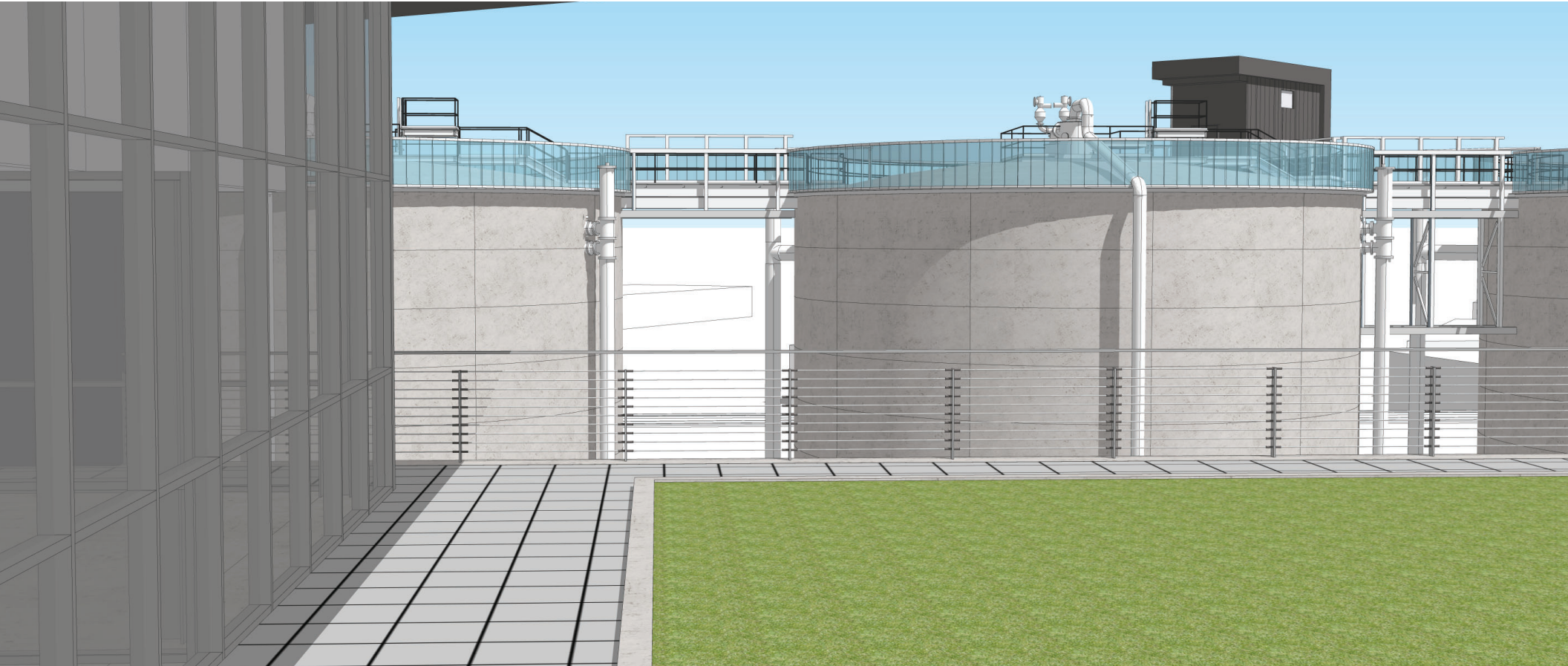


ANAEROBIC DIGESTION PREVIOUS SCHEME



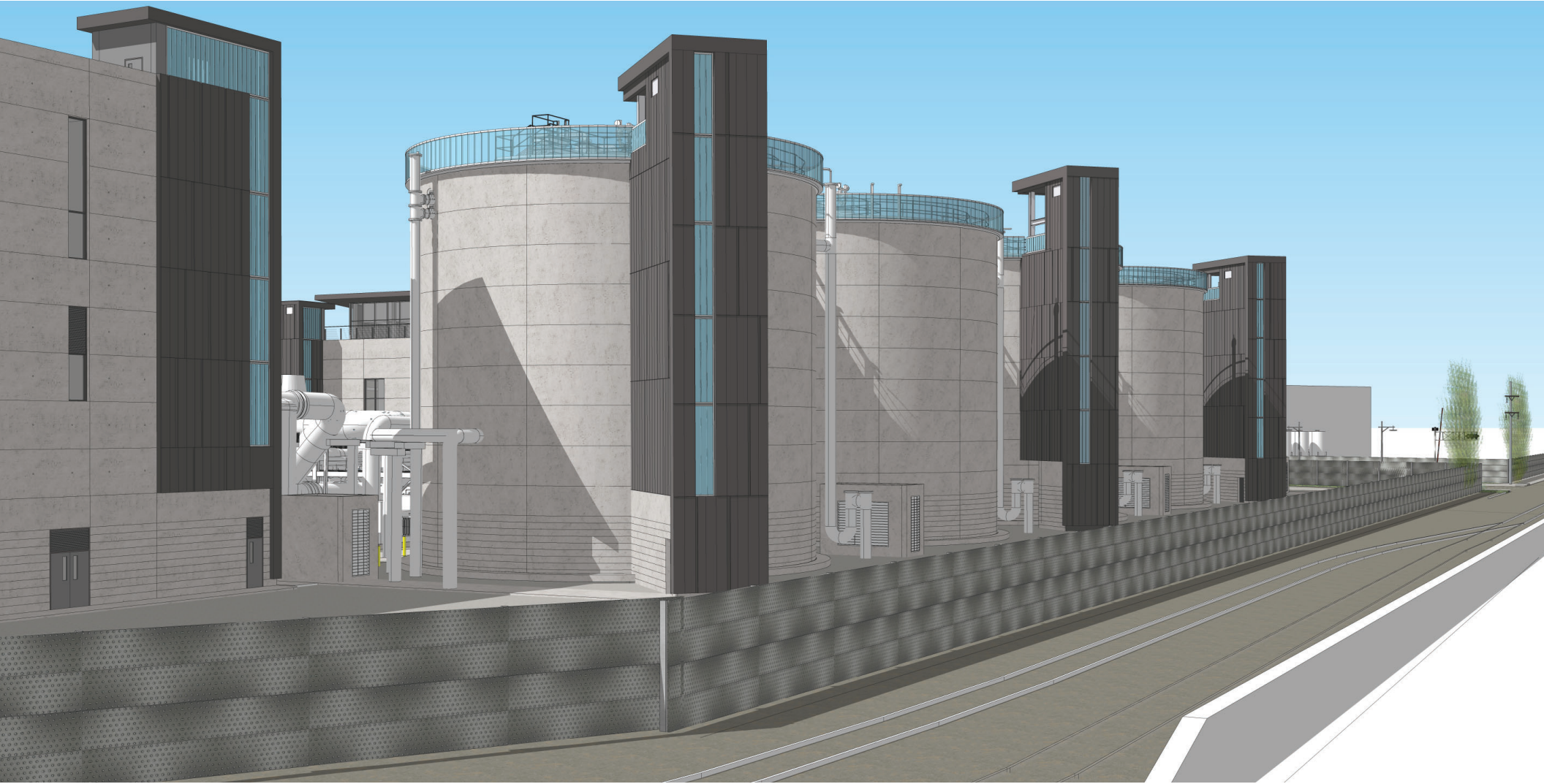
ANAEROBIC DIGESTION - PROPOSED SCHEME

PERSPECTIVE VIEW FROM SOLIDS PRETREATMENT



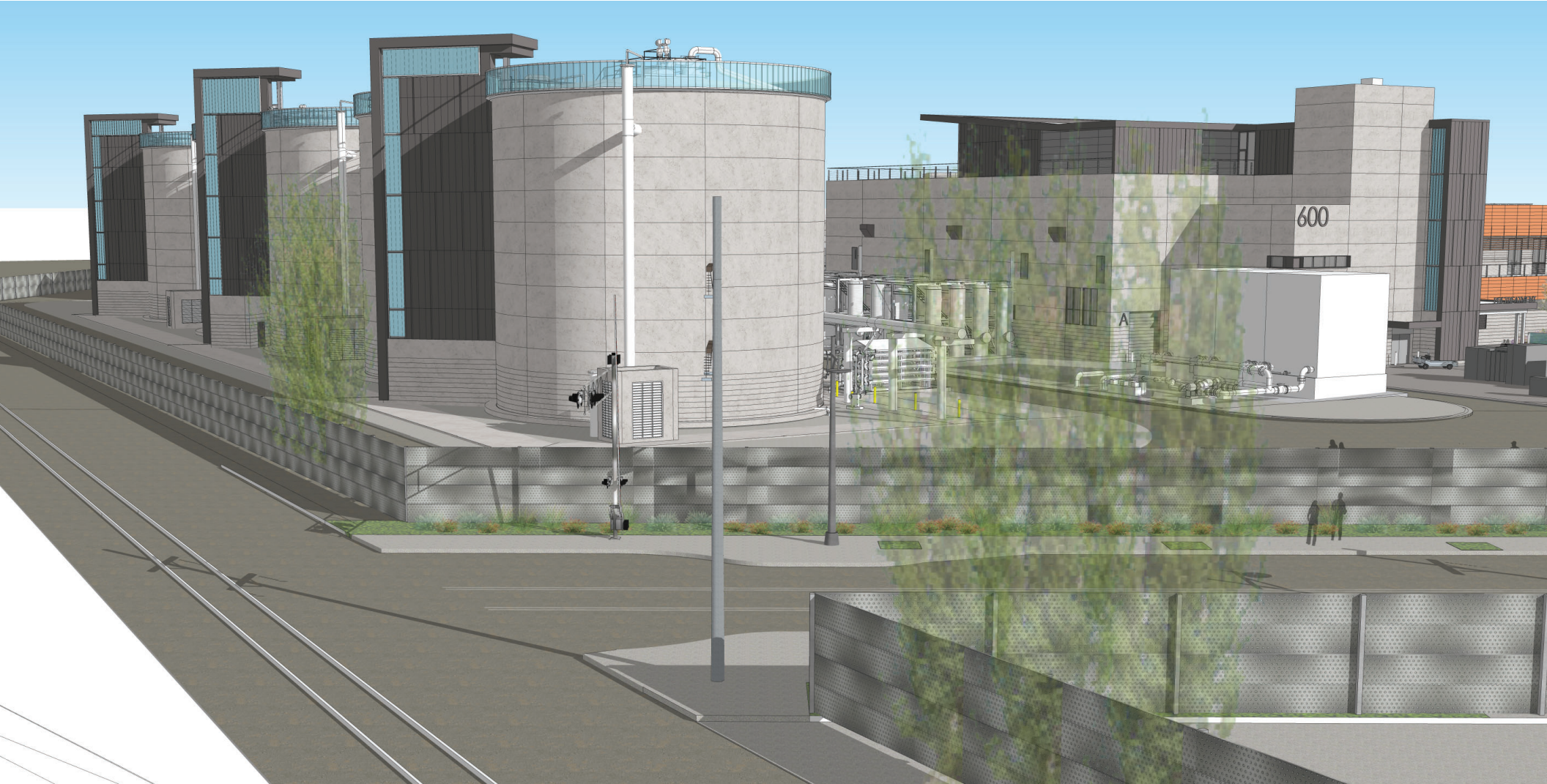
ANAEROBIC DIGESTION - PROPOSED SCHEME

PERSPECTIVE VIEW FROM CALTRAIN - NORTH



ANAEROBIC DIGESTION - PROPOSED SCHEME

PERSPECTIVE VIEW FROM CALTRAIN - SOUTH



CDR PHASE 2.5 CONTINGENCIES

CAMPUS

- 1) Add variety in the terracotta palette

~~MAINTENANCE BUILDINGS~~

- ~~2) Provide design and material of the guardrail~~
- ~~3) Provide design detail at the base of Zinc~~
- ~~4) "Re-entrant" corner at 914 shops~~

DIGESTER CLADDING

- ~~5) Options to eliminate aeolian harp effect~~ VE REDESIGN

LANDSCAPE

- 6) Fountain layout limitations
- 7) Fountain Graphics
- 8) Gate Graphics

TERRACOTTA VARIATION

CDR PHASE 2.5 CONTINGENCIES

1) Add variety in the terracotta palette

TERRACOTTA EXTENT - PREVIOUS

COLOR VARIATION



TERRA COTTA EXTENT - PROPOSED SCHEME

COLOR VARIATION



CAMPUS DESIGN ELEMENTS & MATERIALS



CHANNEL GLASS
BENDHEIM 504 ROUGH CAST, AZUR COATING



CONCRETE



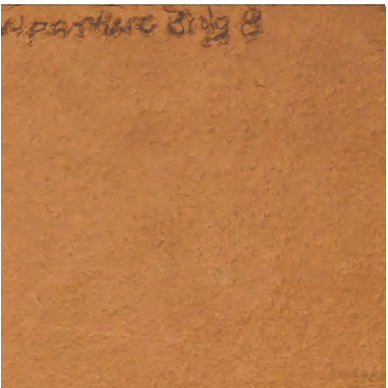
ZINC PANELS
IMETCO UNITED ZINC ONYX BLACK



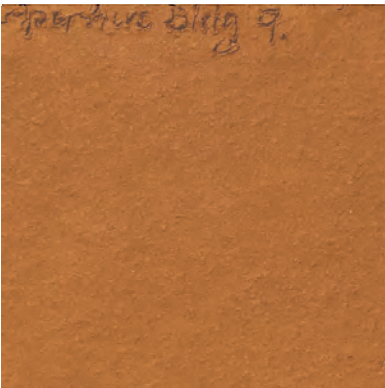
FIBER CEMENT
EQUITONE, TECTIVA



TERRACOTTA
1X5 PANELS



TERRACOTTA
NBK - COLOR APB-08



TERRACOTTA
NBK - COLOR APB-09



TERRACOTTA
NBK - COLOR APB-10

TERRACOTTA COLOR VARIATION

PRETREATMENT - 600



SOUTH ELEVATION



SOUTH ELEVATION

TERRACOTTA COLOR VARIATION

PRETREATMENT - 600



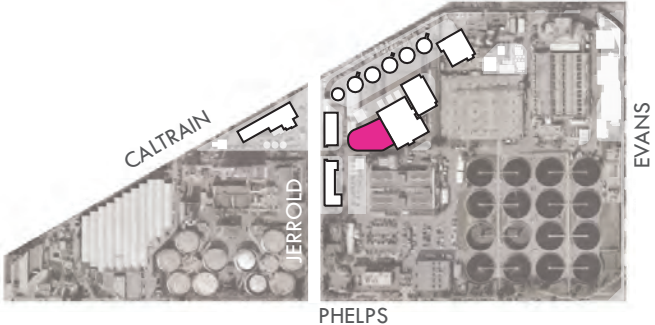
EAST ELEVATION



EAST ELEVATION

FOUNTAIN GRAPHIC

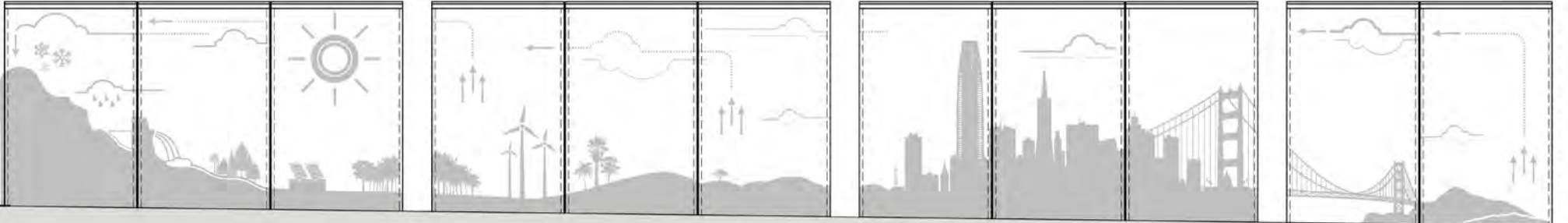
FOUNTAIN PLAZA



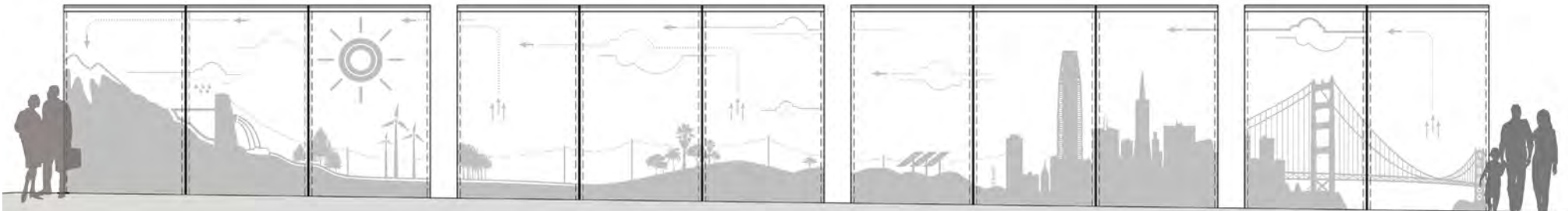
FOUNTAIN GRAPHICS



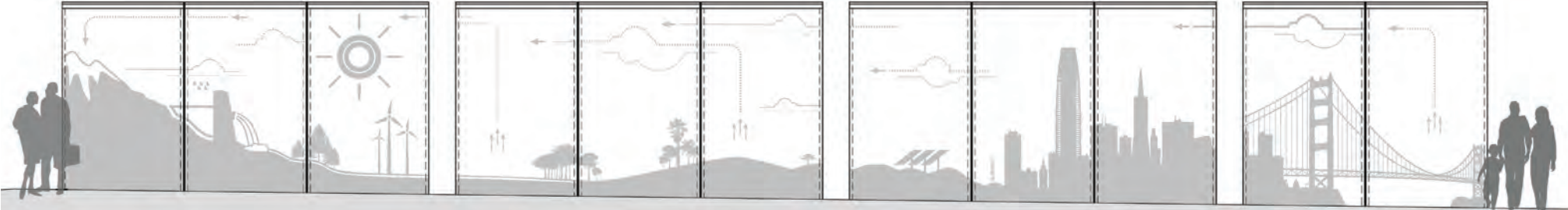
PREVIOUS MOC



SIMPLE POWERLINES

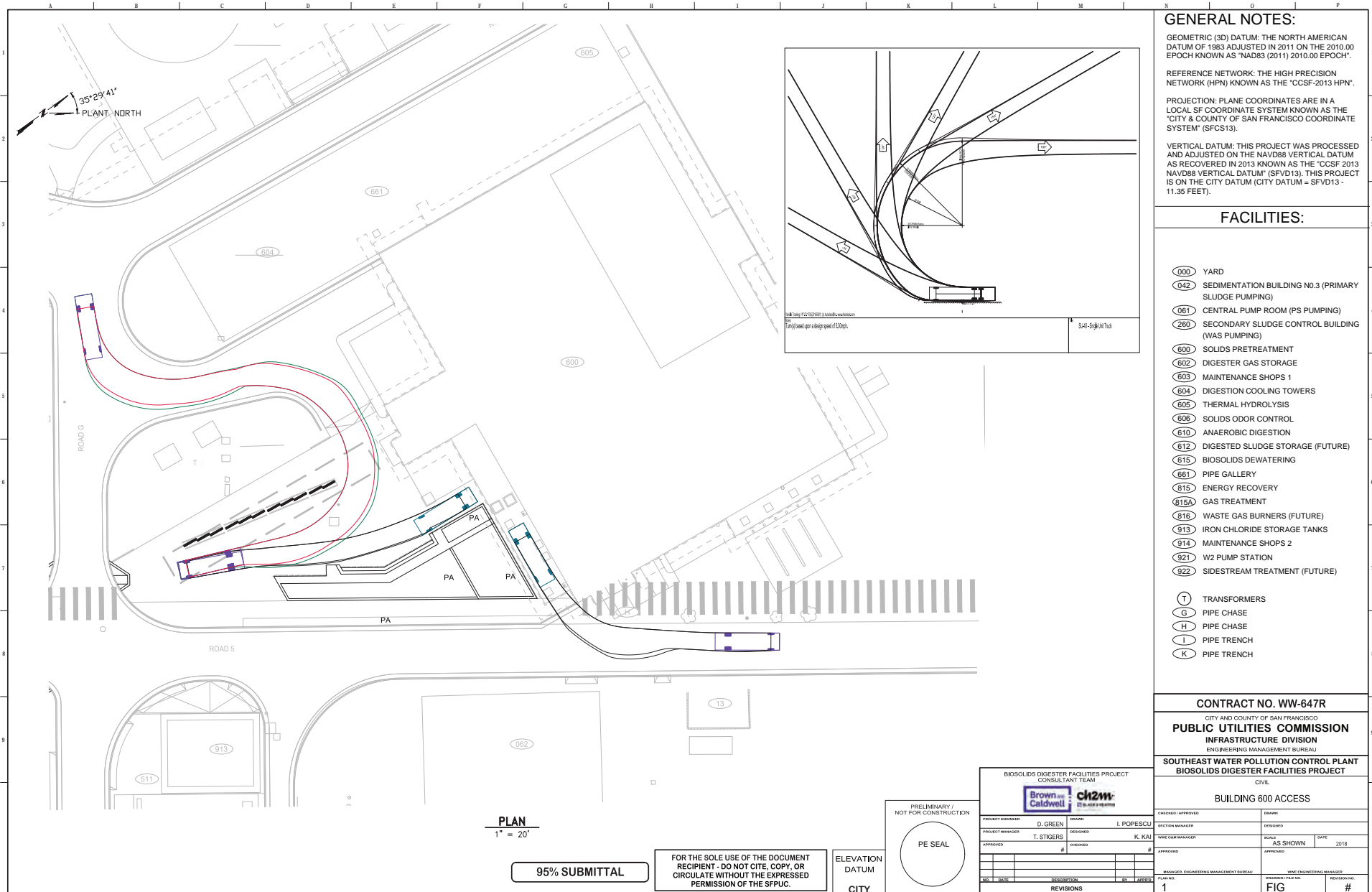


NO POWERLINES



FOUNTAIN DESIGN CONSTRAINTS

VEHICLE TRACKING AT COURTYARD



GENERAL NOTES:

GEOMETRIC (3D) DATUM: THE NORTH AMERICAN DATUM OF 1983 ADJUSTED IN 2011 ON THE 2010.00 EPOCH KNOWN AS "NAD83 (2011) 2010.00 EPOCH".

REFERENCE NETWORK: THE HIGH PRECISION NETWORK (HPN) KNOWN AS THE "CCSF-2013 HPN".

PROJECTION: PLANE COORDINATES ARE IN A LOCAL SF COORDINATE SYSTEM KNOWN AS THE "CITY & COUNTY OF SAN FRANCISCO COORDINATE SYSTEM" (SFC0513).

VERTICAL DATUM: THIS PROJECT WAS PROCESSED AND ADJUSTED ON THE NAVD88 VERTICAL DATUM AS RECOVERED IN 2013 KNOWN AS THE "CCSF 2013 NAVD88 VERTICAL DATUM" (SFVD13). THIS PROJECT IS ON THE CITY DATUM (CITY DATUM = SFVD13 - 11.35 FEET).

FACILITIES:

- (000) YARD
- (042) SEDIMENTATION BUILDING NO.3 (PRIMARY SLUDGE PUMPING)
- (061) CENTRAL PUMP ROOM (PS PUMPING)
- (260) SECONDARY SLUDGE CONTROL BUILDING (WAS PUMPING)
- (600) SOLIDS PRETREATMENT
- (602) DIGESTER GAS STORAGE
- (603) MAINTENANCE SHOPS 1
- (604) DIGESTION COOLING TOWERS
- (605) THERMAL HYDROLYSIS
- (606) SOLIDS ODOR CONTROL
- (610) ANAEROBIC DIGESTION
- (612) DIGESTED SLUDGE STORAGE (FUTURE)
- (615) BIOSOLIDS DEWATERING
- (661) PIPE GALLERY
- (815) ENERGY RECOVERY
- (815A) GAS TREATMENT
- (816) WASTE GAS BURNERS (FUTURE)
- (913) IRON CHLORIDE STORAGE TANKS
- (914) MAINTENANCE SHOPS 2
- (921) W2 PUMP STATION
- (922) SIDESTREAM TREATMENT (FUTURE)

- (T) TRANSFORMERS
- (G) PIPE CHASE
- (H) PIPE CHASE
- (I) PIPE TRENCH
- (K) PIPE TRENCH

CONTRACT NO. WW-647R

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
 INFRASTRUCTURE DIVISION
 ENGINEERING MANAGEMENT BUREAU

SOUTHEAST WATER POLLUTION CONTROL PLANT
 BIOSOLIDS DIGESTER FACILITIES PROJECT

CIVIL
BUILDING 600 ACCESS

PLAN
 1" = 20'

95% SUBMITTAL

FOR THE SOLE USE OF THE DOCUMENT
 RECIPIENT - DO NOT CITE, COPY, OR
 CIRCULATE WITHOUT THE EXPRESSED
 PERMISSION OF THE SFPUC.

PRELIMINARY / NOT FOR CONSTRUCTION
 ELEVATION DATUM
 CITY

BIOSOLIDS DIGESTER FACILITIES PROJECT CONSULTANT TEAM	
PROJECT ENGINEER D. GREEN	OWNER I. POPESCU
PROJECT MANAGER T. STIGERS	DESIGNED BY K. KAI
APPROVED BY #	CHECKED BY #
DATE	DATE
DESCRIPTION	BY / APPROVED
REVISIONS	

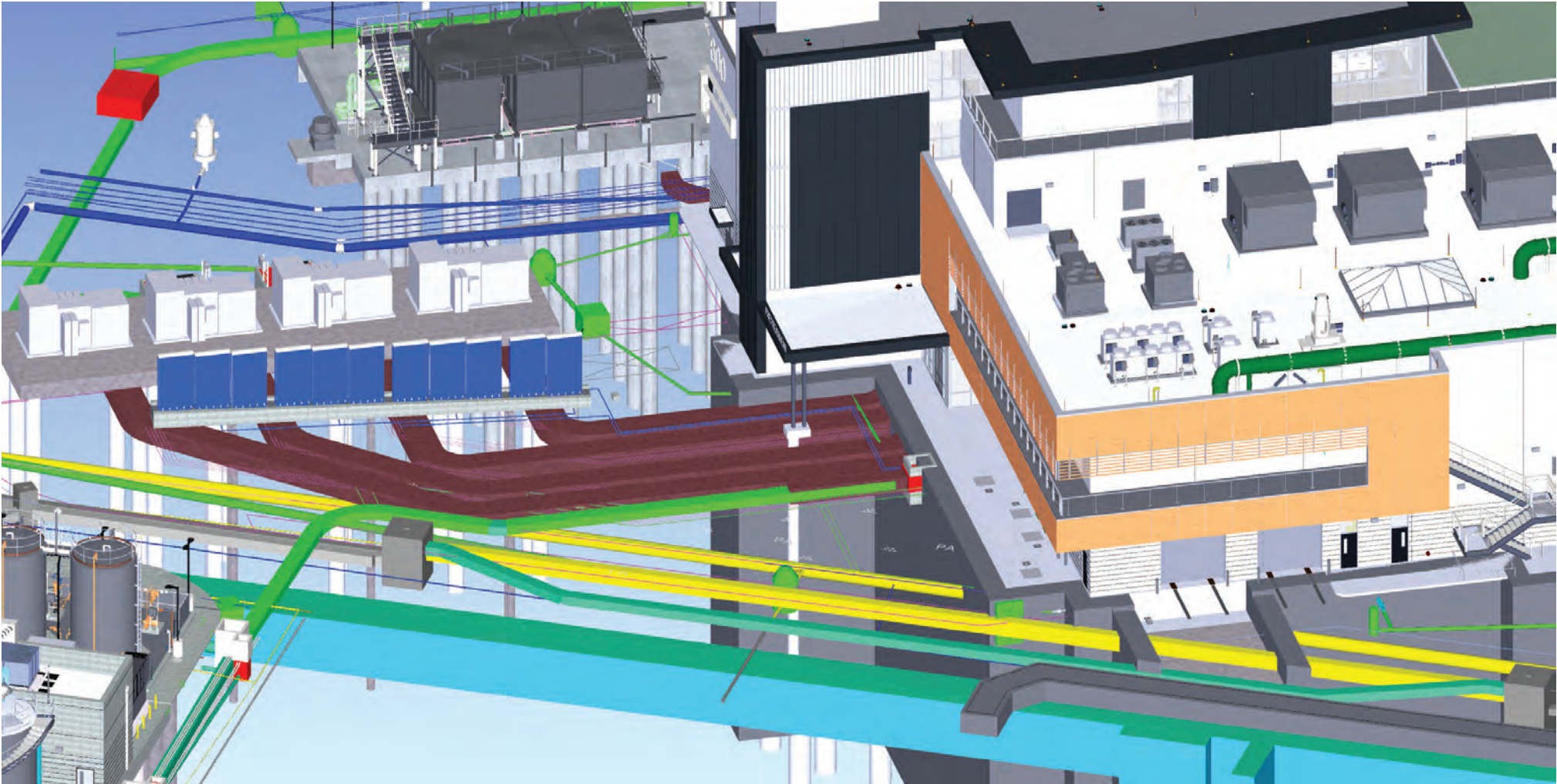
CHECKED / APPROVED	DRAWN
SECTION MANAGER	DESIGNED
TIME OUV MANAGER	SCALE
APPROVED	DATE
MANAGER, ENGINEERING MANAGEMENT BUREAU	DATE ENGINEERING MANAGER
PLAN NO. 1	REVISION NO. #

FILE: C:\PW\WORKING\ENR\PW\01421104\C-FG-VEHICLE TRACKING-600.DWG
 8/7/2018 1:48 PM

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

FOUNTAIN DESIGN CONSTRAINTS

UTILITIES AND UNDERGROUND STRUCTURES AT COURTYARD






GATE GRAPHICS

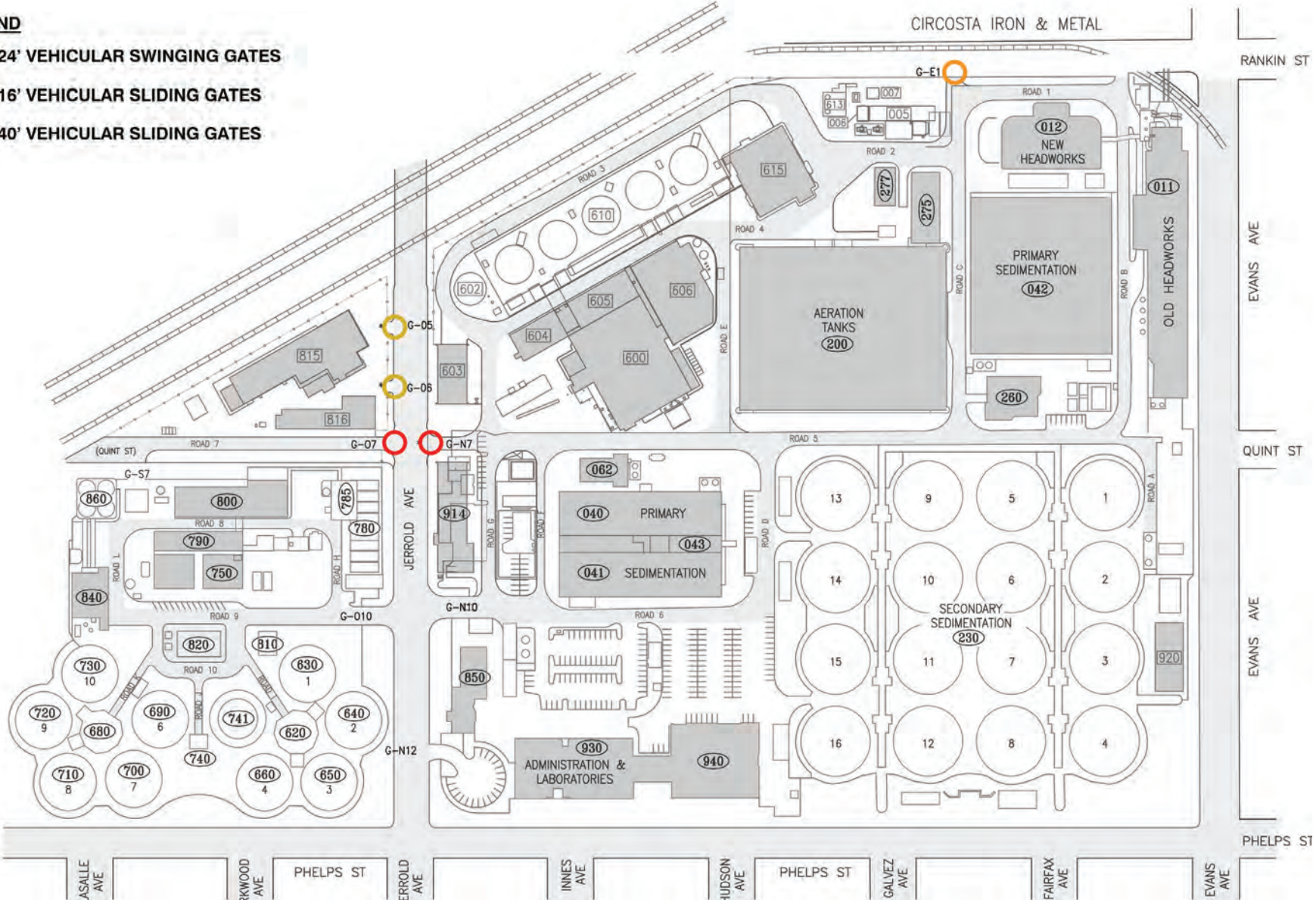
SITE MAP- NEW ENTRY GATE LOCATIONS



ENTRY GATE LOCATIONS

LEGEND

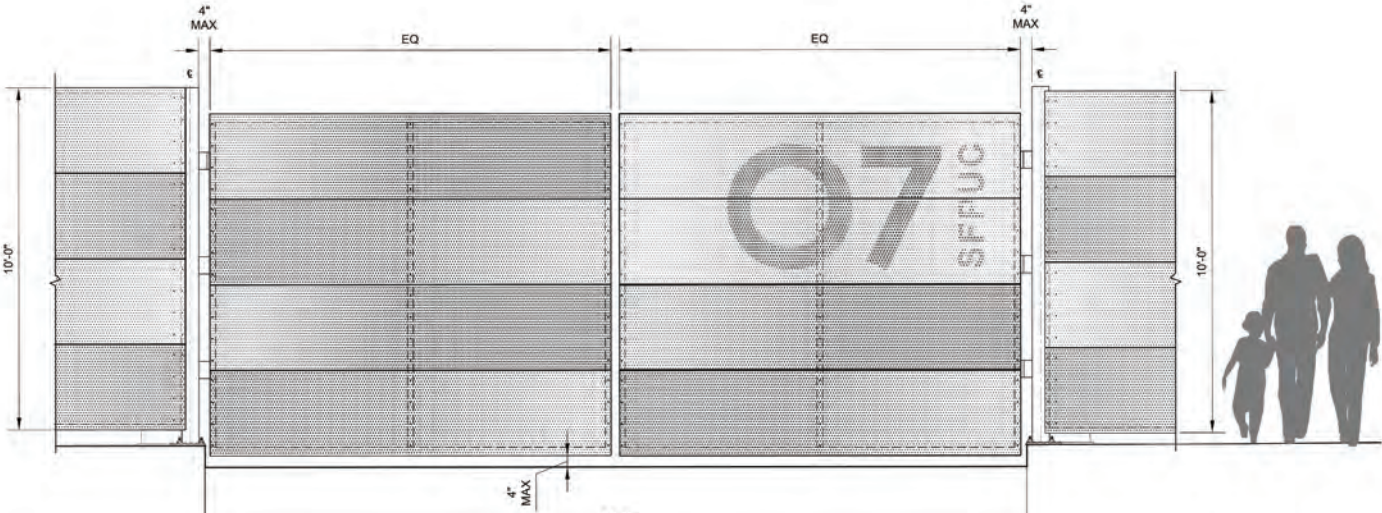
-  24' VEHICULAR SWINGING GATES
-  16' VEHICULAR SLIDING GATES
-  40' VEHICULAR SLIDING GATES



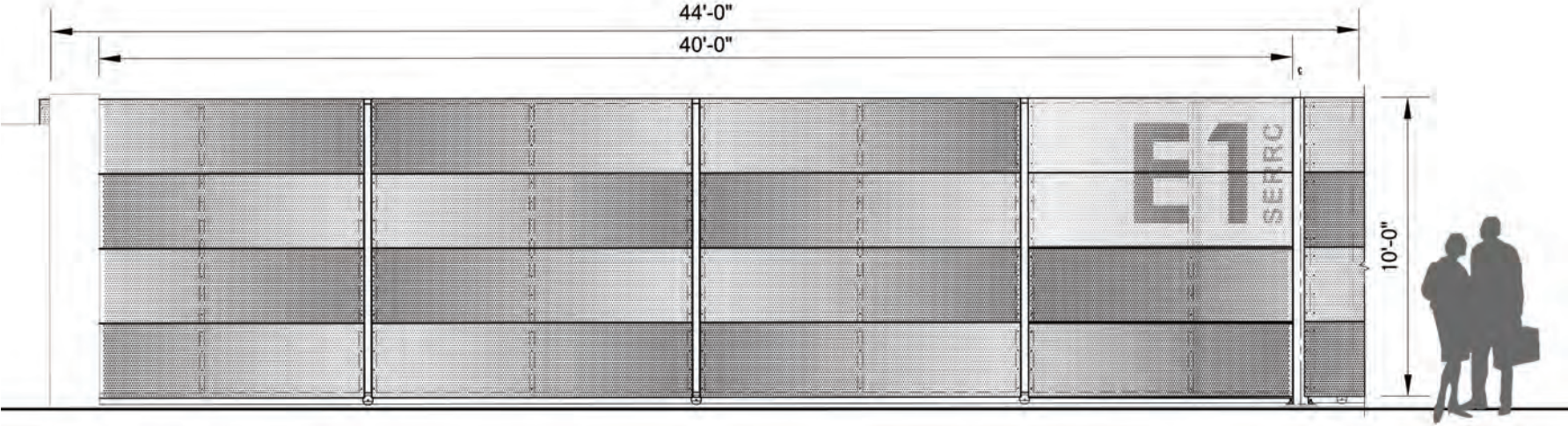
GATE GRAPHICS



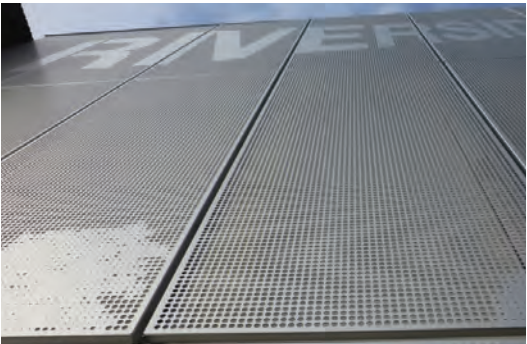
SWINGING GATE



SLIDING GATE



PERFORATED IMAGERY





THANK YOU!