

MIAMI-DADE COUNTY WATER AND SEWER DEPARTMENT OCEAN OUTFALL LEGISLATION PROGRAM

Construction Industry Workshop North District Wastewater Treatment Plant Projects

November 8, 2024



Template Updated
May 8, 2018





1. Overview of OOL Compliance Projects under Design

- a) NE-1 Municipal Injection Wells PS
- b) NT-2C HLD Facilities
- c) NT-3 EDB # 2 (Electrical Bldg. for HLD)

2. Projects Interdependencies and OFE

3. Interactive Session - Contractor Collaboration

OOL: North District Wastewater Treatment Plant

- Achieve OOL compliance by disposing of HLD treated effluent using municipal deep injection wells

Project	Investment	Status	Substantial Completion
Five Municipal Deep Injection Wells (NE-2, S-956)	\$218.4M	Completed	August 2024A
Site Preparation (NT-2B, S-967)	\$52.0M	Const.: 20%	May 2025
Municipal Injection Well PS and Site Improvements (NE-1, S-965)	\$218.4M	Design: 89%	March 2028
High Level Disinfection Facilities (NT-2C, S-966)	\$180.2M	Design: 97%	March 2028
Electrical Distribution Building 2 (NT-3, S-968)	\$181.1M	Design: 70%	September 2028

Commissioning activities and operator training will start approximately 90 days before substantial completion



MIAMI-DADE COUNTY WATER AND SEWER DEPARTMENT OCEAN OUTFALL LEGISLATION PROGRAM

Overview of OOL Compliance Projects under Design

November 8, 2024







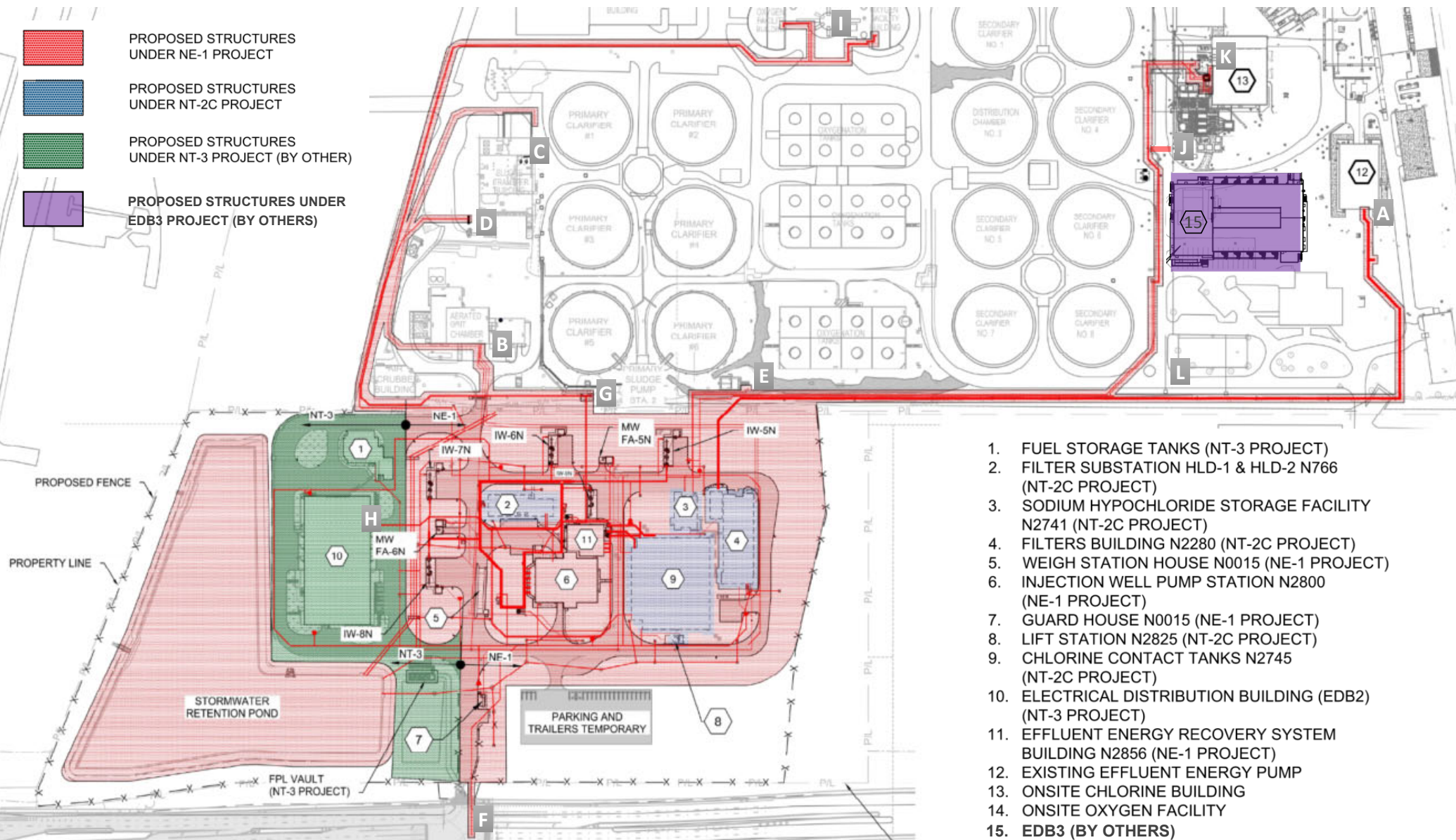
Template Updated
May 8, 2018



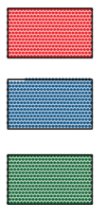
Summary of Work NE-1, NT-2C, NT-3



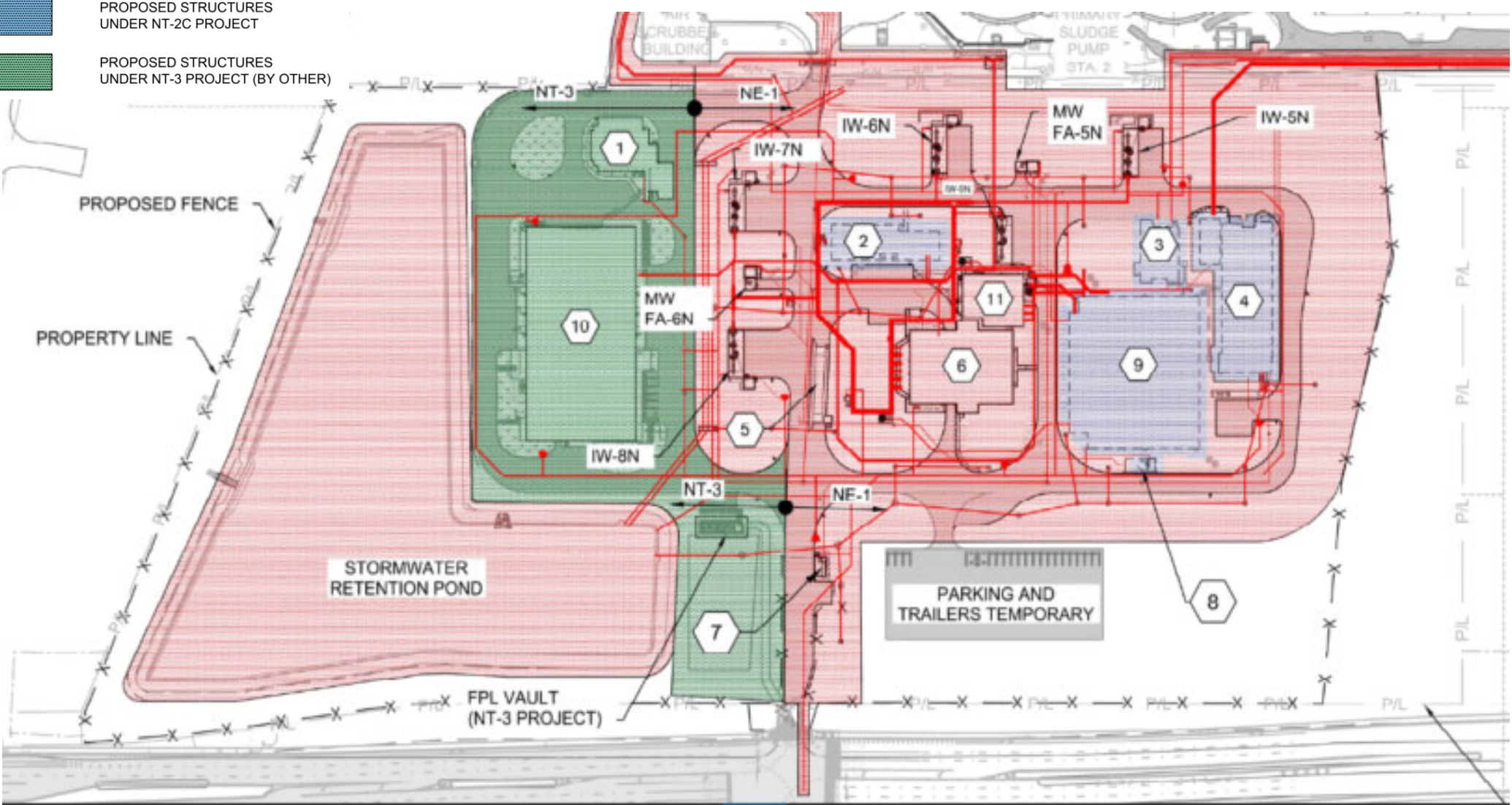
-  PROPOSED STRUCTURES UNDER NE-1 PROJECT
-  PROPOSED STRUCTURES UNDER NT-2C PROJECT
-  PROPOSED STRUCTURES UNDER NT-3 PROJECT (BY OTHER)
-  PROPOSED STRUCTURES UNDER EDB3 PROJECT (BY OTHERS)



1. FUEL STORAGE TANKS (NT-3 PROJECT)
2. FILTER SUBSTATION HLD-1 & HLD-2 N766 (NT-2C PROJECT)
3. SODIUM HYPOCHLORIDE STORAGE FACILITY N2741 (NT-2C PROJECT)
4. FILTERS BUILDING N2280 (NT-2C PROJECT)
5. WEIGH STATION HOUSE N0015 (NE-1 PROJECT)
6. INJECTION WELL PUMP STATION N2800 (NE-1 PROJECT)
7. GUARD HOUSE N0015 (NE-1 PROJECT)
8. LIFT STATION N2825 (NT-2C PROJECT)
9. CHLORINE CONTACT TANKS N2745 (NT-2C PROJECT)
10. ELECTRICAL DISTRIBUTION BUILDING (EDB2) (NT-3 PROJECT)
11. EFFLUENT ENERGY RECOVERY SYSTEM BUILDING N2856 (NE-1 PROJECT)
12. EXISTING EFFLUENT ENERGY PUMP
13. ONSITE CHLORINE BUILDING
14. ONSITE OXYGEN FACILITY
15. EDB3 (BY OTHERS)



- PROPOSED STRUCTURES
UNDER NE-1 PROJECT
- PROPOSED STRUCTURES
UNDER NT-2C PROJECT
- PROPOSED STRUCTURES
UNDER NT-3 PROJECT (BY OTHER)



NE-1 Municipal Injection Wells PS



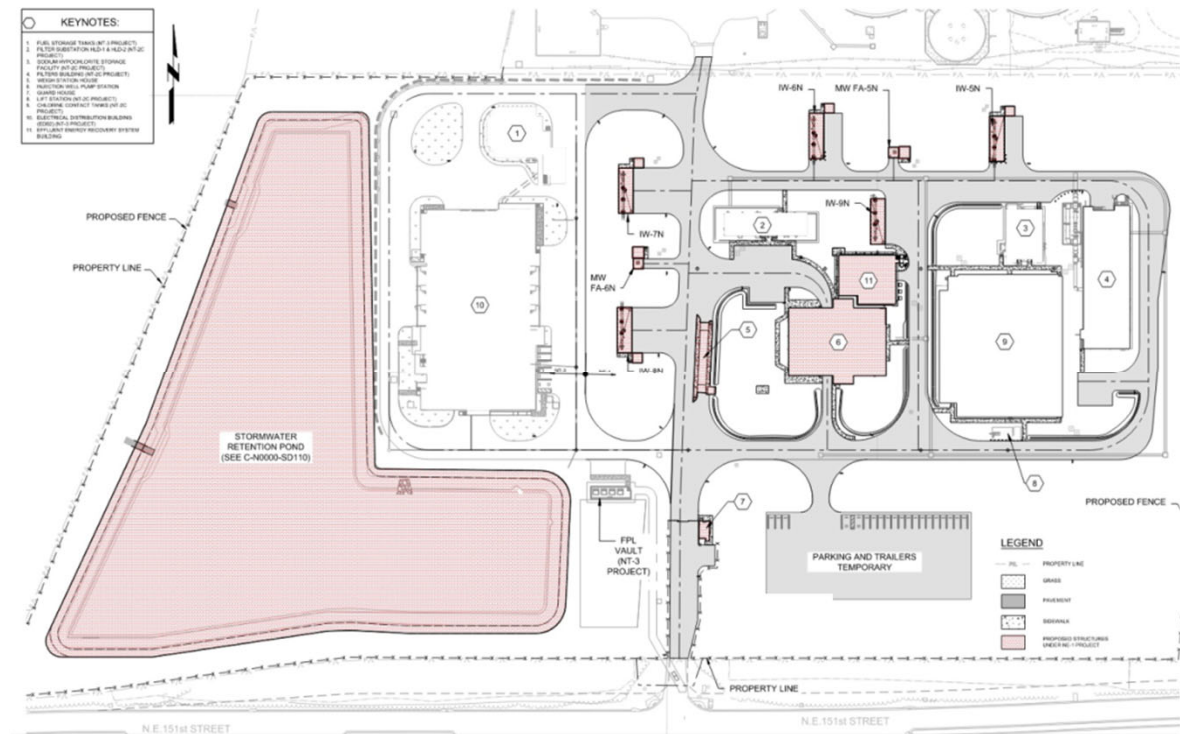
NDWWTP: Municipal Injection Well PS and Site Improvements

SNAPSHOT

ID	S-965, NE-1
Status	Design: 89%
Substantial	March 2028
Construction Estimate	\$152-172M

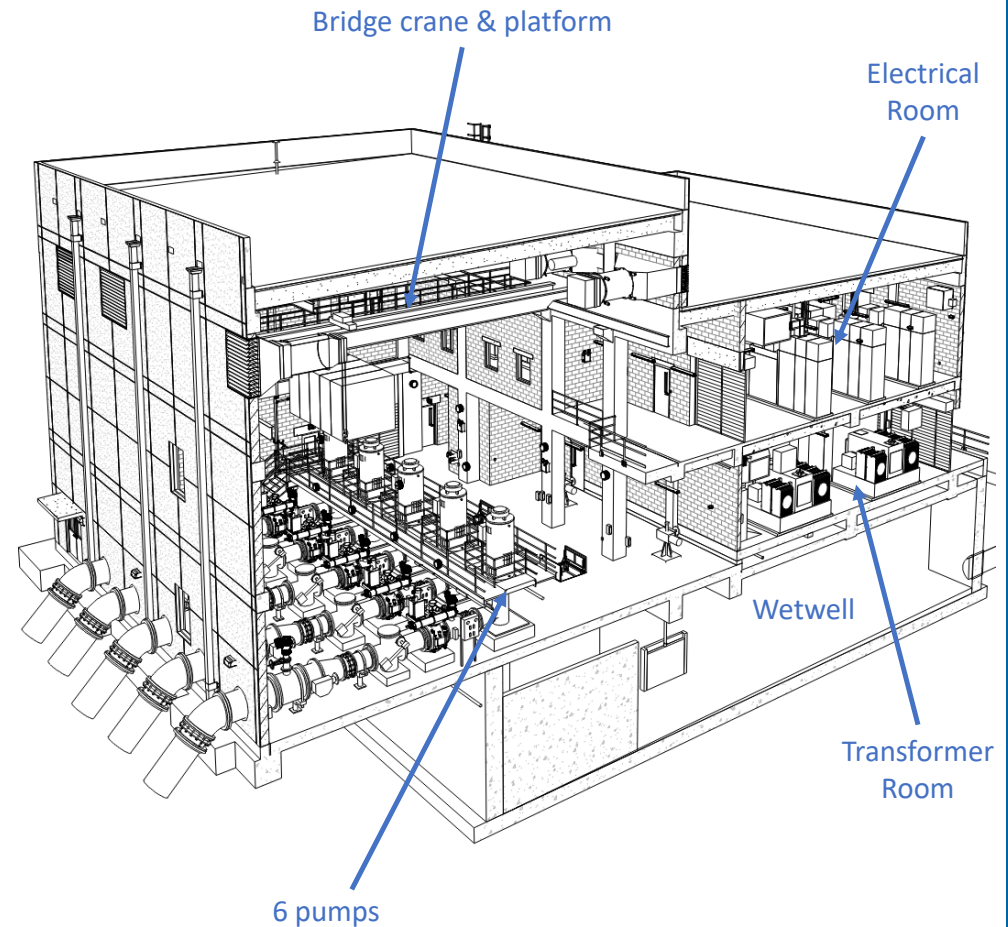
MAJOR COMPONENTS

Municipal Well PS (75 MGD)
60" FM from Transfer PS to Filters
60" Effluent Well Loop and wellheads
Well Sampling & Instrumentation Room
Stormwater, potable water and flushing water systems
Site improvements and roads
Effluent Energy Recovery Facility



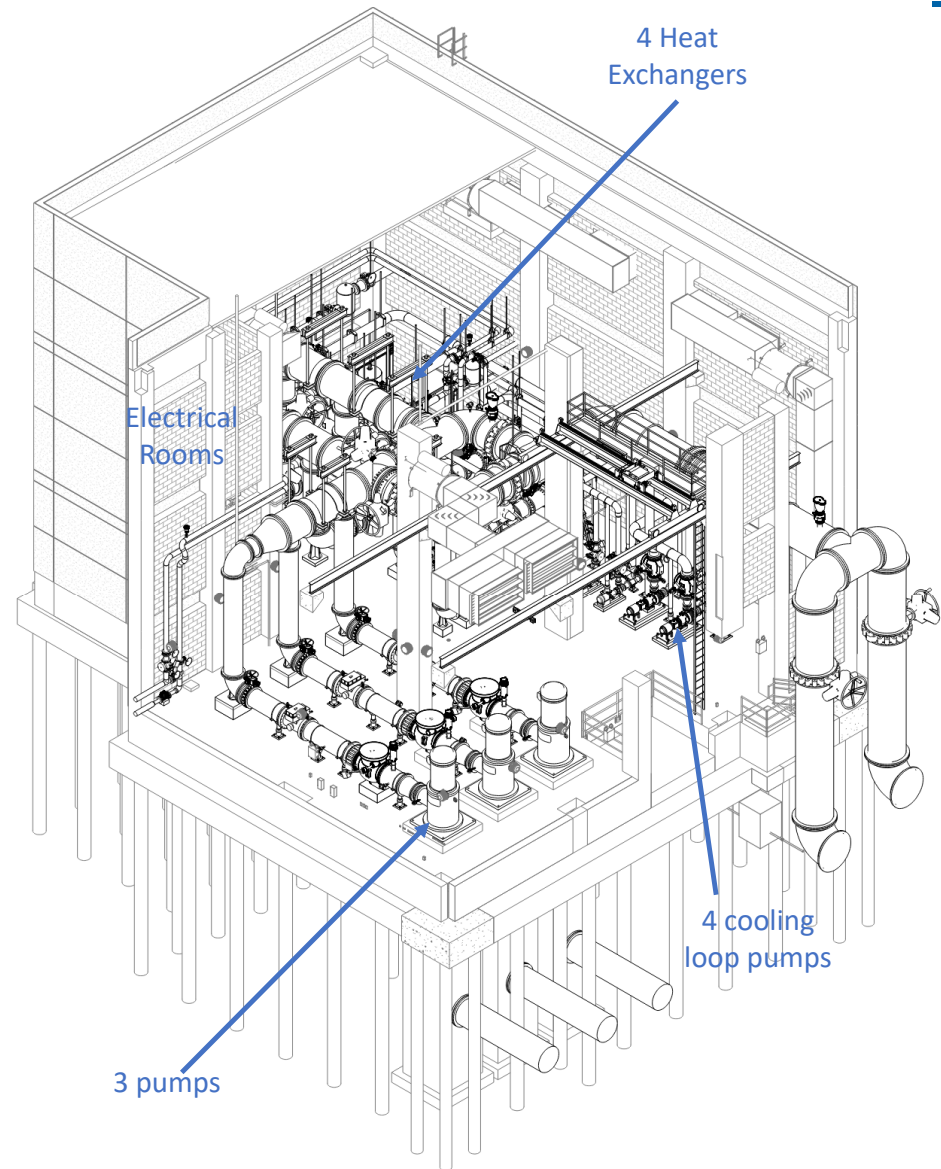
Injection Well Pump Station

- **Bldg Area:** 31,000 SF
- **Foundation:** Auger cast piles
- **Substructure:** Reinforced concrete
- **Superstructure:** Concrete & reinforced masonry, double tees concrete roof
- **Design Pump Flow:** 18.75 MGD/13,020 gpm
- **Lower Level** – Elev 16.33
 - 6 vertical turbined pumps - 900 HP (each)
- **Intermediate Level** – Elev 18.25
 - Transformers
(To be Pre-Purchased by WASD)
- **Upper Level** – Elev 33.3
 - Control Room
 - Electrical equipment
 - Platform for electrical equipment service/removal



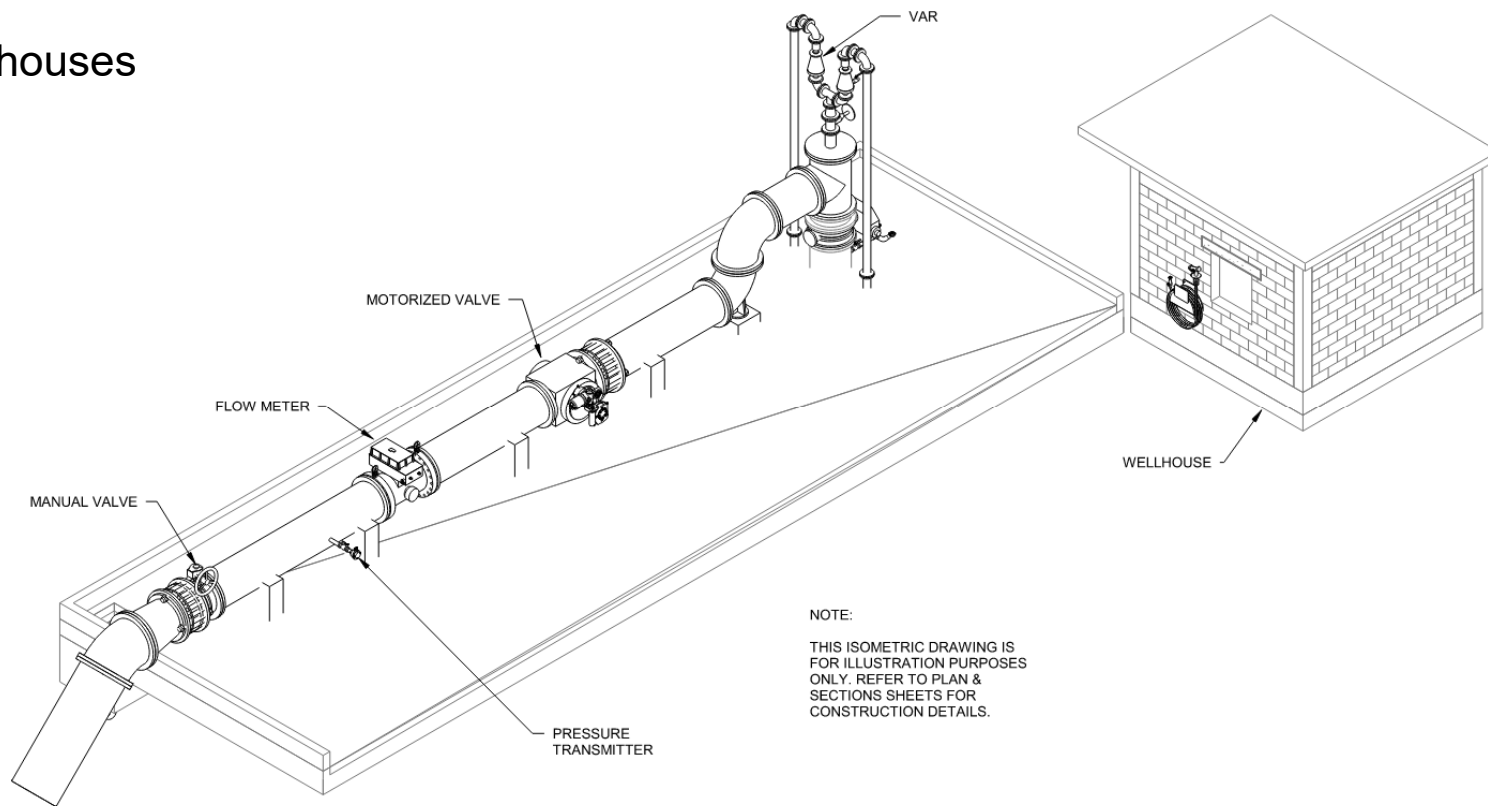
Effluent Energy Recovery System

- **Bldg Area:** 4,858 SF
- **Foundation:** Auger cast piles & concrete slab
- **Superstructure:** Concrete & reinforced masonry, double tees concrete roof
- **Operating Floor - Elev 18.25**
 - 3 canned vertical turbine pumps (400 HP each)
 - 4 heat exchangers
 - 4 cooling loop pumps
- **Electrical Rooms - Elev 28.75 (two stories)**
- High Roof to accommodate bridge crane & platform



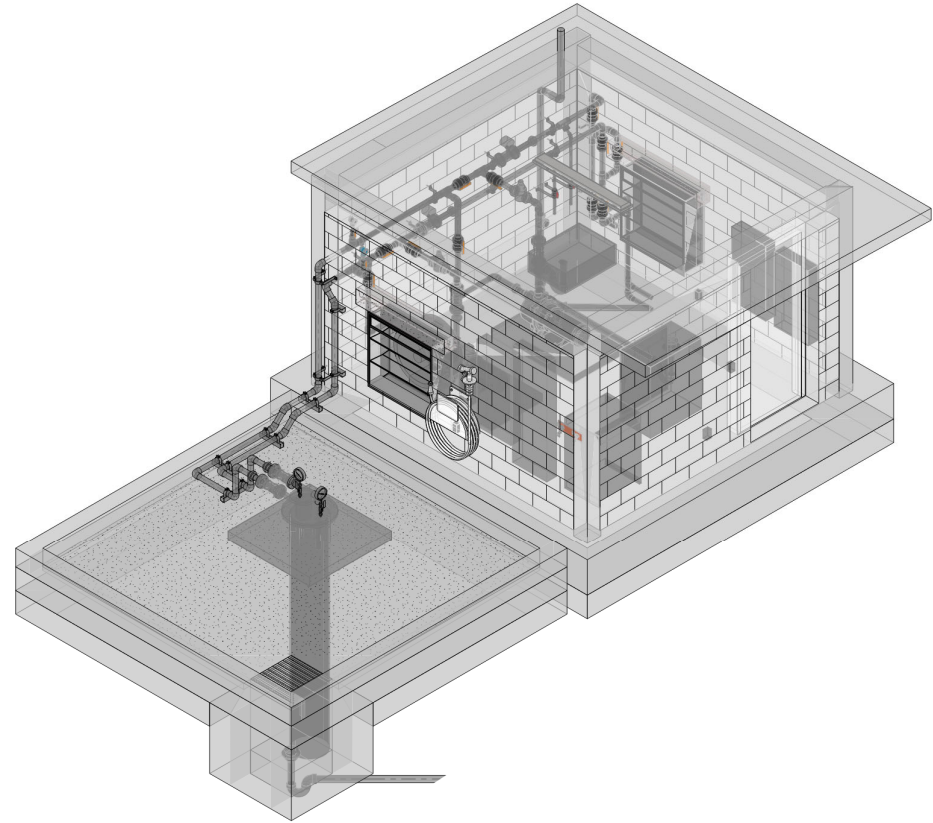
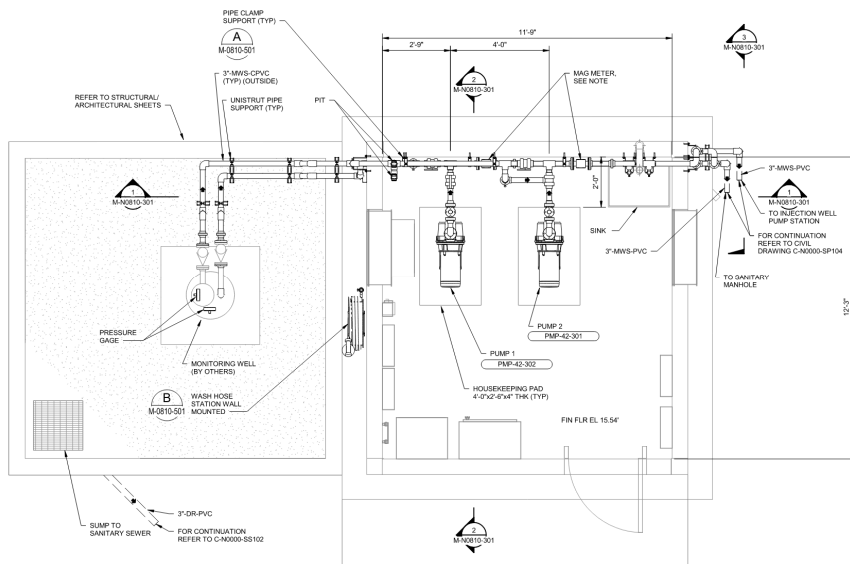
Injection Wellhead

- 5 Injection Well Heads
- 4 with wellhouses

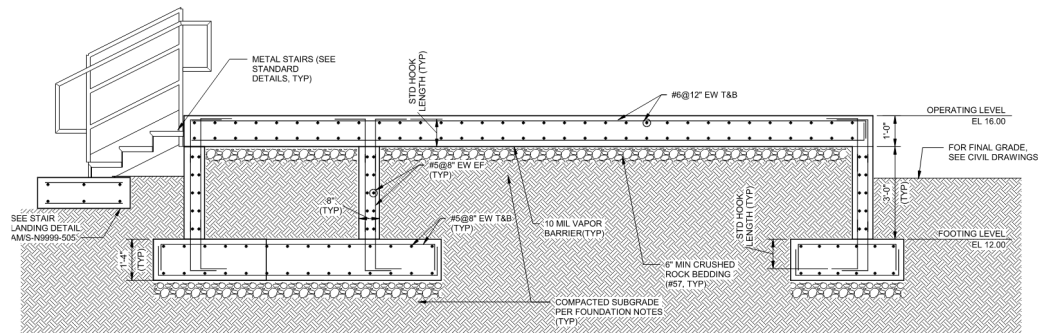
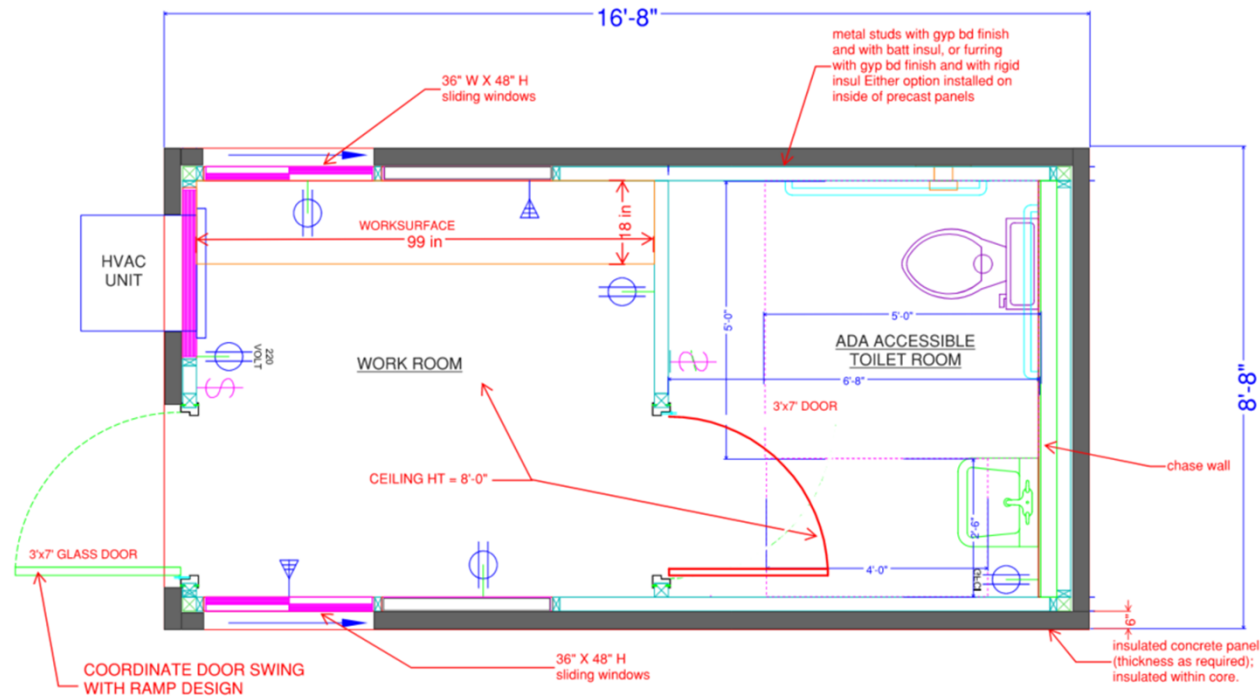


Monitoring Wells

- 2 Monitoring Wells
- 2 – 120 gpm centrifugal end-suction pumps



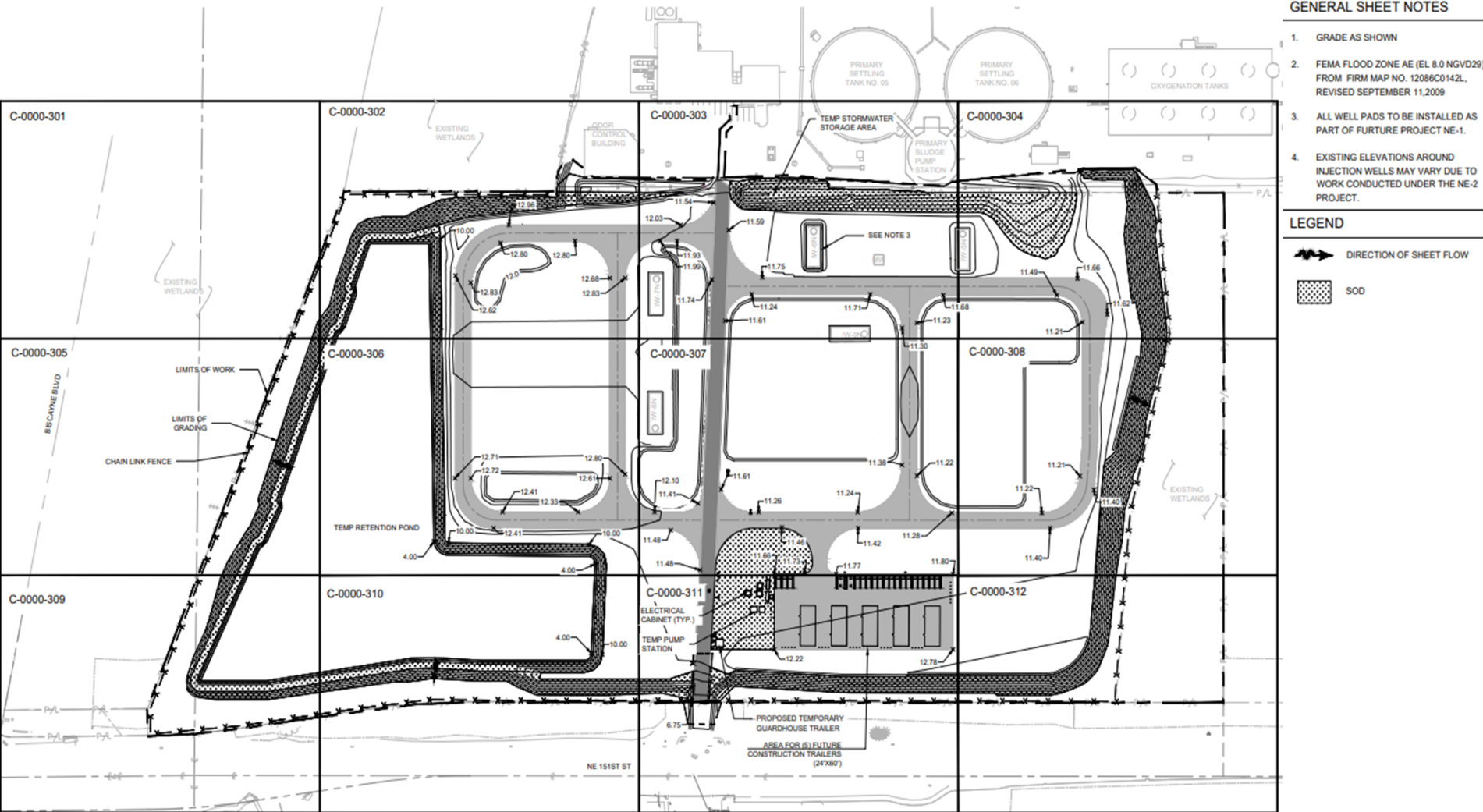
Pre-fabricated Guardhouse with bathroom







NT-2B Civil- Grading and Drainage

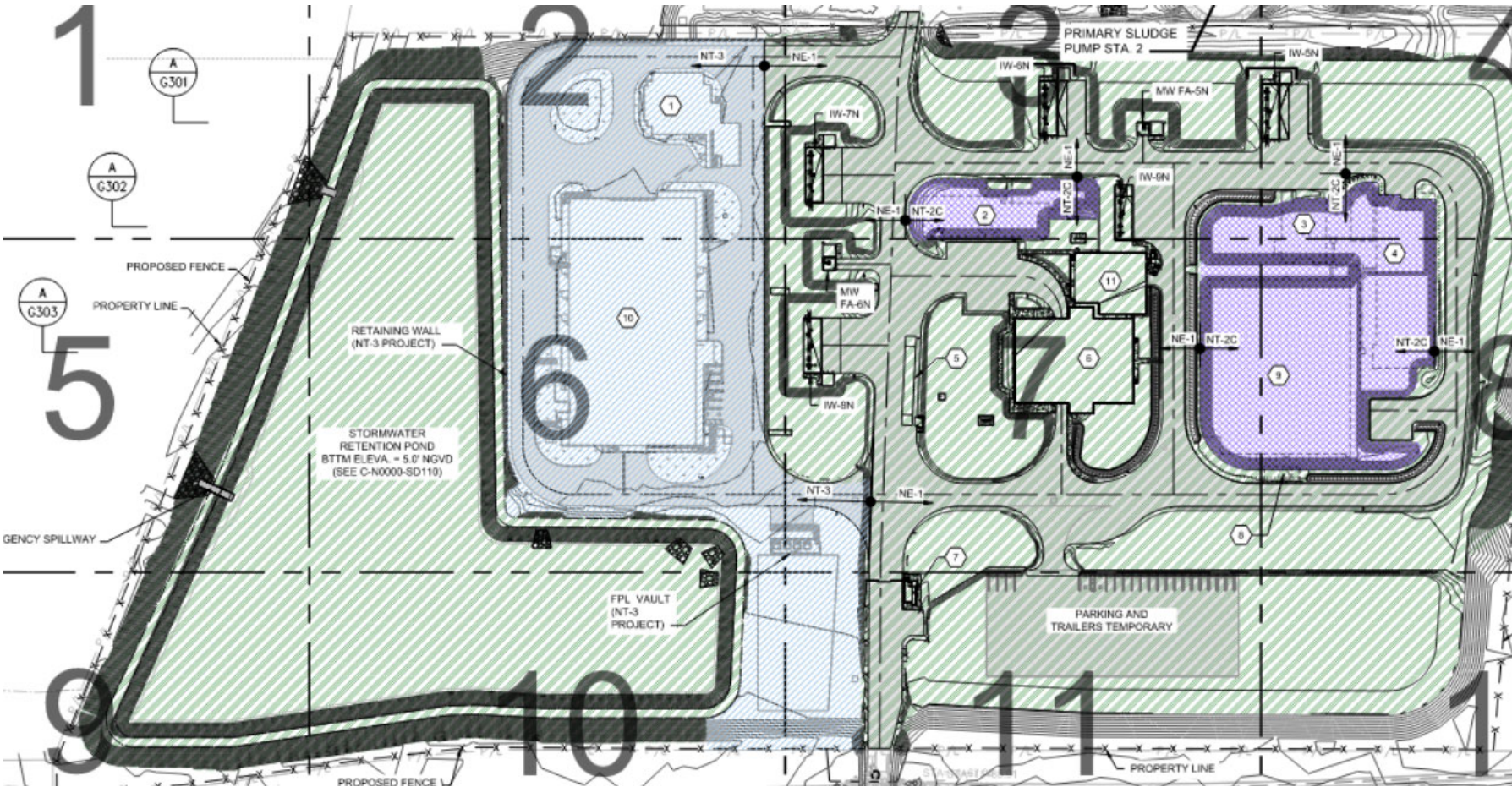


Civil- Grading

 NT-2C HLD Filters

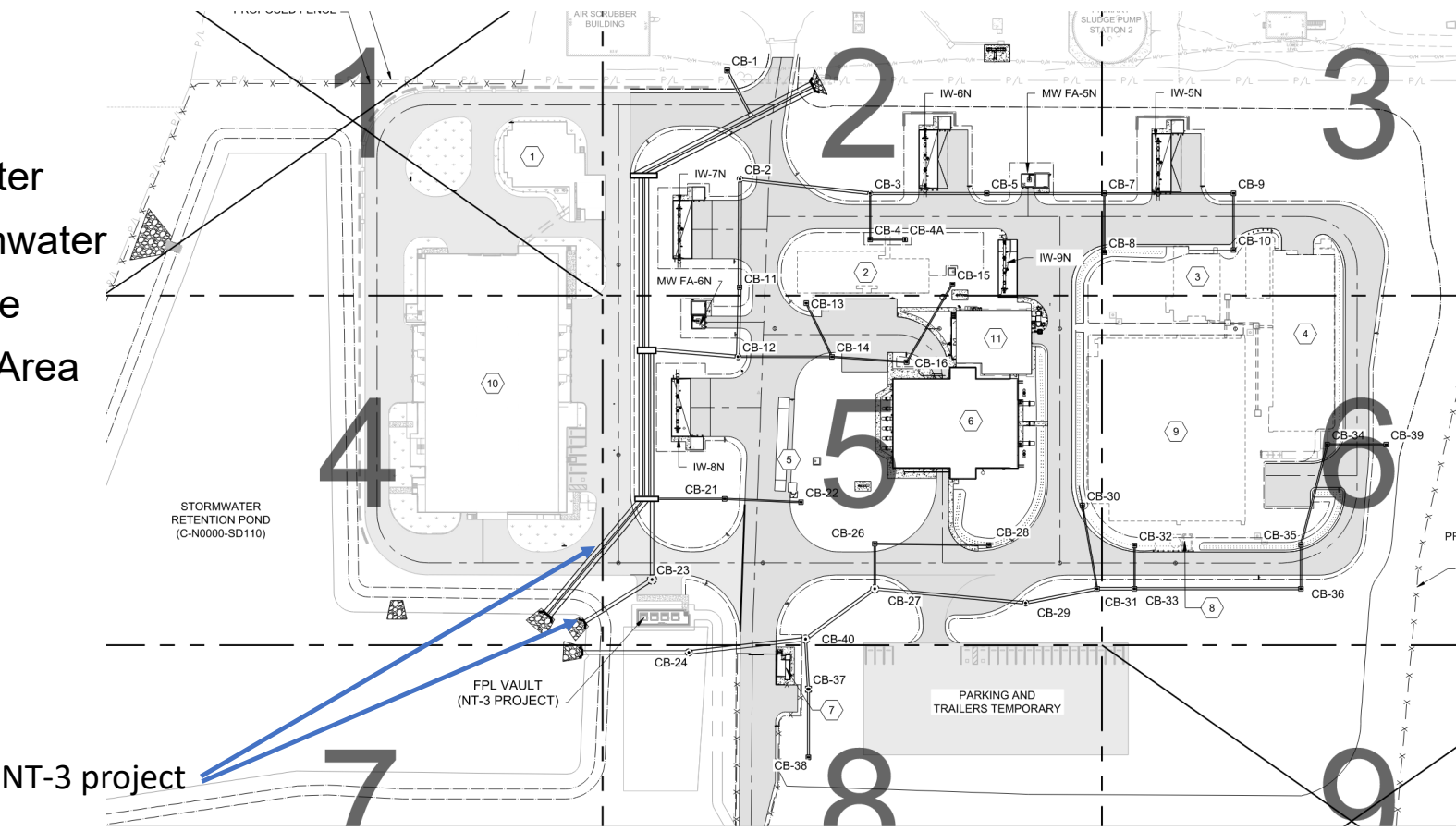
 NE-1 IWPS & Site Work

 NT-3 EDB3



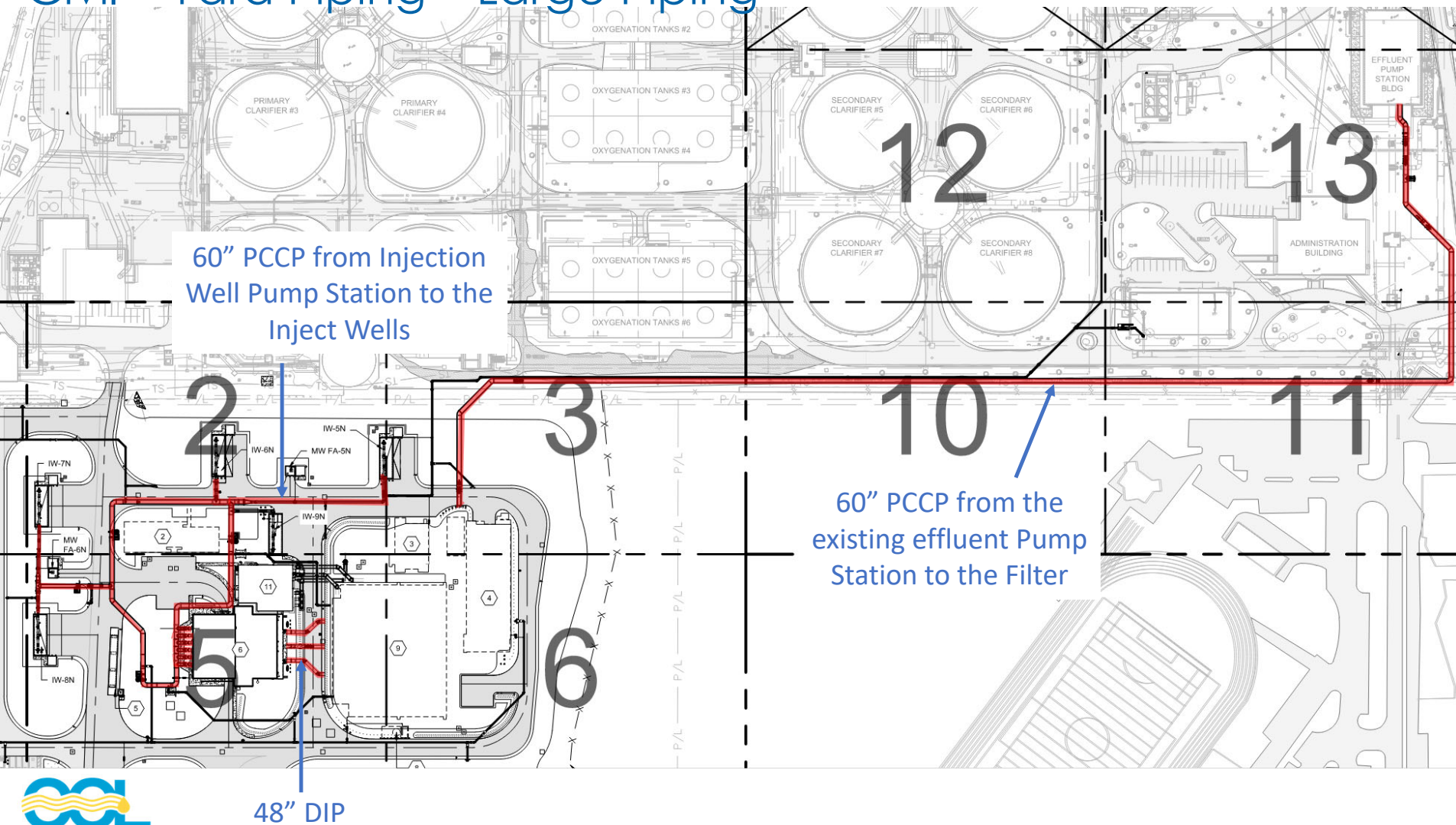
Civil- Stormwater

Stormwater water pond and stormwater collection for the NT-2C & NE-1 Area

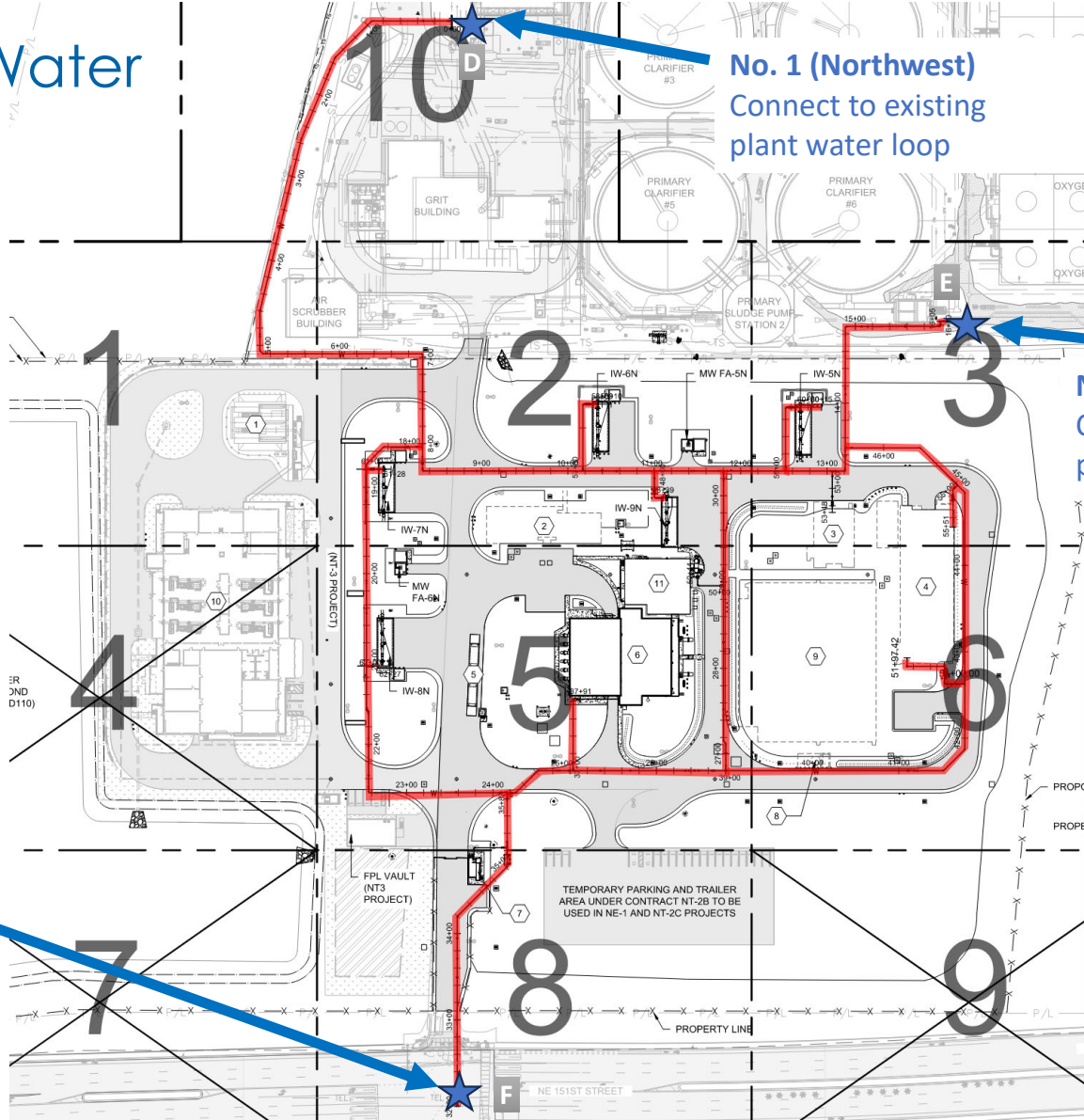


- 19 -

Civil – Yard Piping – Large Piping



Civil- Potable Water



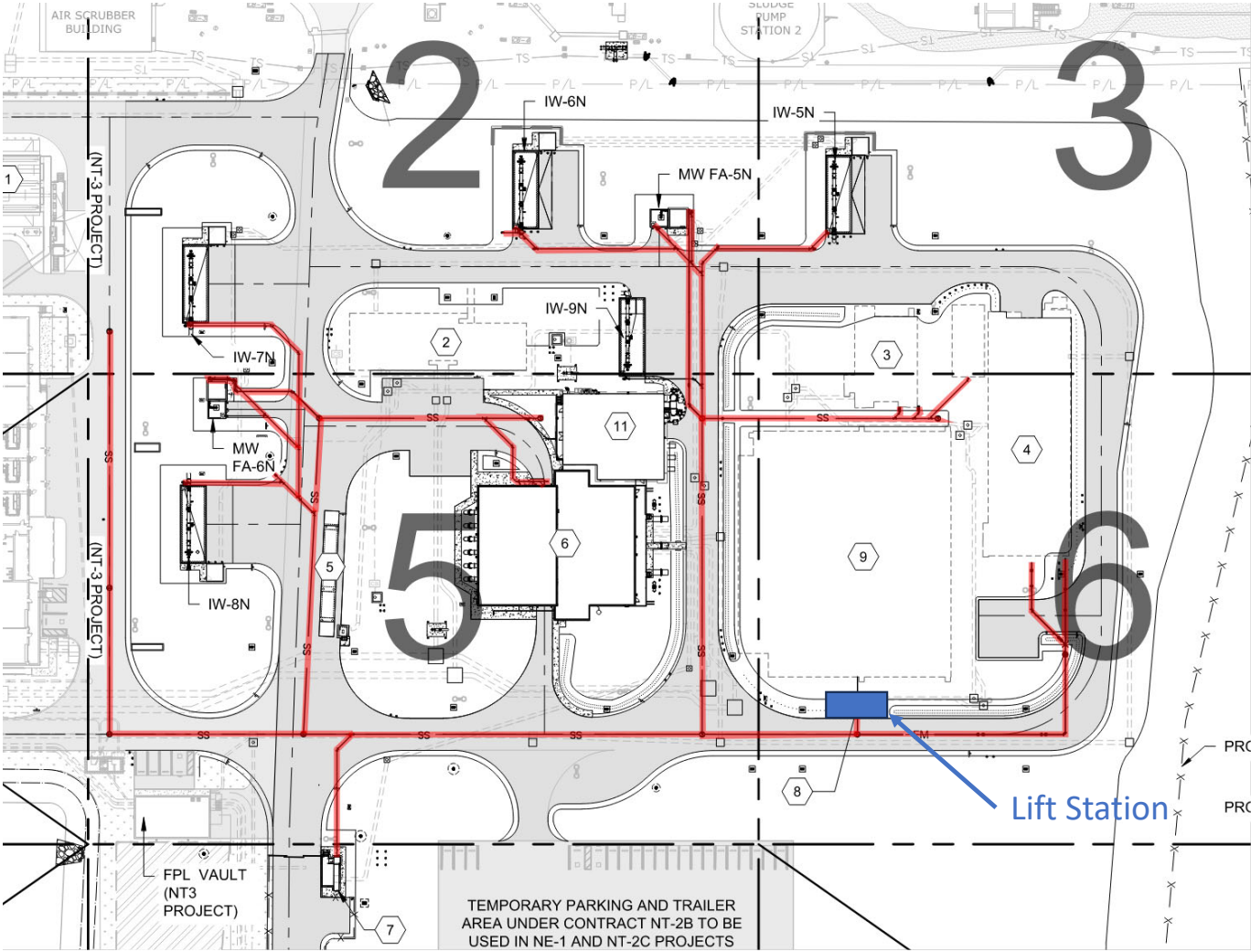
No. 1 (Northwest)
Connect to existing
plant water loop

No. 2 (Northeast)
Connect to existing
plant water loop

No. 3 (South)
Hop tap 151st street
Watermain



Civil- Sanitary Sewer



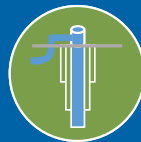
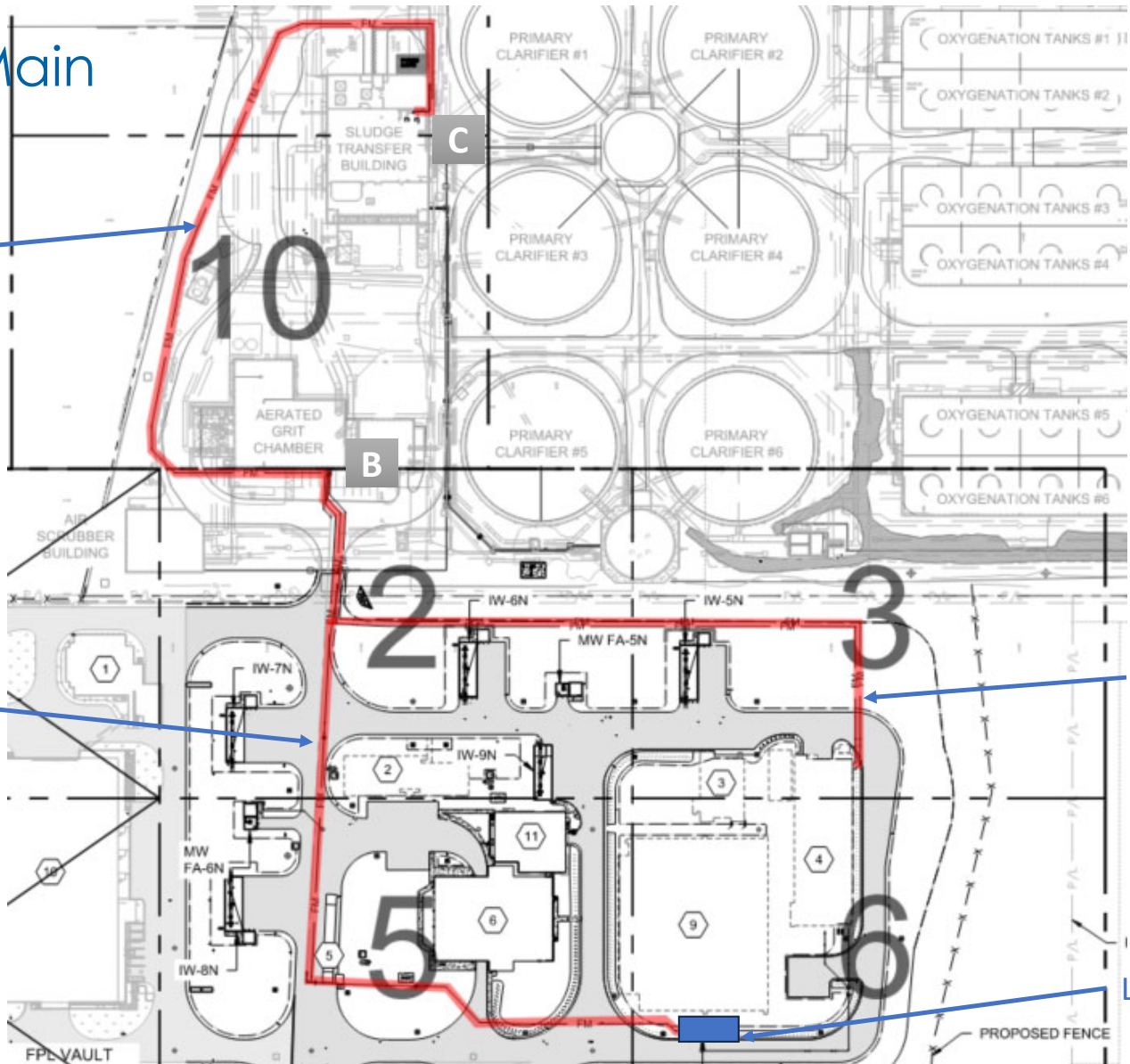
Civil- Force Main

10" Backwash
Filter Bypass

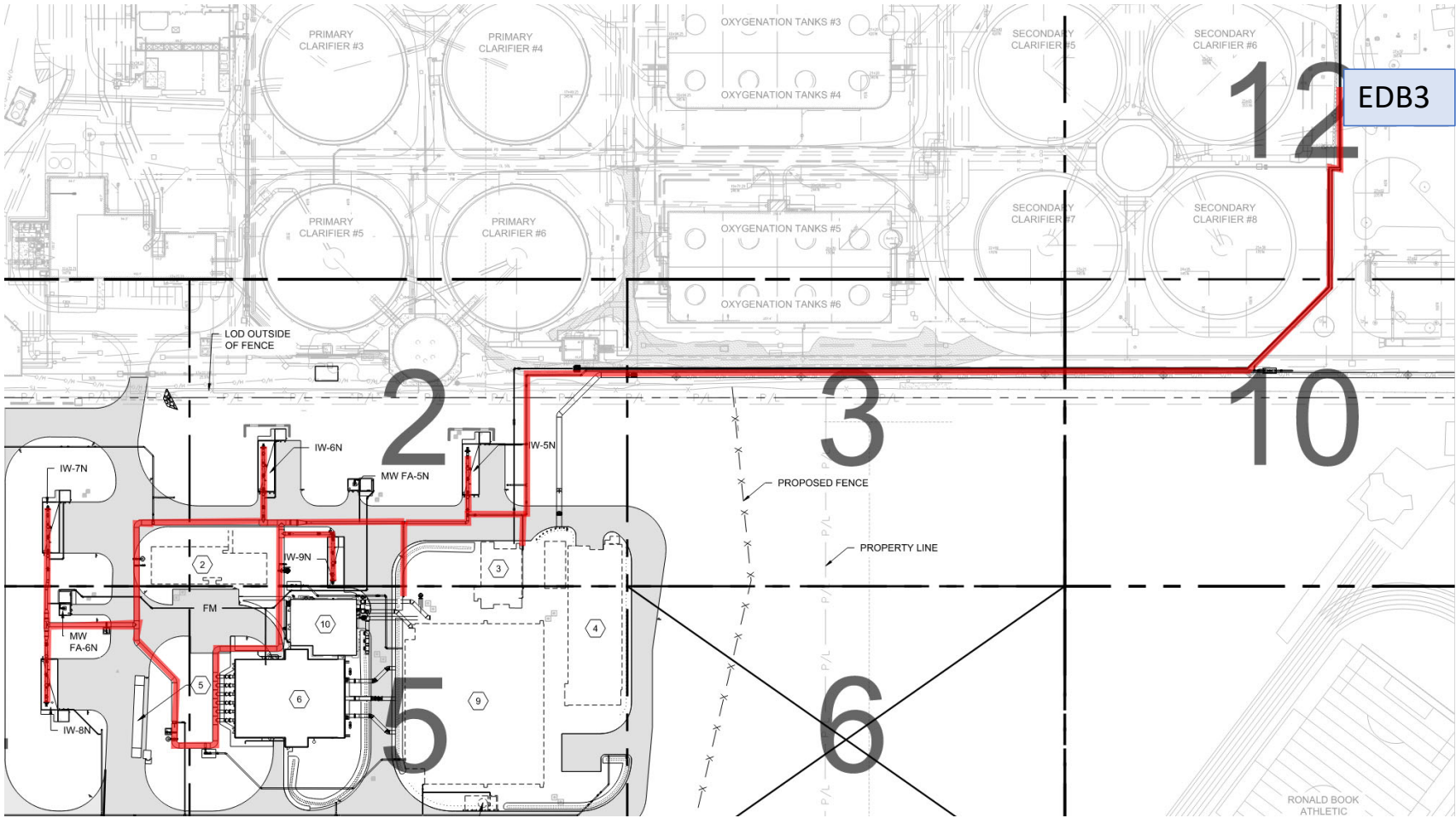
6" Lift Station
Discharge

10" & 12" Filter
Backwash

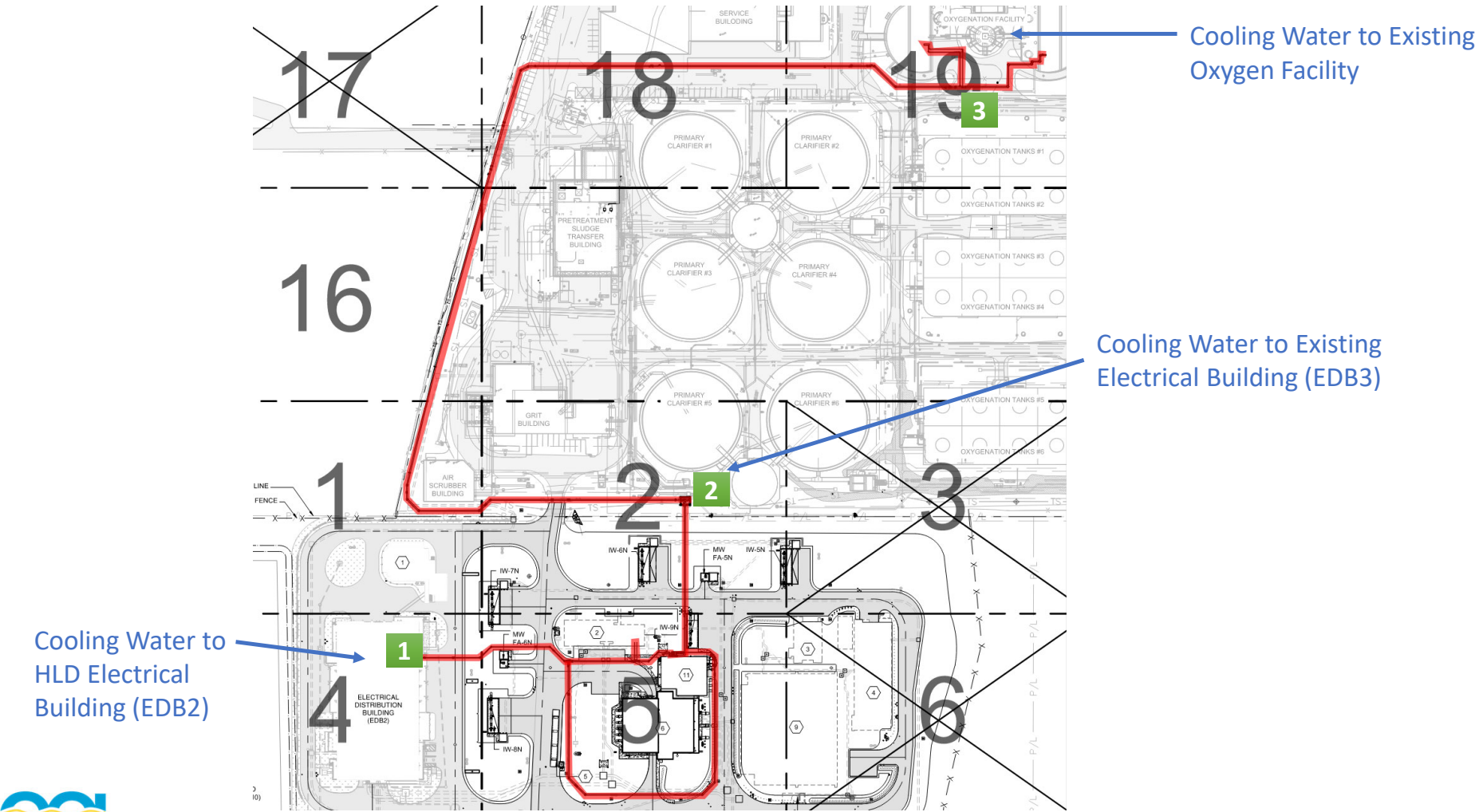
Lift Station



Civil- Non-Potable Water



Civil- Cooling Water Loop



- 25-

Risks - Connections to New or Existing Infrastructure



Risks - Connections to New or Existing Infrastructure

ID	Connection Description	Responsible Firm	Provisions	Shutdown Duration	Facilities Affected by Shutdown	Risks
A	HLD Filter Influent	EPS by BC	Blind Flange by BV	NA	No Shutdown required	None
B	10" & 12" Filter Backwash Connection at the Existing Grit Building Plan	BV	Verify pipe condition prior to hot tap	NA	No Shutdown required	Contractor to verify the condition of existing piping before welding Tap
C	Backwash Filter Bypass – 6" Connection to the Sludge Transfer Building	BV		4 hrs midnight shutdown	Sludge Transfer	Isolation valves to be tested before shutdown
D	Connect to Existing Plant Potable Water Loop - Northwest	BV	Use linestops or Locate the closest isolation valves to connection point	NA or 4 hrs	No Shutdown required. To be determined if linestops not used.	If isolation valves are not functional, 2 linestops can be used.
E	Connect to Existing Plant Potable Water Loop – Northeast	BV	Use linestops or Locate the closest isolation valves to connection point	NA or 4 hrs	No Shutdown required. To be determined if linestops not used.	If isolation valves are not functional, two line-stops can be used.

ID	Connection Description	Responsible Firm	BV Provisions	Shutdown Duration	Facilities Affected by Shutdown	Risks
F	New PW Connection with the City of North Miami – 151 st St.	BV	-Coordinate with North Miami -MOT required	NA	No Shutdown required	Temporary water loss for multiple City water costumers
G	Cooling Water to EDB3	EDB3 by Hazen	Isolation Valve with Blind Flange	NA	No Shutdown required	None
H	Cooling Water to EDB2	EDB2 by CDM	Blind Flange	NA	No Shutdown required	None
I	Cooling Water to Existing Oxygen Facility	BV	Valves to isolate cooling towers	0-2 hrs	HPO Reactors	Oxygen production stopping, not enough storage in the O2 sphere for the shutdown, effluent water quality issues

ID	Connection Description	Responsible Firm	BV Provisions	Shutdown Duration	Facilities Affected by Shutdown	Risks
J	Non-Potable Water – Flushing Water Connection at The Existing Chlorination & Non-Potable Pump Facility	EDB3 by Hazen	Isolation Valve with Blind Flange for future connection	To be determined by Hazen	To be determined by Hazen	EDB3 project will provide a potable water connection to be used during shutdowns
K	Connection to Existing Sodium Hypochlorite System	BV	All Effluent to be directed to existing Injection Wells	NA	No Shutdown required	Period of tie-in to be coordinated with minimal hose bibb usage.
L	Existing Injection Well No. 4	BV	Replace existing 24” 90 bend by a 24” Tee	4 hrs midnight shutdown	Injection Well No. 4 out of service	Verify if existing injection well loop isolation valve is operational

NT-2C - HLD Facilities



NDWWTP: High Level Disinfection Facilities

SNAPSHOT

ID	S-966, NT-2C
Status	Design: 97%
Substantial	March 2028
Construction Estimate	\$123-139M

MAJOR COMPONENTS

Filter building with 8 disk filters

Chlorine Contact Tanks

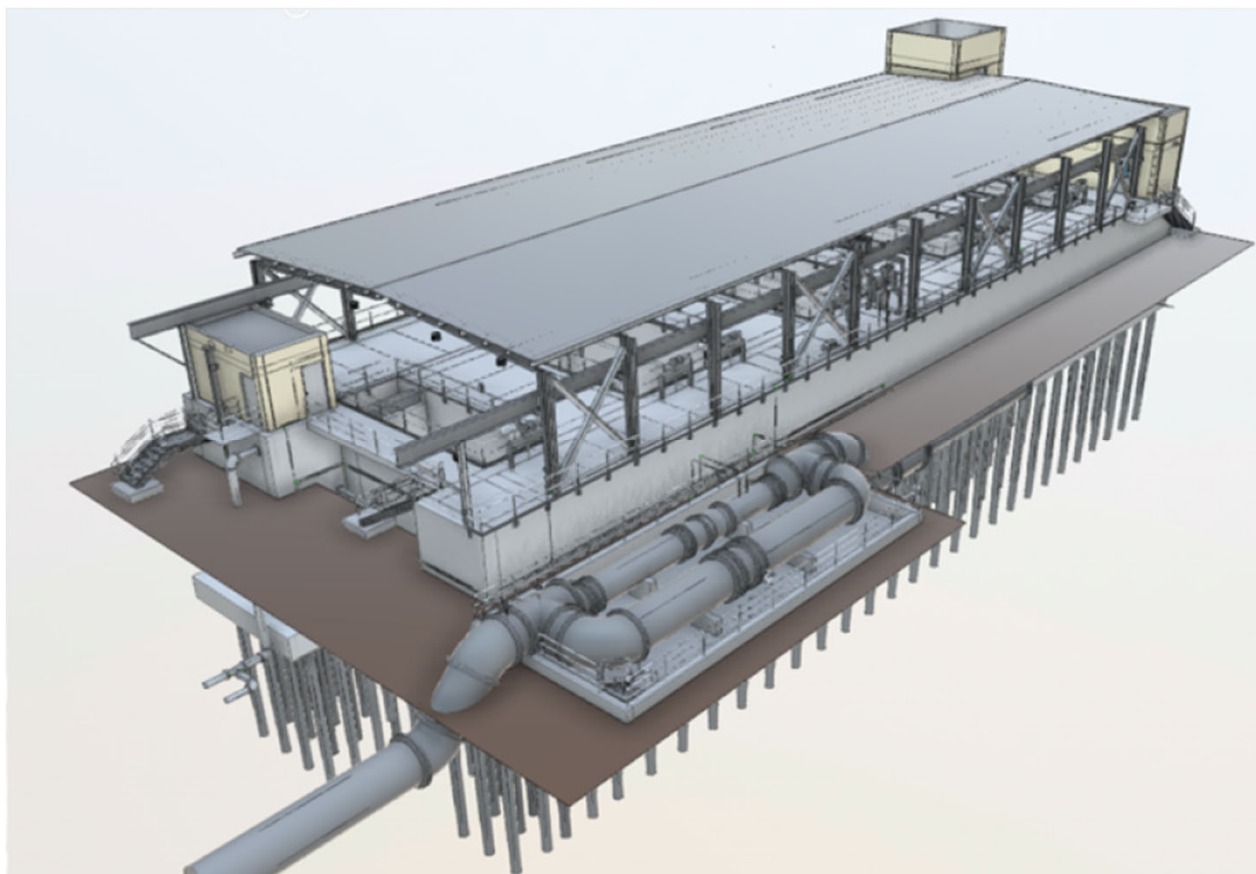
Sodium Hypochlorite Storage

Electrical substation

Sanitary Pump Station

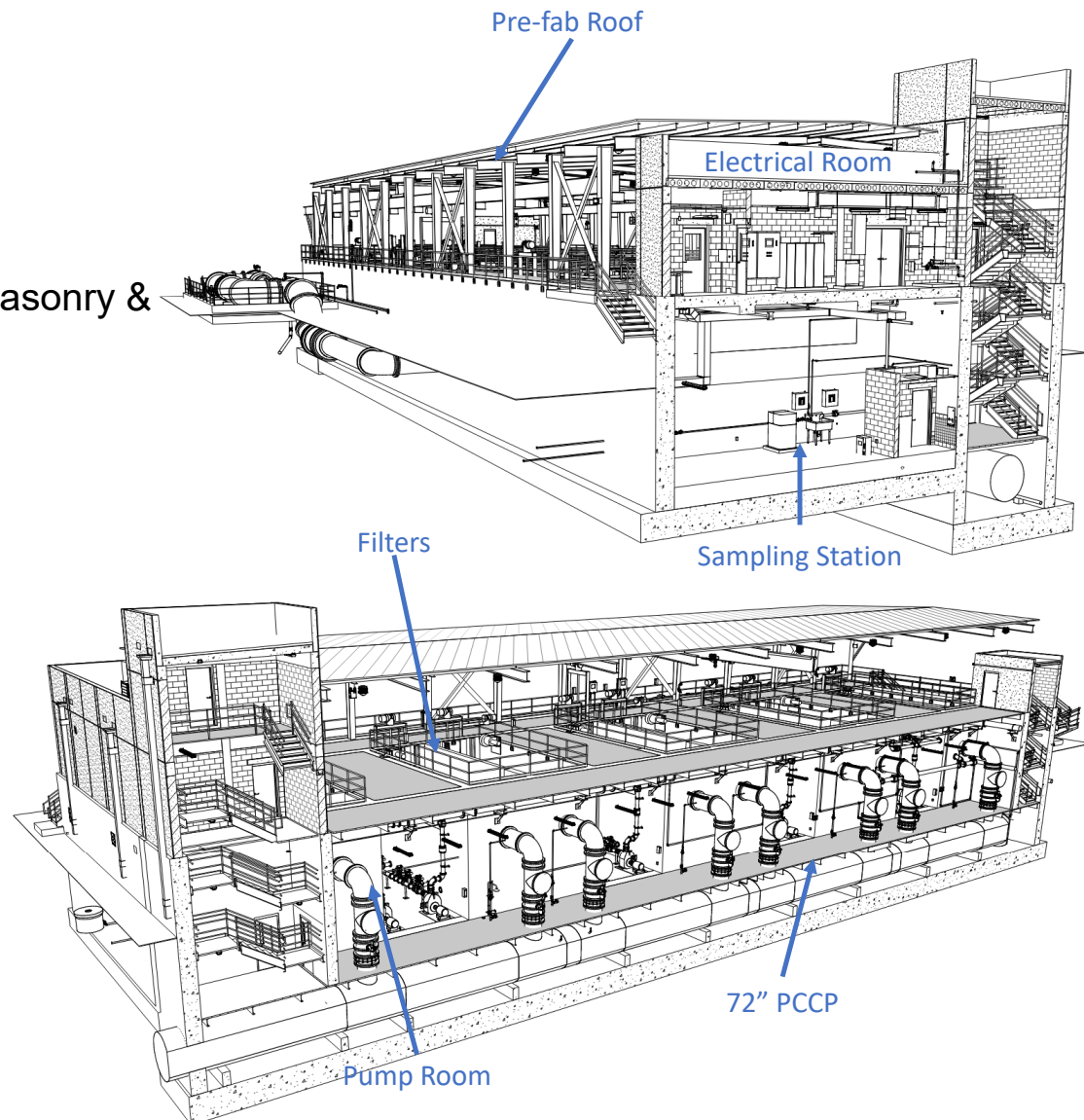
CHALLENGES

Disk Filter Procurement



Filter Building

- **Building Area:** 22,011 SF
- **Foundation:** Auger cast piles
- **Substructure:** Reinforced concrete
- **Superstructure:** Concrete & reinforced masonry & Pre-fabricated/pre-engineered roof
- **Upper level** 11,062 SF – Elev. 22.33
 - Influent channel with isolation gates
 - Filter bays for housing 8 Megadisk cloth media filters (To be Pre-Purchased by WASD)
 - Pre-fabricated/pre-engineered roof to cover filters & support bridge crane
 - Electrical & Control Room
- **Lower level** 10,949 SF – Elev. 2.33
 - Pump Gallery
 - Restroom
 - Sampling Station
 - Pipe gallery with 72" PCCP effluent pipe
 - Fire Sprinklers

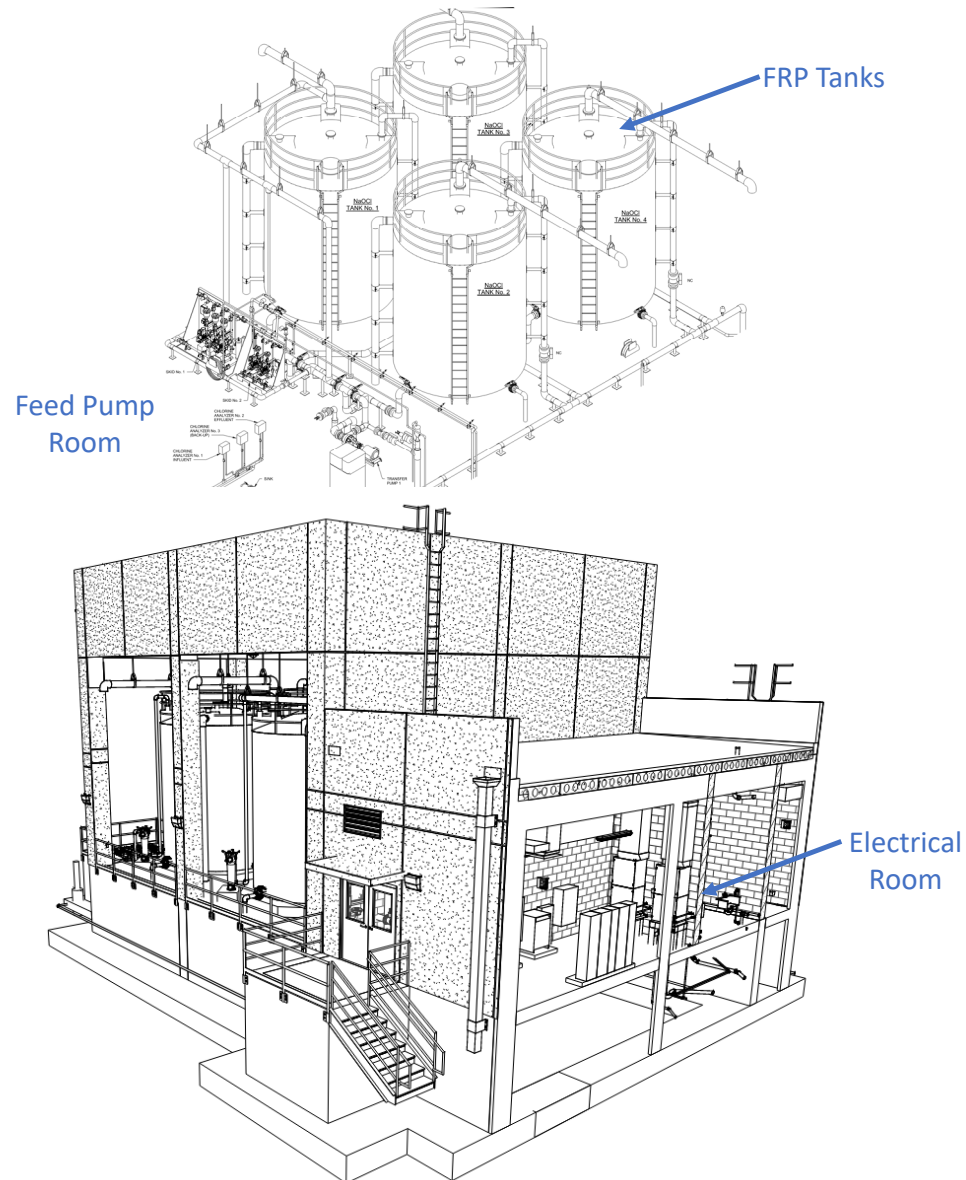


- **Structure Area** ~ 29,500 SF
- **Foundation:** Auger cast pile & large pile cap/mat slab
- Reinforced concrete structure
- 4 Trains, 5 passes per train
 - Width: 8 ft
 - Length: 130 ft
 - Depth: 12 ft
- 18 Isolation Slide Gates
- 2 Effluent Channels



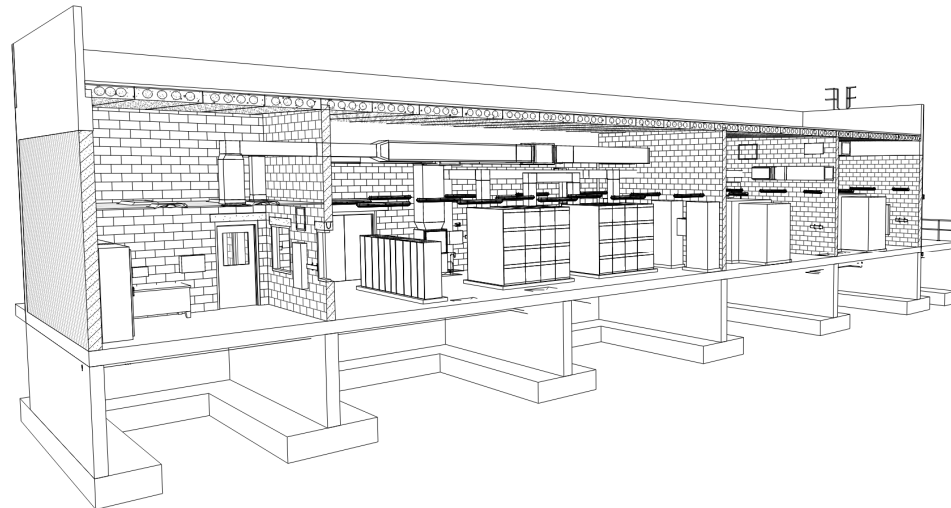
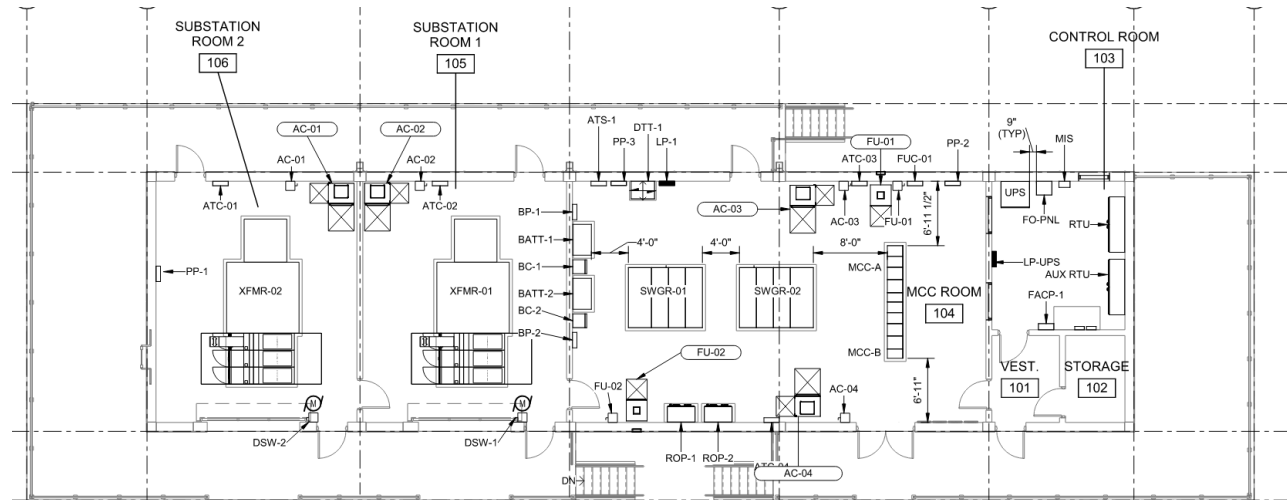
Sodium Hypochlorite

- **Building Ares:** 2,983 SF
- **Foundation:** Shallow continuous footing
- **Superstructure:** reinforced concrete & masonry
- 4 FRP Tanks (16,000 gallons)
- 2 Disinfection Feed Pumps
- 2 Filter Cleaning Feed Pumps
- A Transfer Pump for temporary NaOCl transfer to existing facility
- **Sample Room**
 - 1 Composite Samplers
 - 3 Chlorine Analyzers
 - Lab Sink



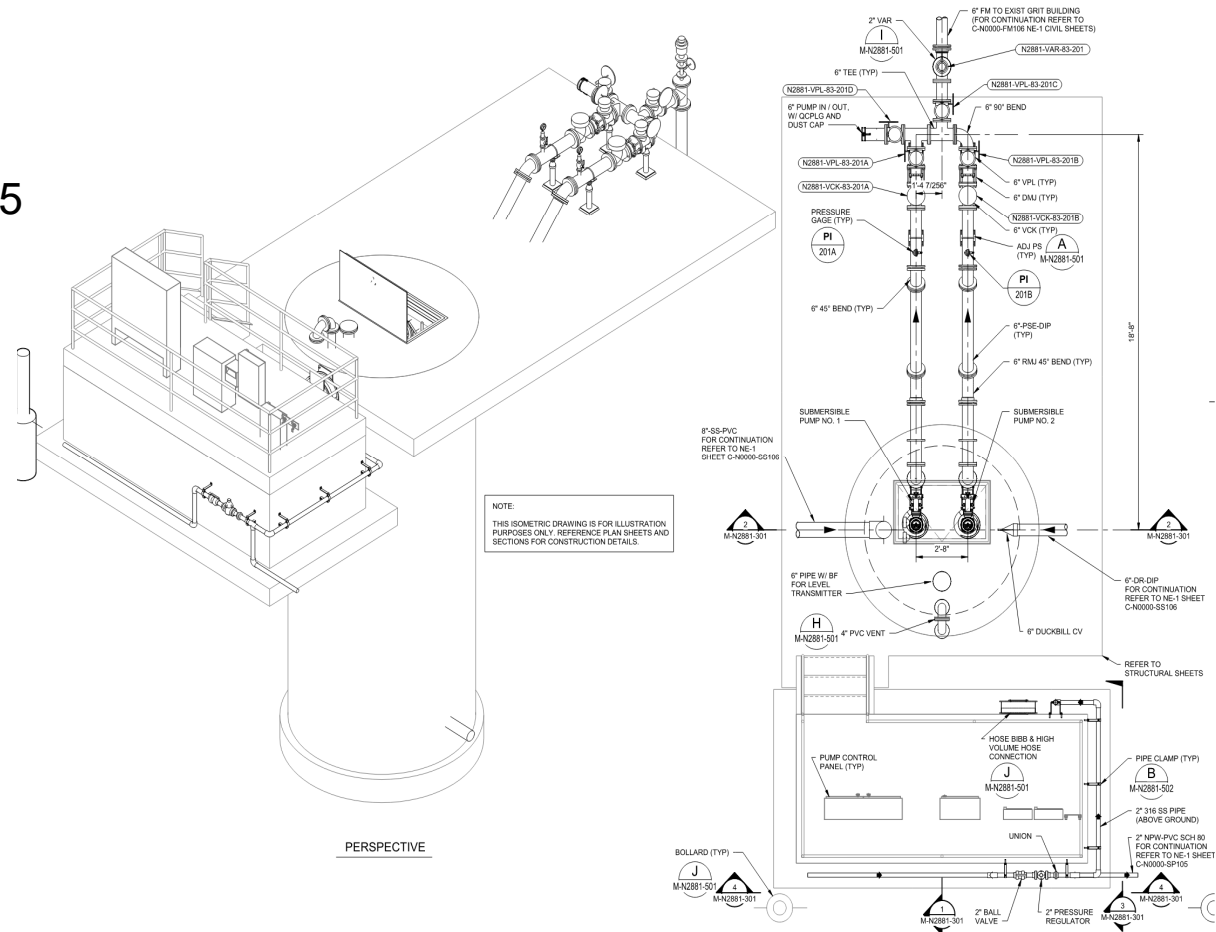
HLD Substation

- **Bldg Area:** 2,986 SF
- **Foundation:** Concrete wall footings
- **Superstructure:** Reinforced concrete & masonry, Hollowcore planks roof
- **Operating Floor Elev 18.25**
 - Transformer rooms
 - Electrical room
 - Control Room



HLD Lift Station

- Valve Pad - Elev 16 ft
 - Reinforced Concrete
- Electrical Platform - Elev 18.25
 - Stem Walls & Continuous Wall Footing
 - Access Stairs



Qualifications and Experience Requirements for NT-2C & NE-1

Criteria	Details
Large Wastewater Treatment Upgrade Projects	Bidder/Bidder PM must have 3 projects in large WWTPs greater than \$75M in the past 10 yrs
Medium or High Voltage Power Supply Systems	Bidder/Bidder's Electrical Sub Lead Electrician must have a min of 1 project of medium/high voltage power supply system while maintaining operations of a wastewater facility in the past 10 yrs
Instrumentation & Controls	Bidder/Bidder's I&C Sub must have a min of 1 project including connections into an existing SCADA while maintaining operations of a wastewater facility in the past 10 yrs.
HVAC	Bidder/Bidder's HVAC Sub must have a min of 1 project including cooling towers while maintaining operations of a wastewater facility in the past 10 yrs.



Slide 37

SA0

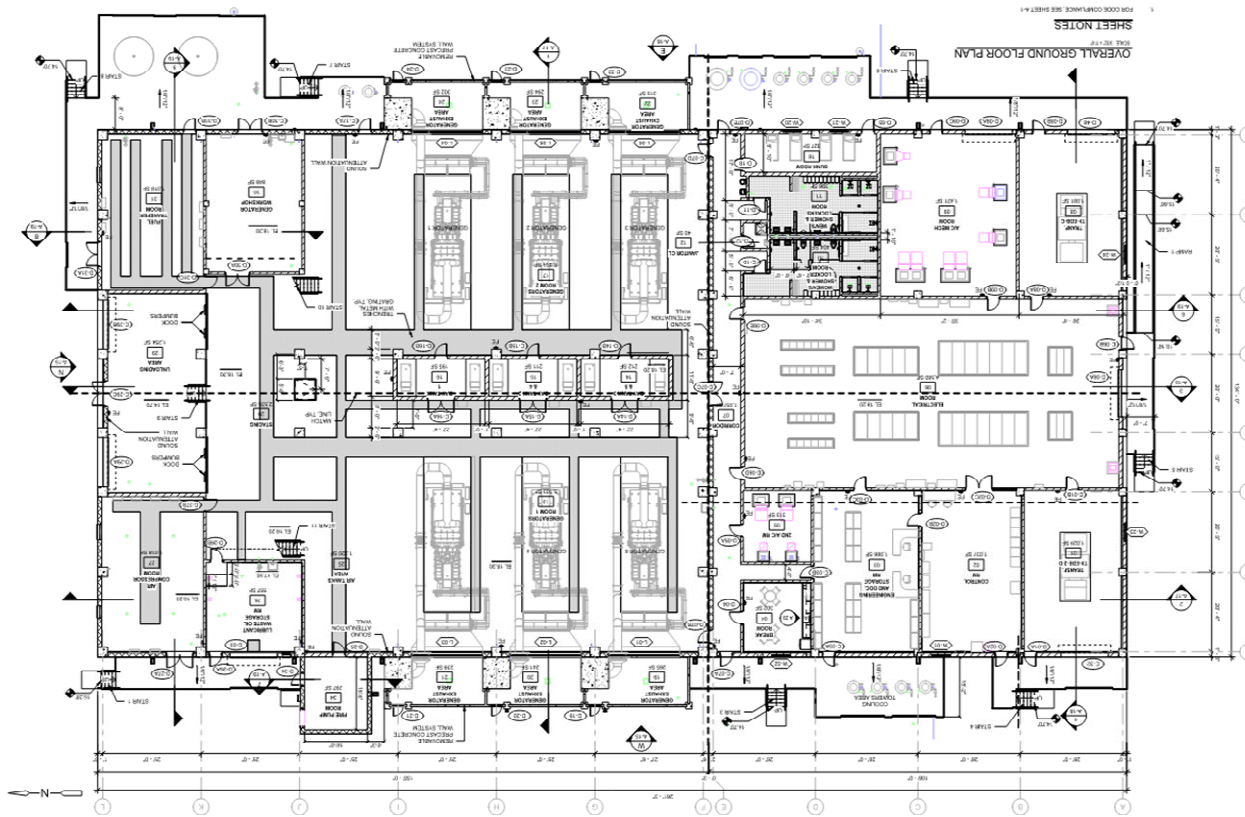
Thank you, if you want you can follow the format from Slide 78

SuarezAbastida, Andrea, 2024-11-07T14:04:15.602

NT-3 – Electrical Building Design Elements



NDWWTP: Electrical Distribution Building 2



SNAPSHOT

ID	S-968, NT-3
Status	Design: 70%
Substantial	September 2028
Construction Estimate	\$97-125M

MAJOR COMPONENTS

Electrical Distribution Building 2
Five engine generators (OFE)
Duct banks and connection to substation
Fuel storage facilities
FPL facilities & service improvements
Temporary electrical facilities

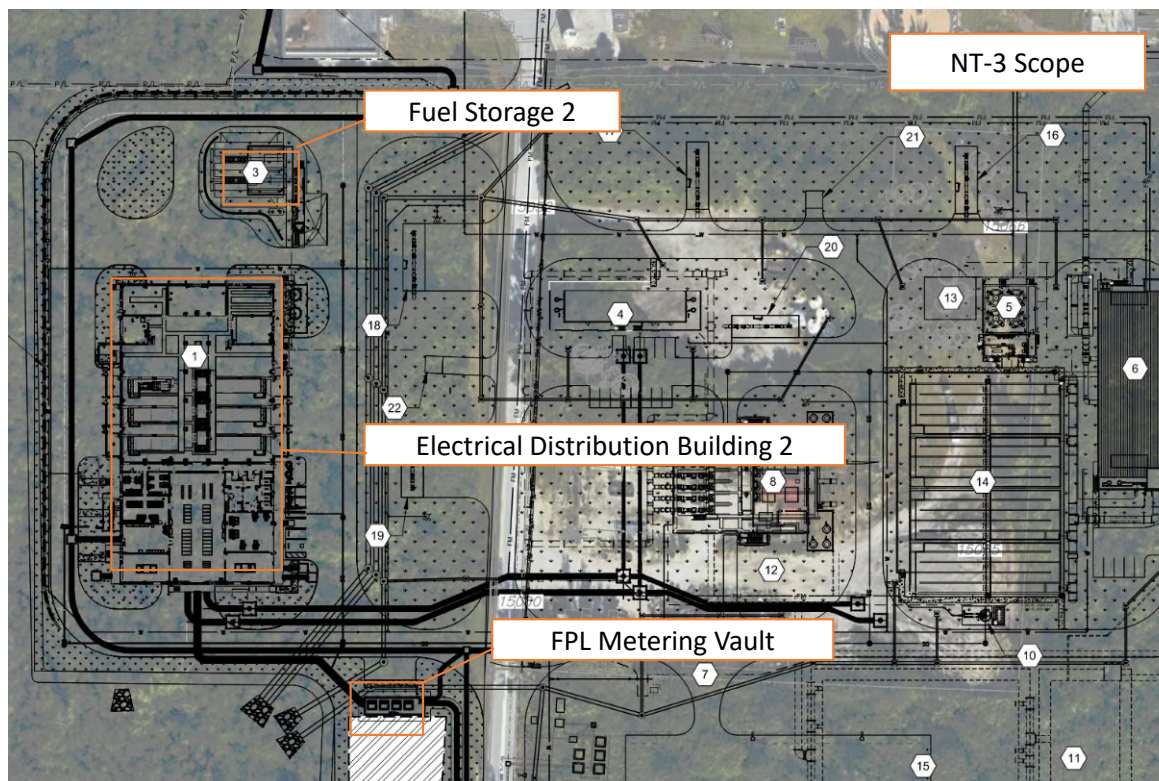
CHALLENGES

Coordination with FPL



Overall EDB 2 Project Features and Needs

- Project Elements
 - New EDB 2
 - New Fuel Storage Facility
 - FPL Metering Vault
 - Coordination with HLD and EDB3 Contracts

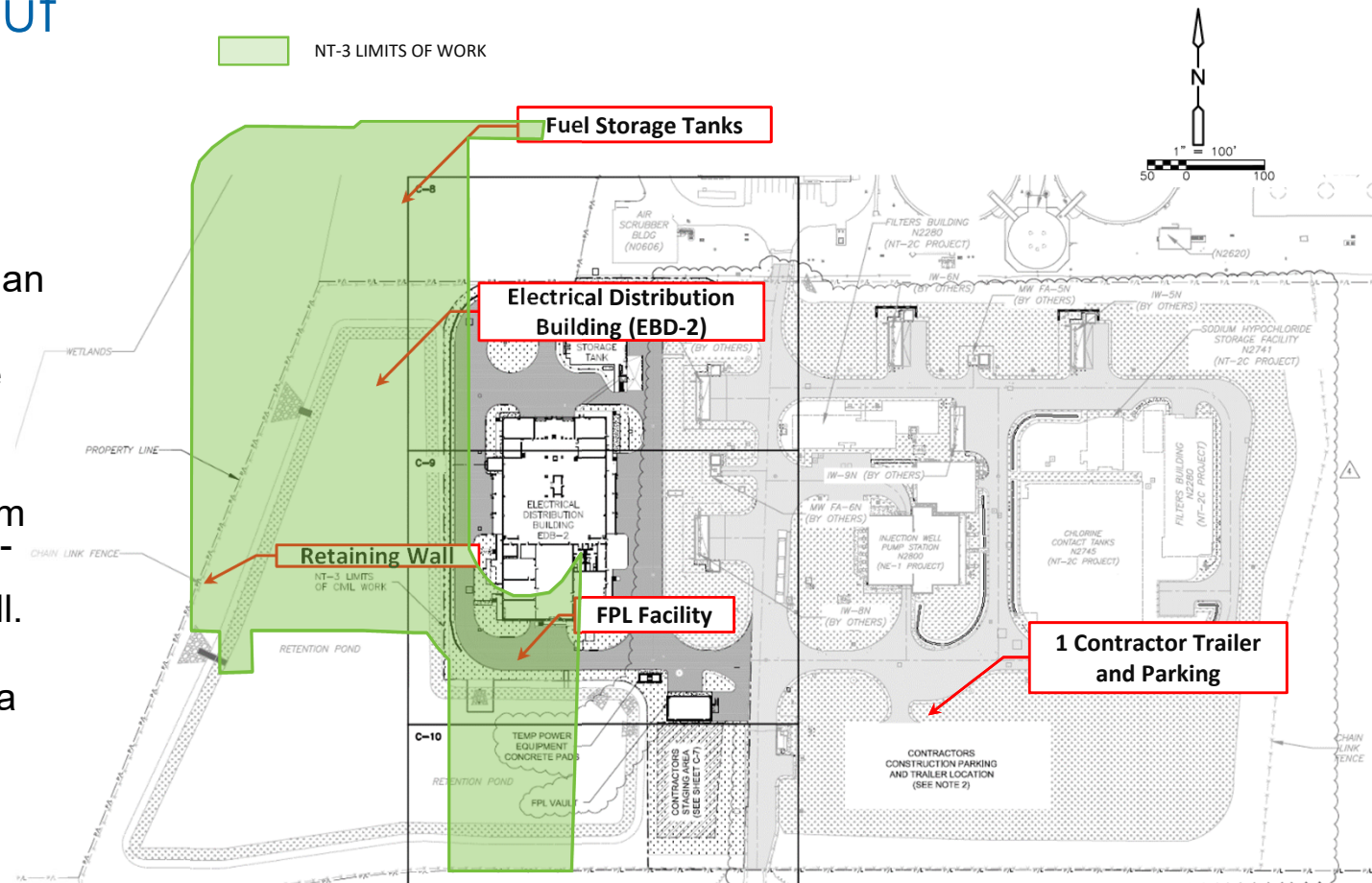


Civil Site Layout











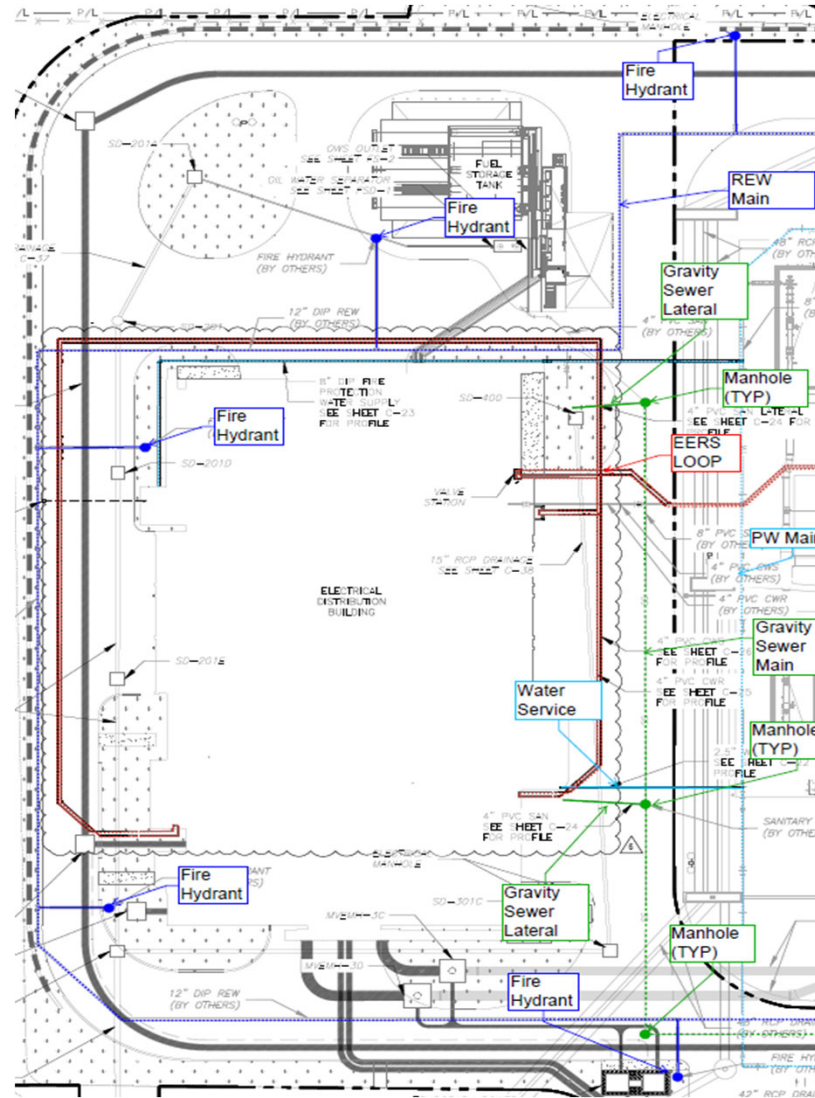
Civil Site Layout

- Site Layout for the New Electrical Distribution Building (EDB2) and Fuel Storage Facility.
- Vehicle and Pedestrian Circulation per MD County Standards. (Largest vehicle size WB-67)
- Grading sheet flow towards storm system and grass areas. Tie-back in to existing beyond retaining wall.
- FPL Facility is being redesigned. The area will be revised per modification at the Southeast edge site.



Civil Site Yard Piping Layout

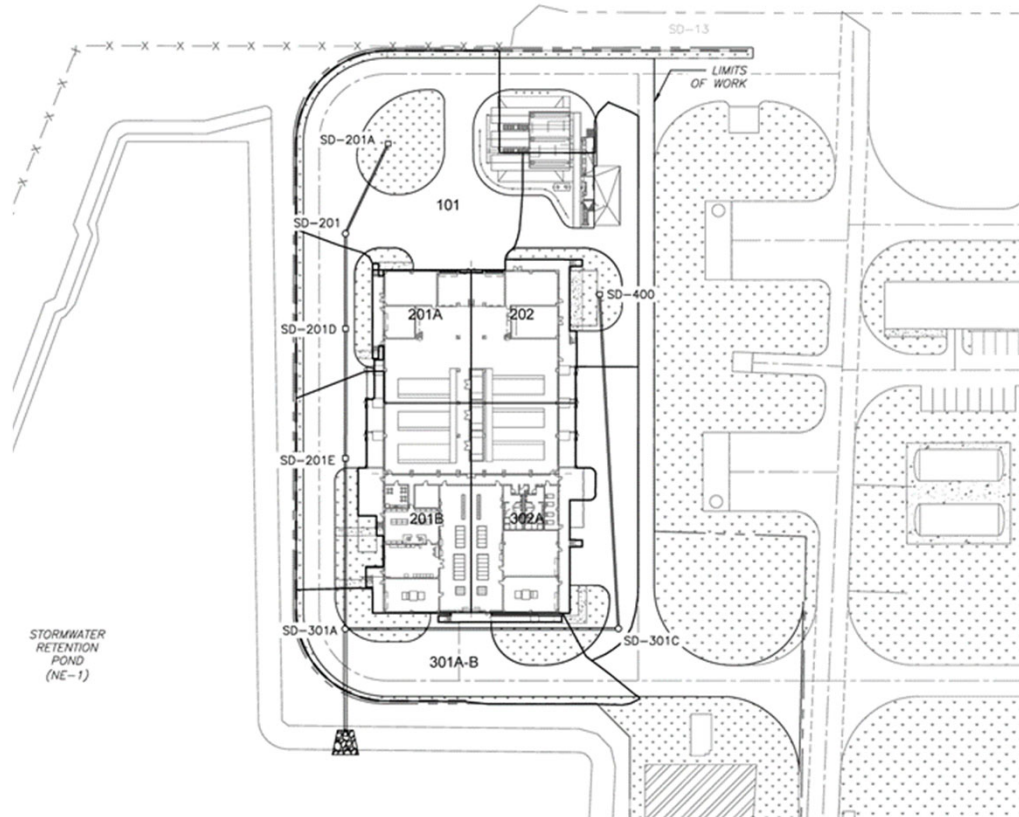
-  Potable Water Service
-  Gravity Sewer Laterals
-  Potable Water Main (by Others)
-  Reuse Water Main (by Others)
-  Gravity Sewer Main (by Others)
-  EERS Loop
-  Manholes (by Others)
-  Fire Hydrants (by Others)



Site Civil – Drainage Improvements



EDB2 – Site Civil Grading and Drainage Improvements



Drainage Basin Data					
Basin Number	Basin Drains To Node No.	Basin Area (Acres)	Pervious Area (Acres)	Impervious Area Pavement (Acres)	Impervious Area Roofs (Acres)
101	Inlet - 201A	0.57	0.17	0.38	0.02
201A	Inlet - 201D	0.31	0.02	0.12	0.17
201B	Inlet - 201E	0.49	0.02	0.16	0.31
301A-B	Pond New	0.36	0.12	0.22	0.02
202	Inlet - 400	0.48	0.06	0.16	0.26
302A	Inlet - 301C	0.53	0.09	0.15	0.29



Architectural Building Layout



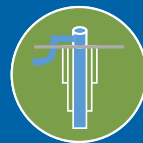
Architectural Requirements

- The EDB2 Facility includes a Two-Story equipment building with approximately 34,000 square feet
- Two major areas are located on the Ground Floor that include a Generator Rooms Area and Electrical Transformer Rooms Area
- The Generator Rooms Area is double height at the Loading Dock and Mezzanine Area. The Mezzanine includes interior stairways leading to the Ground Floor. Exterior stairways leading to the grade elevation on all sides of the building have been provided.
- The Electrical / Transformer Rooms Area includes Mechanical Rooms, Break Room, Handicapped Accessible Toilet Rooms and Lockers / Showers that are located on the South Side of the building

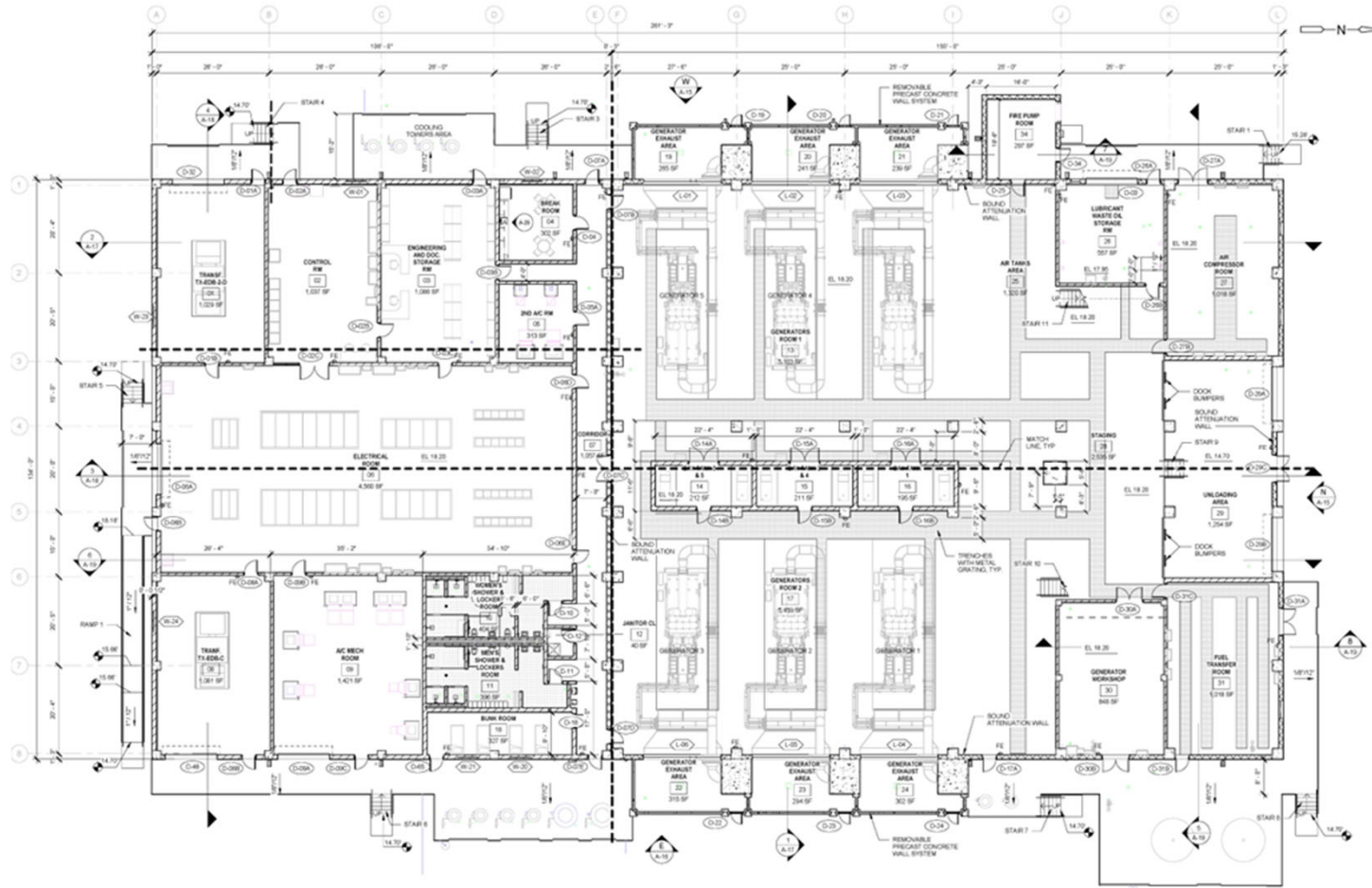


Architectural Requirements (Cont'd)

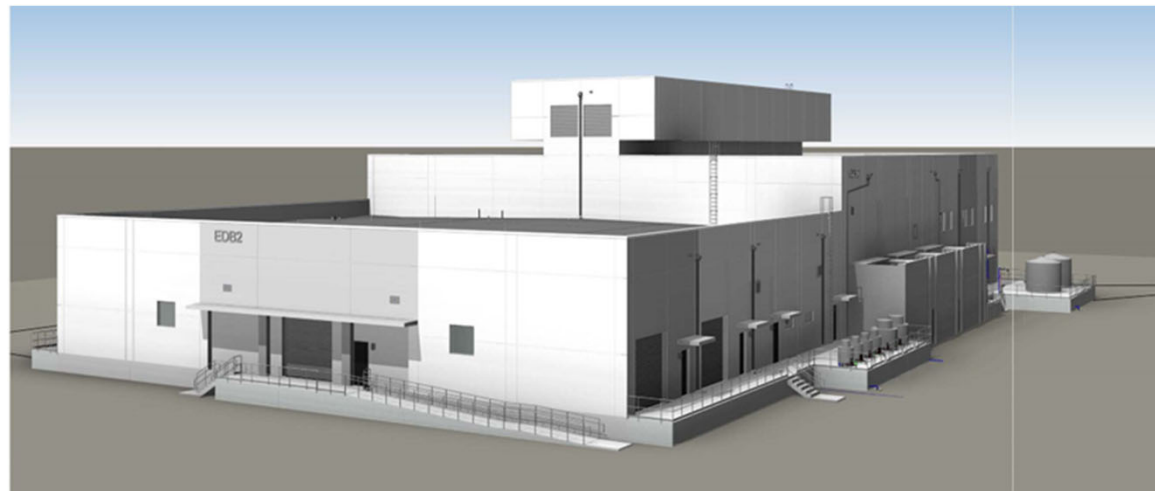
- The building shall meet FBC 2020, Seventh Edition and the Industrial Occupancy requirements with Classification F-1 Low Hazard and Type IIB construction.
- The exterior walls are reinforced concrete masonry units. The floors shall be cast in place concrete except for the roof that shall have Precast Concrete Double Tees with lightweight insulating concrete and SBS modified bitumen type roofing.
- Exterior walls shall be paint on smooth stucco finish throughout. Acoustical type Block and acoustical tile ceiling is recommended for sound attenuation on Generators area. All doors and frames shall be stainless steel with active NOA / FL Numbers.
- Windows and louvers shall be Category II safety type glazing with energy efficient shading coefficient. All entrance doors shall have canopies for overhang protection and provided with waterproofing as required.



Architectural Layout – EDB2 – Top View



Architectural Layout – EDB2 – Front View



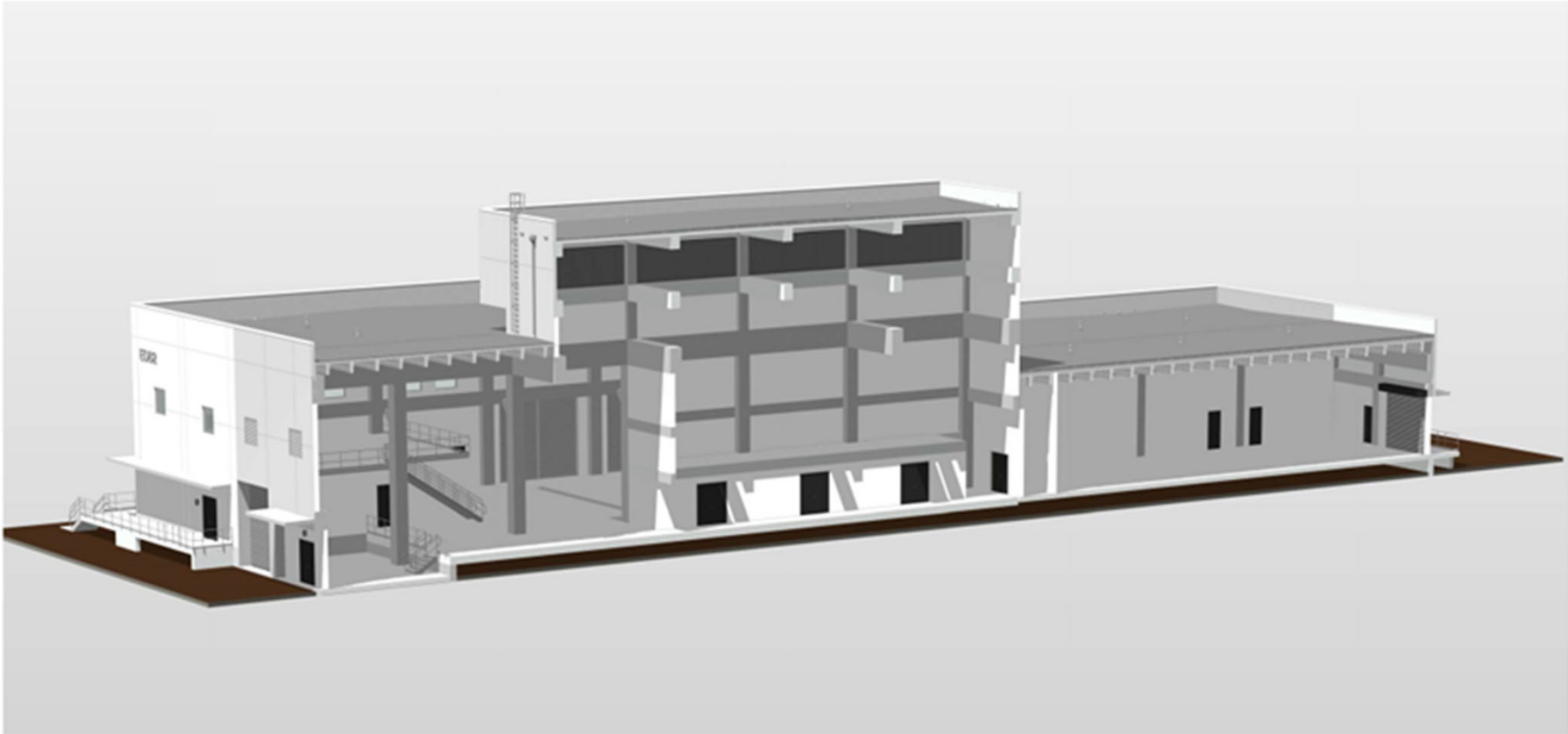
Architectural Layout – EDB2 – Front View



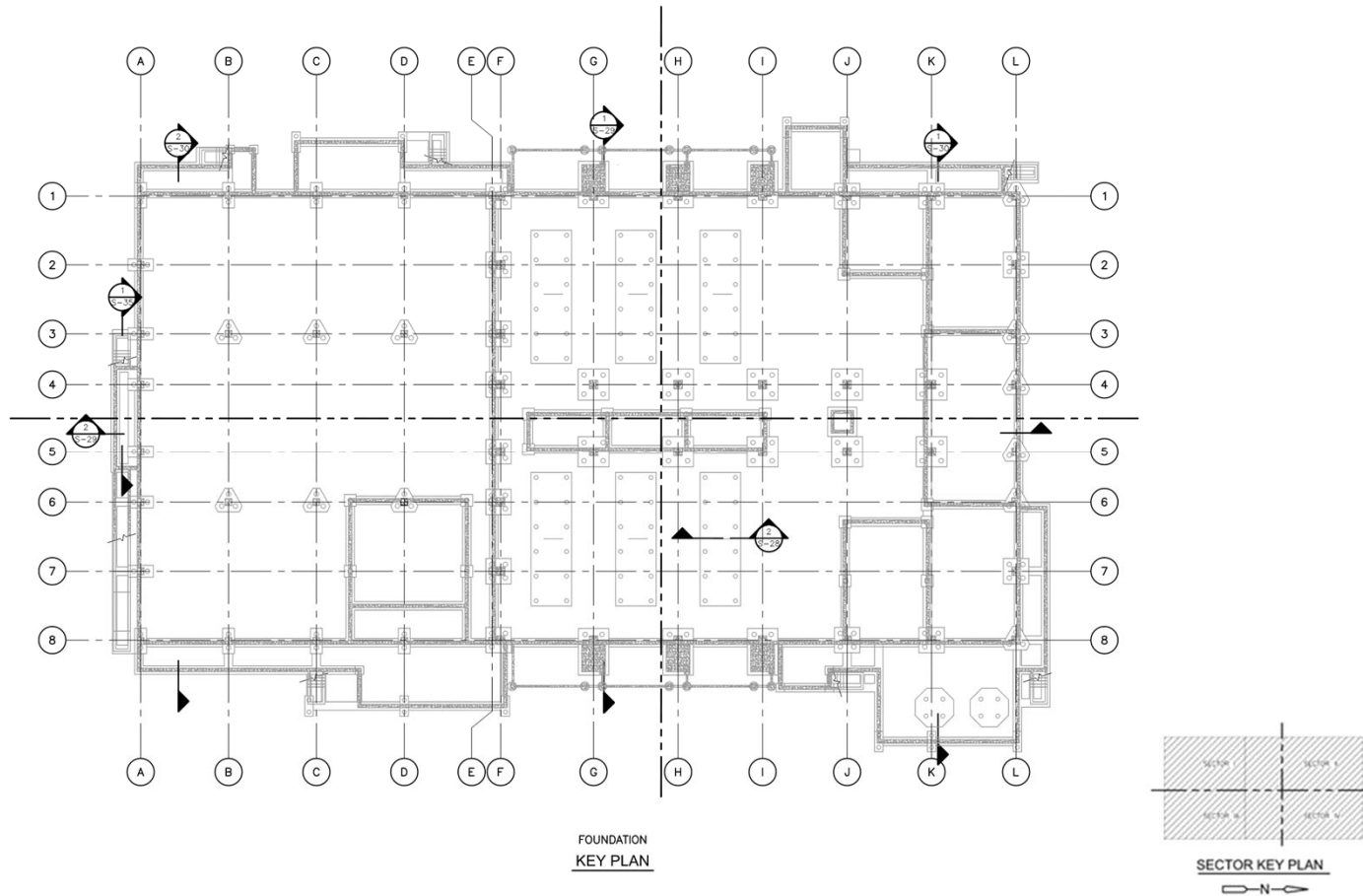
Structural



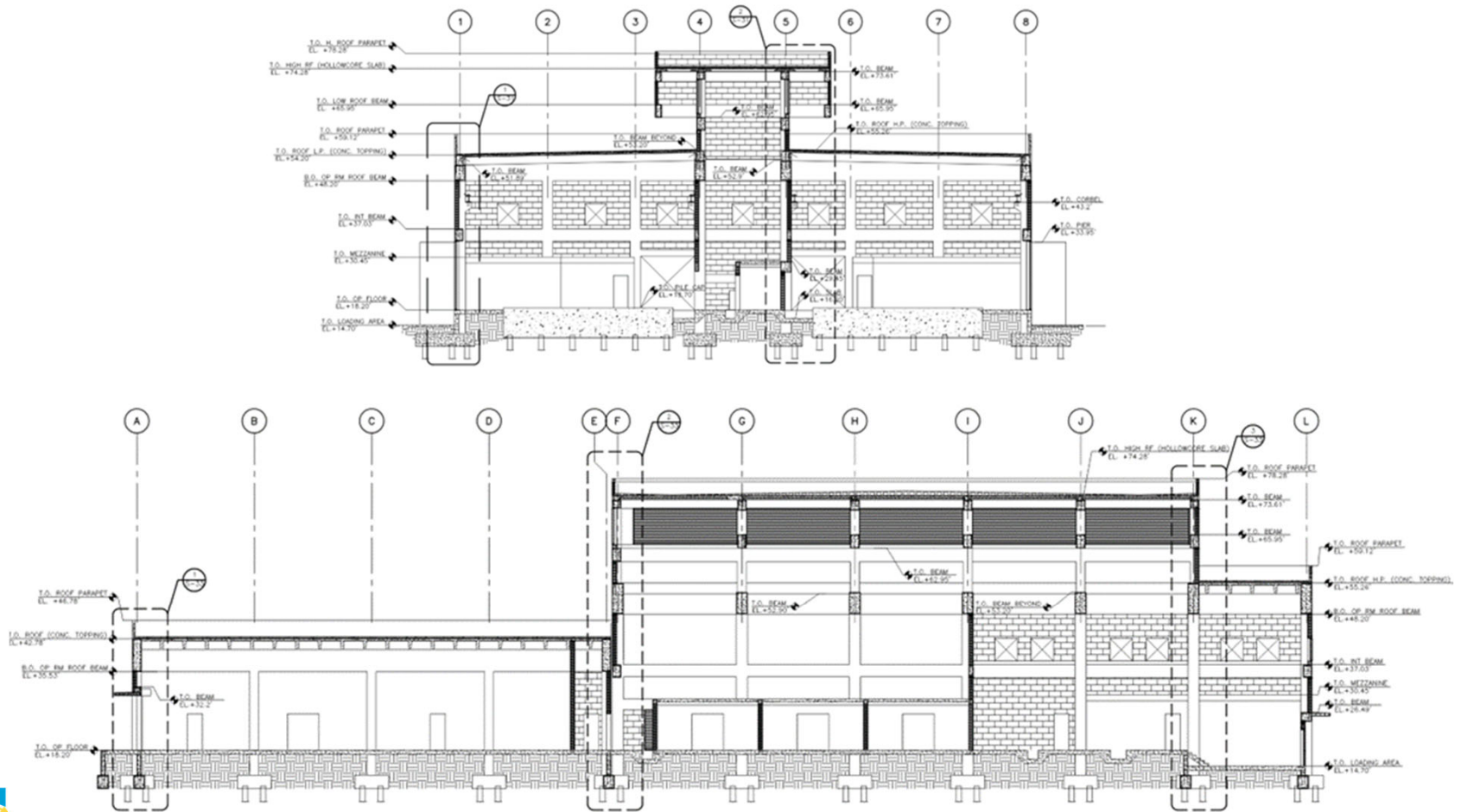
Structural Design Considerations – EDB2



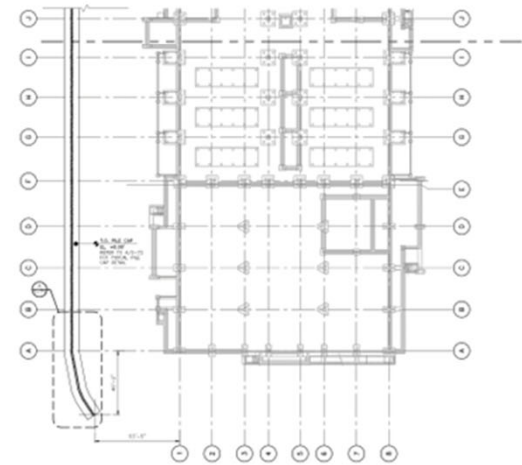
Structural Design – EDB2 – Foundation



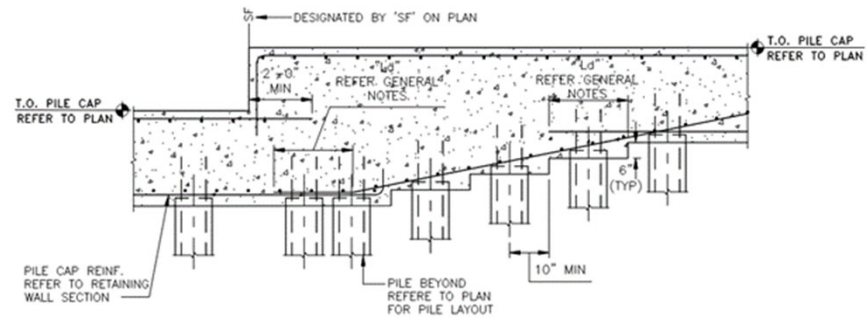
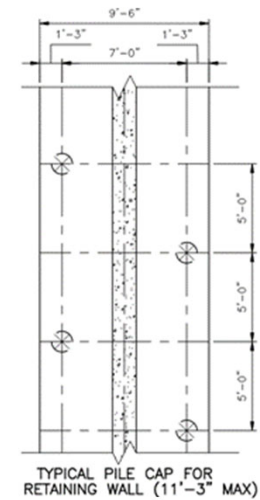
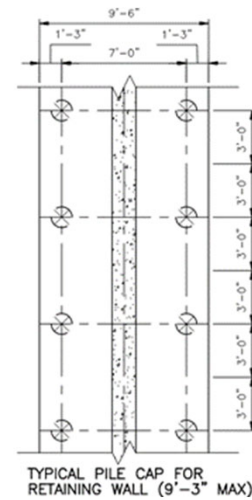
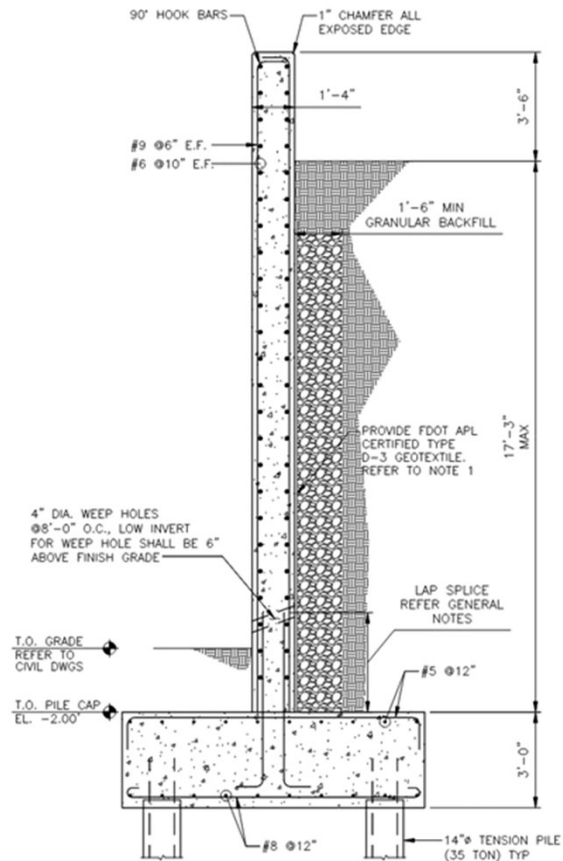
Structural Design – EDB2 – Building Sections



Architectural drawing showing a section and detail of a building. The main section is a curved facade with various window types and structural elements. A detailed view of a corner is shown on the right, labeled "DETAIL" and "Scale = 1/8" = 1'-0". The drawing includes dimensions, material callouts, and a north arrow.



Structural Design – Retaining Wall



TYPICAL STEP PILE CAP



HVAC



Building Mechanical Systems - HVAC

- HVAC Systems Based on Electrical Equipment Cooling requirements
 - Indoor Water Source AC Units (WCAC), FRP Cooling Towers. Use AC Units redundancy
 - The (WCAC) units recirculate 100% air, equipment room is pressurized using a PURAFIL filtration system, except in transformer rooms
 - The (WCAC) units are Straight Cool Units, no heating
 - Cupro Nickel Condenser /Heat exchangers
 - Units coated with factory applied anticorrosive product in all coils
 - Schedule 80 CPVC piping
- Generator Room Ventilation Design Criteria
 - Ventilation System Based on Generator Cooling System requirements: Incoming Air Louvers, Generator Radiator Fans & Discharge Air Louvers
 - Room Ventilation: Exhaust Fans and incoming Air Louvers
- Other Areas: Ventilation Design Criteria
 - Ventilation System: Exhaust Fans and incoming Air Louvers

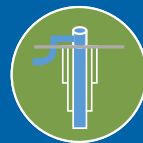


Plumbing



Building Mechanical Systems – Plumbing (Cont'd)

- Design Criteria
 - Lockers rooms: WC, LAV, Urinal, Showers
 - Generator Room: Floor Drainage System, Service Sink, Emergency Eye Wash/Shower
 - AC Systems: Overflow in cooling towers to sanitary lines. Overflow in condensate is drained to drywell located outside the building
 - Service Rooms: Required Plumbing Fixtures
 - Floor drains w/Reseal
 - Floor drain Trap Primers
 - Funnel drains

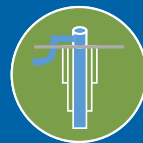


Fuel Storage System

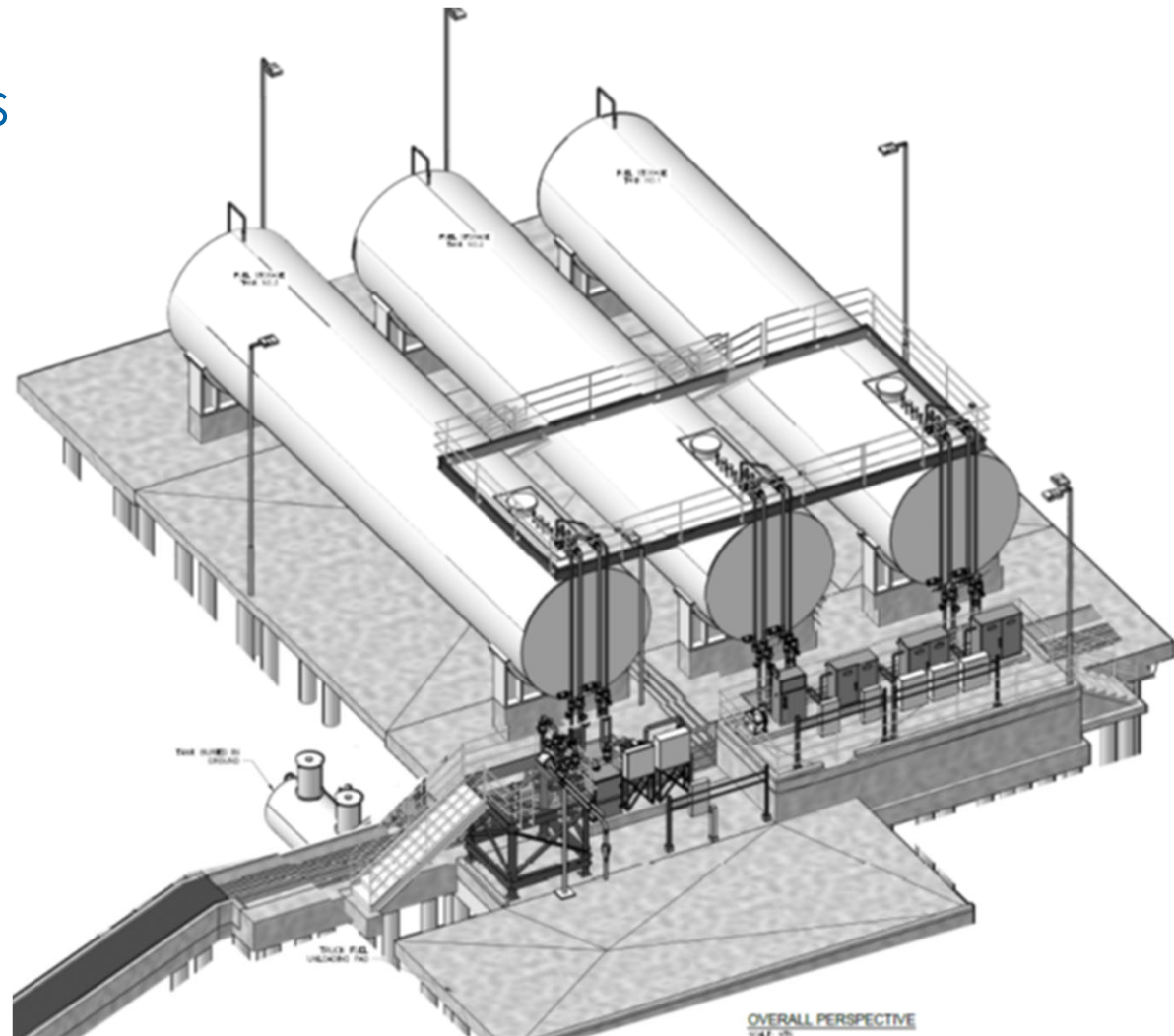


Fuel Storage System

- Fuel Storage Facility
 - Outside located facility: stairs, supports and platform
 - Three (3) 50,000 Gallon fuel storage tanks
- DEF Storage Tanks
 - Outside adjacent platform
 - Two (2) DEF tanks
 - DEF Fill Station



Fuel Storage Facility Requirements

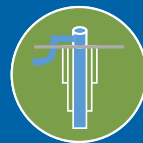


Fire Protection



Building-Mechanical Systems - FP

- Design Criteria is similar to EDB-3 design in South District
- Design incorporates requirements stated in FBC 2020 and applicable NFPA standards
- Design incorporated Fire Marshal Comments from Design Group's meeting with Fire Marshal on 07-20-2021
- All the areas include fire detection devices along with Fire alarm notification (audible/Visible) devices after the hazardous area classification.

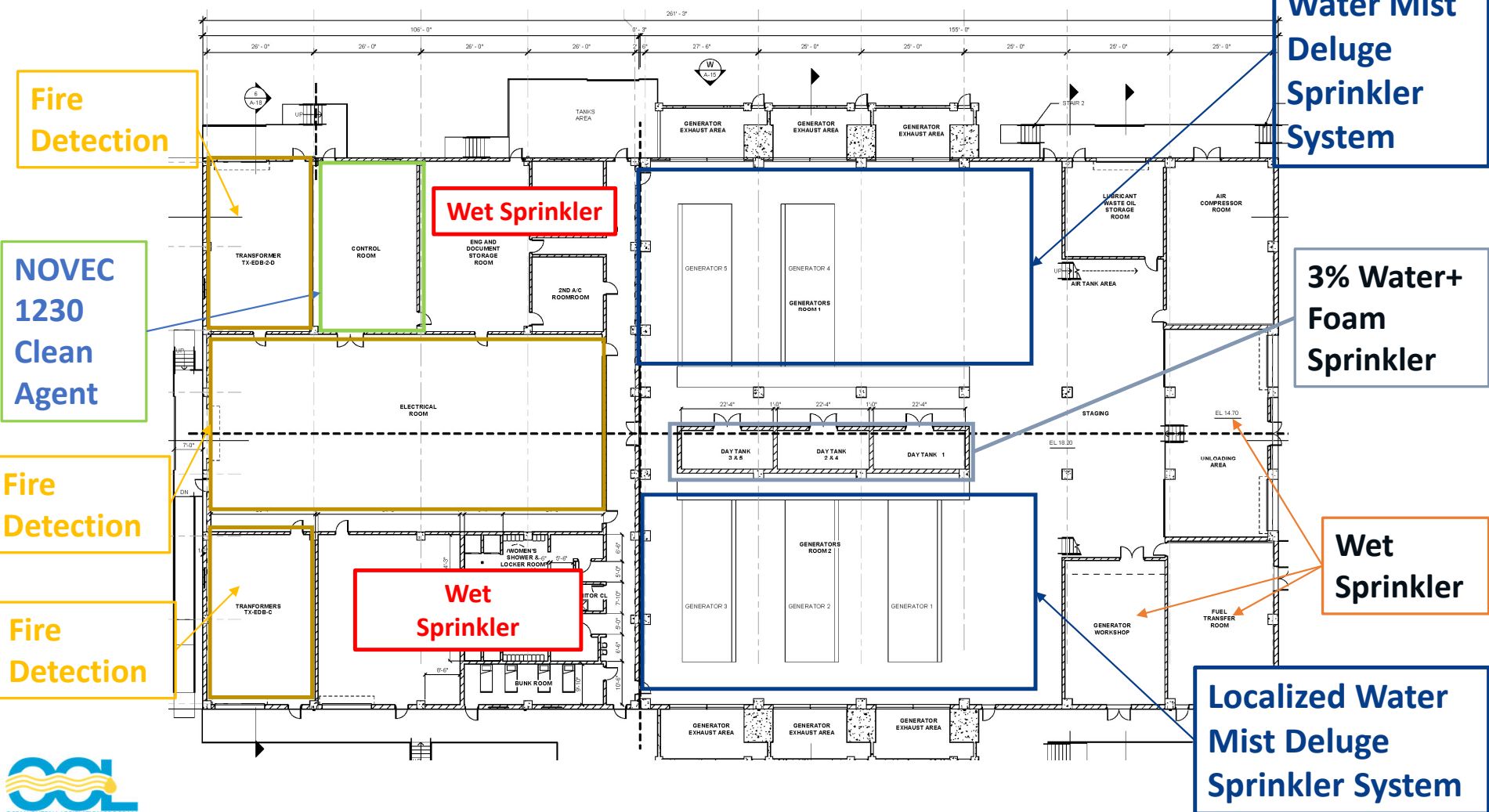


Fire Protection Details by Area

Area	Type of Fire Protection	Comments
Generators Area	Localized Water Mist Deluge Sprinkler System	Localized for each Generator Using Deluge Valves) along with Linear Heat Detection Cable
Control Room	NOVEC 1230 Clean Agent	No Residue, Electrically non-conductive and Environment friendly
Day Tank Rooms	3% Water+ AFFF type Foam Sprinkler System	
Workshop, Oil Storage, Air Compressor Room, Transfer Pumps Area, Bunker Room, Break room and HVAC Rooms	Water Sprinkler Systems	
Switchgear Room, Transformer Rooms	Fire Detection (Combination Detectors)	Sprinklers not required based on exceptions stated in NFPA 13



Area-wise Fire Protection Details



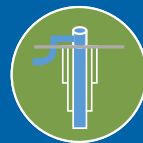
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Electrical Improvements

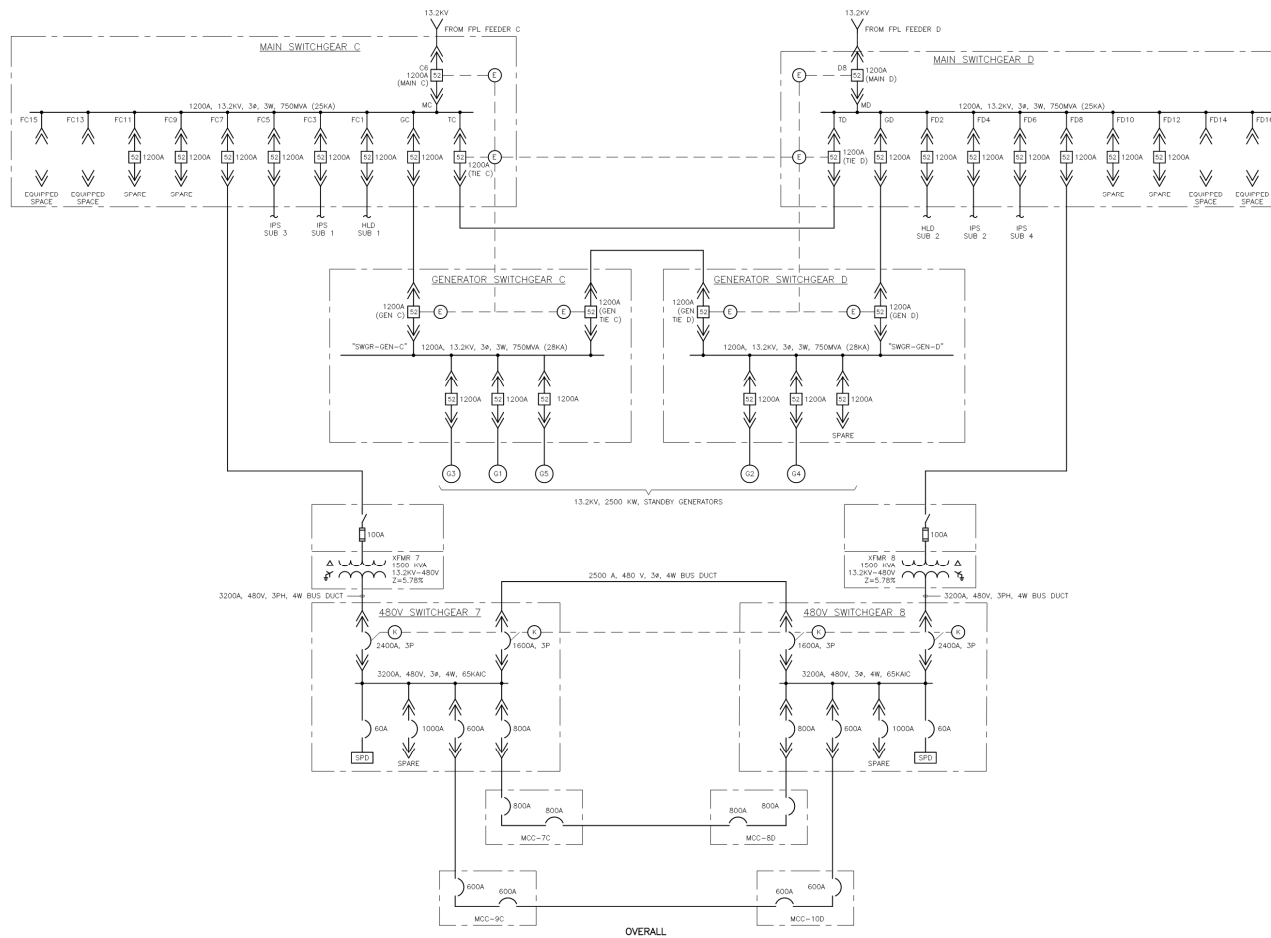


Electrical Design Overview

- 2 New Services from FPL from a manhole in 151st Street.
- FPL Metering Vault
- 13.2kV Service Entrance, Closed Transition Paralleling Switchgear
- 13.2kV Distribution Ductbanks
- Power, Lighting, Grounding and Controls for all Related Facilities:
 - Fuel Facility
 - EDB2
 - FPL Vault
- Portions of Control Ductbank Located on NT-3 Site



Electrical Single Line Power Diagram



Major Electrical Equipment Selection

■ 13.2kV Switchgear

- Arc resistant switchgear
- Main-Tie-Tie-Main
- 15 kV – 750 MVA (25 kA) Class
- Draw-out circuit breakers
- Station class surge arrestors
- Copper busses, fluidized
- Insulated busses
- Porcelain bus supports
- Dual 125 VDC battery system
- Remote control rackout device
- IR windows

■ 480 V Motor Control Centers

■ Medium Voltage Cables

- 15 kV EPR insulation
- Concentric neutral
- MV-105
- No splices



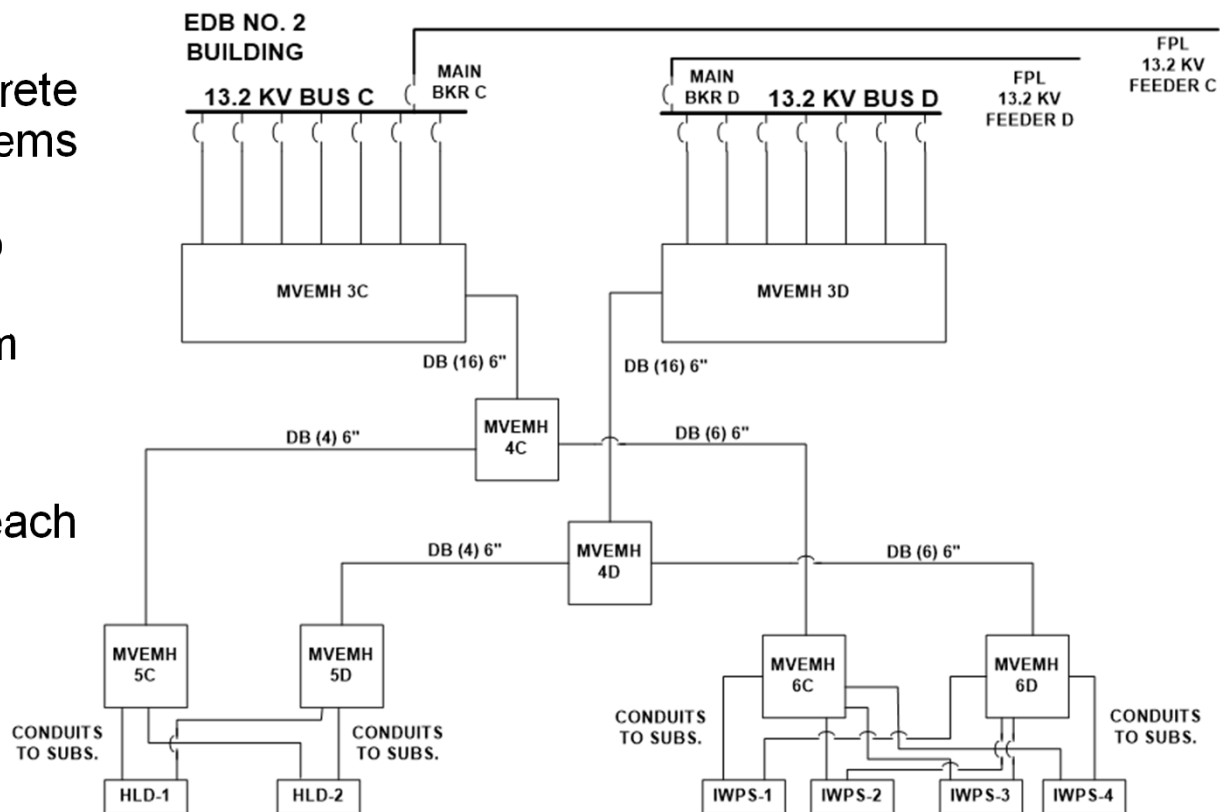
Major Electrical Equipment Selection (Cont'd)

- 15 kV – 480 V Substation Transformers
 - Sized per WASD standards
 - Fans and fan package
 - 55/65 rise, 4 ratings
 - Copper windings
 - Heavy duty winding bracing
 - Core bracing for captive motor
 - Sudden pressure, high temp, low oil alarm and shutdown
 - Less flammable, environmentally friendly dielectric fluid
 - 45 kV BIL at 480 V
 - No load tap changer with metal handle
- 480 V Motor Control Centers
 - Arc resistant
 - Main tie/tie main
 - Tin plated copper bus
 - 12" minimum high buckets
- Lighting
 - LED
 - Mounted not more than 14' AFF
- Grounding
 - Non-reversible compression connections
- Conduit
 - Aluminum



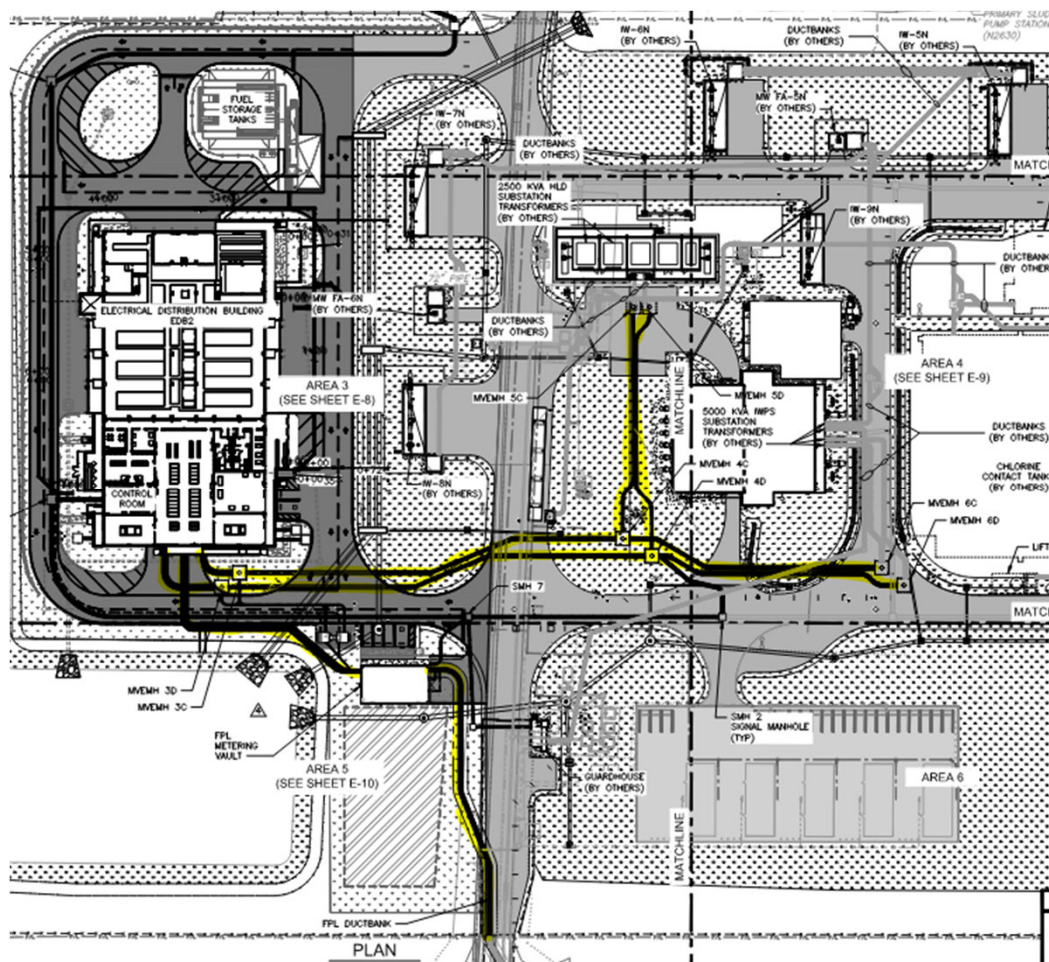
Medium Voltage Duct and Manhole System

- Dual Independent Concrete Duct and Manhole Systems to Support 13 kV Dual Independent Feeders to Each HLD and IWPS Substations Served from EDB No.2 Building
- Total of six HLD/IWPS substations supported each by (2) 13 kV distribution feeders



Medium Voltage Duct and Manhole System

- Dual Independent Concrete Duct and Manhole Systems to Support 13 kV Dual Independent Feeders to Each HLD and IWPS Substations Served from EDB No.2 Building
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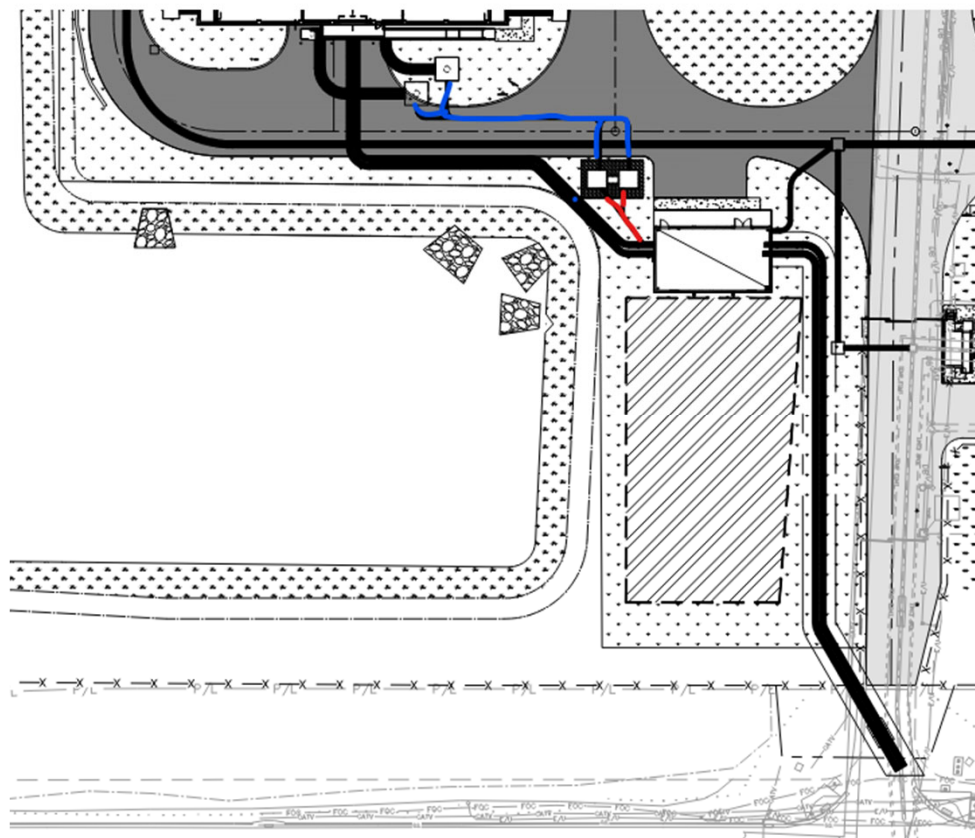


Temporary Power Facilities



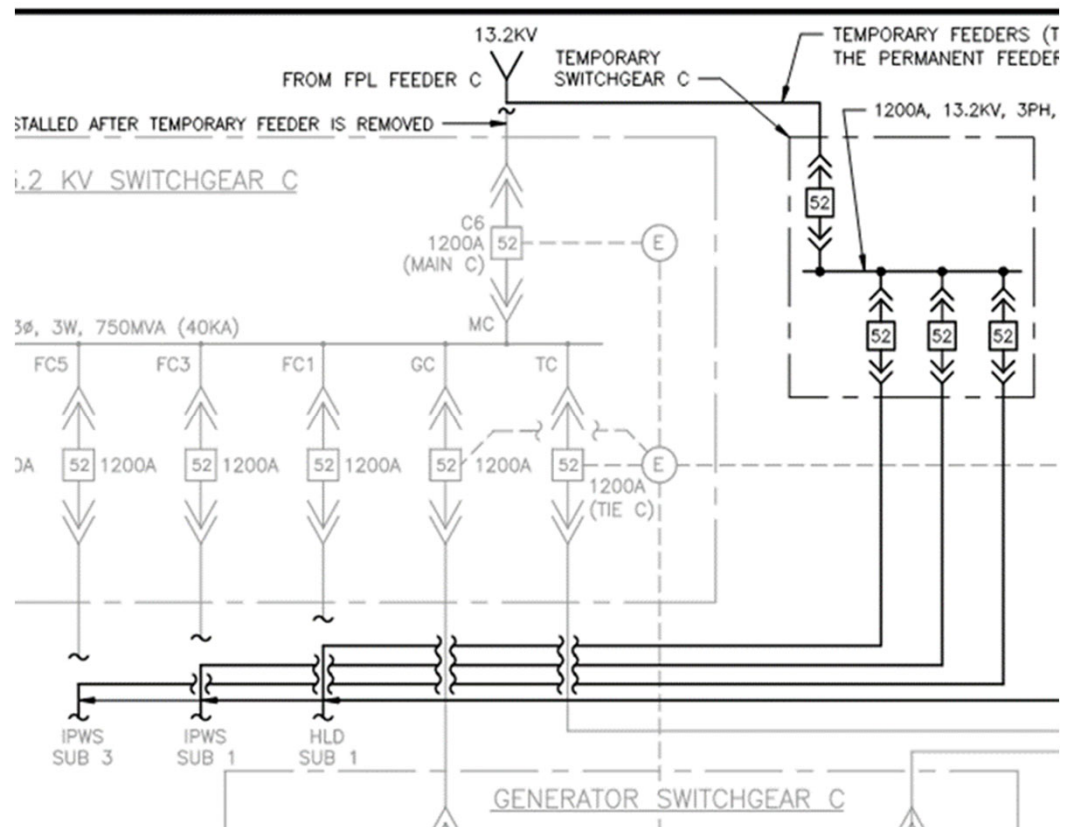
Temporary Power Facilities - Electrical

- Temporary Switchgear Installed Adjacent to Vault
- Temporary Cables From Vault to Temporary Switchgear
- Permanent Cables from Temporary Switchgear to HLD Substation Transformers
- Permanent Connection to EDB2 After Commissioning



Temporary Power Facilities – Electrical (Cont'd)

- Temporary Switchgear Installed Adjacent to Vault
- Temporary Cables From Vault to Temporary Switchgear
- Permanent Cables from Temporary Switchgear to HLD Substation Transformers
- Permanent Connection to EDB2 After Commissioning



Qualifications and Experience Requirements for NT-3

Criteria	Details
Experience in Electrical Distribution Building	Bidder or Bidder's Subcontractor must have experience in electrical distribution building, including installation of diesel engine and generators, fuel storage tanks and accessories , and construction of fuel piping systems.
Project Completion	Bidder or Bidder's Subcontractor must have successfully completed a minimum of three (3) projects demonstrating in procuring and installing main electrical equipment between 13.2kv to 480kv, HVAC equipment, medium and low voltage electrical power systems, including transformers and switchgear, and instrumentation and controls including connections into an existing SCADA.
Wastewater facility Operations	The BIDDER shall be experienced in performing WORK while maintaining operations of a wastewater facility. These projects shall have been performed within the past ten (10) years from the date of the Invitation to Bid.
Electrical distribution rooms	Bidder must have successfully completed the construction and/or rehabilitation of two (2) electrical distribution with at least 5 diesel engine type generators along with fuel storage tanks, within the last ten (10) years.
Experience in Auger Cast Piles	The Bidder or Bidder's Pile subcontractor shall have at least five (5) years of experience and at least five (5) successful installations of similar type, size, length and quantity to those required for support of the project structures. Bidder must provide a description of at least five projects in the past five (5) years on which the Bidder's Pile subcontractor has installed Augered Cast which provide the approximate number and depth of piles indicated. Include the name and telephone number of a reference for each project.



MIAMI-DADE COUNTY WATER AND SEWER DEPARTMENT OCEAN OUTFALL LEGISLATION PROGRAM

Project Interdependencies and OFE

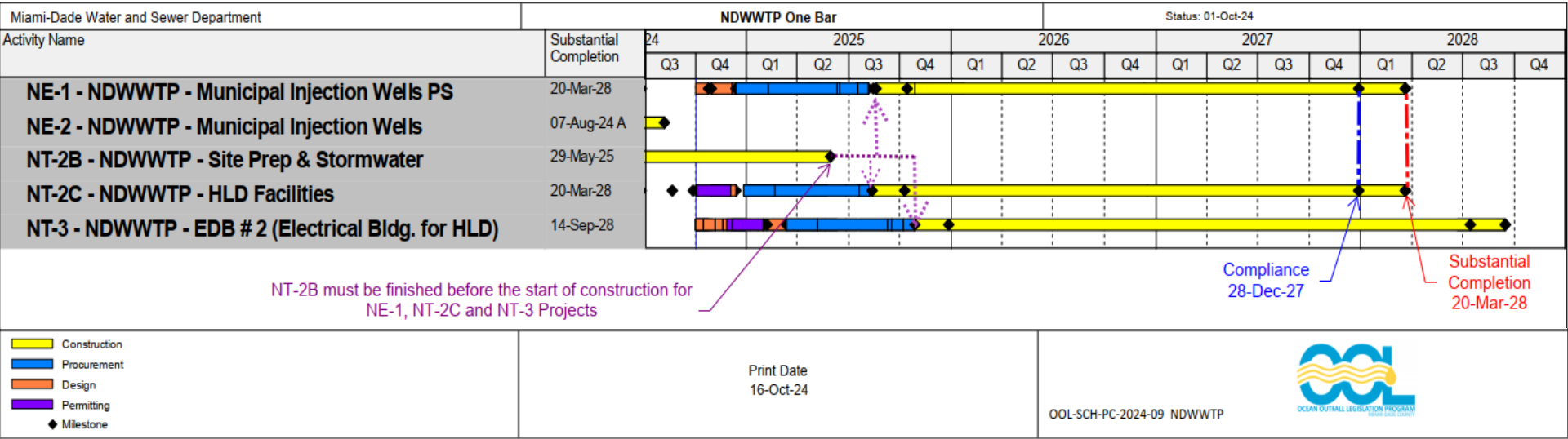
November 8, 2024



Template Updated
May 8, 2018

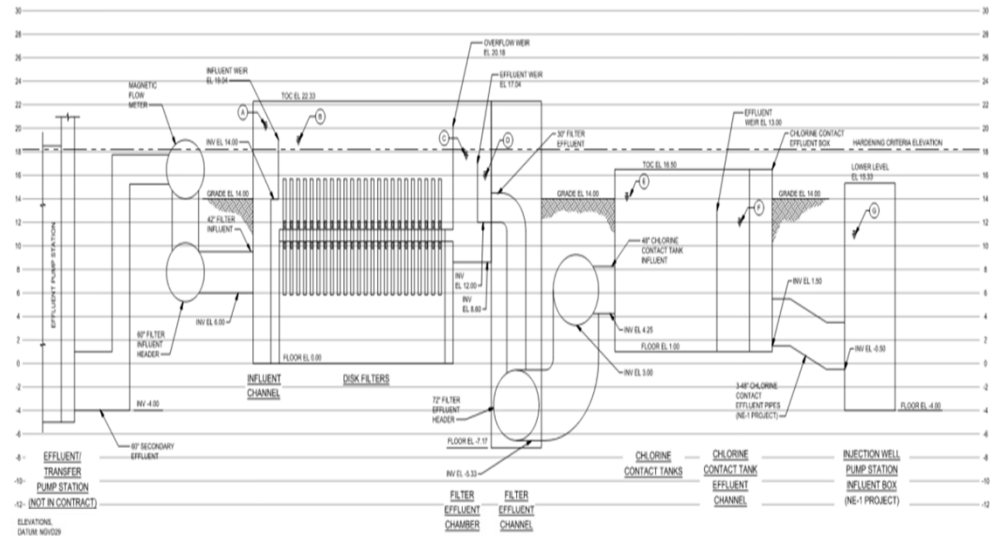


Interdependencies



Owner Furnished Equipment

- Municipal Injection Well PS and Site Improvements (NE-1, S-965)
 - Substation Transformers
- High Level Disinfection Facilities (NT-2C, S-966)
 - Substation Transformers
 - Cloth Media Filters
- Electrical Distribution Building 2 (NT-3, S-968)
 - Substation Transformers
 - Engine Generators
 - Temporary Switchgear



MIAMI-DADE COUNTY WATER AND SEWER DEPARTMENT OCEAN OUTFALL LEGISLATION PROGRAM

Interactive Session - Contractor Collaboration

November 8, 2024



Template Updated
May 8, 2018



Open Discussion



Closing Remarks

