# Sewerage & Water Board of NEW ORLEANS

625 ST. JOSEPH STREET
NEW ORLEANS, LA 70165 • 504-529-2837 OR 52-WATER
www.swbno.org

### Addendum No. 2

Date: 12/13/2023

Your reference is directed to **Contract Number**: <u>2023-SWB-97 (Contract 1420)</u> for WPC Phase 1 Equipment Installation which is scheduled to open at <u>11:30 a.m.</u> **CST** on <u>January 15, 2024</u> for SWBNO Civil Engineering Department.

This addendum provides for the following:

1. Pre-Bid #2 2023-SWB-97 Contract 1420 West Power Complex (WPC) Phase 1 Equipment Installation and Commissioning

A MANDATORY pre-bid conference will be held on **December 18, 2023,** at **11:00 a.m.** Central Time at the Sewerage and Water Board of New Orleans, Carrollton Water Plant Auditorium Room E202, located at 8800 S Claiborne Ave, New Orleans, Louisiana, 70118. If you are unable to attend this in-person meeting, you can also join via teleconference call:

Microsoft Teams meeting

Join on your computer, mobile app or room device

Meeting ID: 238 700 780 609

Passcode: SkLr25
Or call in (audio only)

<u>+1 504-224-8698,,835935079#</u> United States, New Orleans

Phone Conference ID: 835 935 079#

Bidders who attended the previous mandatory pre-bid meeting held on Friday, December 8, 2023 are not required to attend.

All prospective bidders shall be present at the beginning of the pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the pre-bid conference or remain for the duration shall be prohibited from submitting a bid for the project.

#### 2. DBE Percentage Correction

Section 00 47 17, Page 1 (Disadvantaged Business Enterprise Program) – Replace 'The prime contractor shall be required to make a demonstrate good faith effort to award (25%) of the amount of the contract....' To 'The prime contractor shall be required to make a demonstrate good faith effort to award 30% of the amount of the contract....'

3. Section 01 11 01, Project Summary of Work, Paragraph 1.01.C.3.D, REVISE as follows.

Electrical and control cable supply: Note that Contractor is responsible for shipment of cable from Suppliers warehouse in Destrehan or Metarie, LA (location at the discretion of Supplier) to the project site. Refer to CP1435 for details regarding shipping and the quantity of cable 'cuts' provided by CP1435 Supplier.

4. Section 01 11 01, Project Summary of Work, Paragraph 1.03, DELETE the table in its entirety and REPLACE it with the following table.

Separable Portion	Description	Milestone		
All	Anticipated	d NTP	01-Apr-24	
	CTC TT 0 A 11	Area Foundations Complete	02-Aug-24	
2	CTG T7 & Auxiliary Switchgear (PDC-1)	RFC	29-Mar-25	
	Switchgear (1 DC-1)	Substantial Completion	31-May-25	
	GEG 1 0 1	Area Foundations Complete	01-Apr-24	
1	SFC 1 & Interim Switchgear (PDC-2)	RFC	30-Nov-24	
	Switchgear (1 DC-2)	Substantial Completion	26-Apr-25	
		Area Foundations Complete	28-Jun-24	
3	GSU's	RFC	30-Nov-24	
		Substantial Completion	26-Apr-25	
		Foundations	N/A	
5	FO Forwarding Pumps	RFC	02-Feb-25	
		Substantial Completion	26-Apr-25	
	FO Supply Pumps, FO Return Pumps, FO Day tank	Area Foundations Complete	02-Aug-24	
6		RFC	29-Mar-25	
	Tumps, 10 Buy tum	Substantial Completion	31-May-25	
7		Area Foundations Complete	02-Aug-24	
	BOP Miscellaneous Equipment	RFC	29-Mar-25	
		Substantial Completion	31-May-25	
8	CCS DDCS DOD DSS DLC TIMI	RFC	30-Nov-24	
8	GCS PDCS BOP PSS PLC, HMI	Substantial Completion	31-May-25	
		Area Foundations Complete	01-Apr-24	
4	SFC 2	RFC	28-Dec-24	
		Substantial Completion	26-Apr-25	
Alternate		Area Foundations Complete	01-Apr-24	
	SFC 3 - Alternate	RFC	02-Feb-25	
		Substantial Completion	12-May-25	
All	Facility Substantia	05-Jun-25		
All	Project Substantial Completion		05-Jun-25	

#### 5. SWBNO - Contract Days - 430 Days

Section 00 52 13 – Section 4.2.1 – Replace 'The Work shall be substantially completed within [ ] calendar days from the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within [ ] calendar days after the date when the Contract Times commence to run.]' to 'The Work shall be substantially completed within 430 calendar days from the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within 430 calendar days after the date when the Contract Times commence to run.

- 6. SWBNO Pre-bid Meeting held December 8th, 2023 at 9:00AM Presentation Slides
  - a. See Attached pages 4-60

- 7. SWBNO Pre-Bid Meeting held December 8th, 2023 at 9:00AM Attendance Sheet
  - a. See Attached pages 61-63
- 8. Updated Bid Form Section 00 41 13
  - a. See Attached pages 64-74
- 9. This Addendum includes the following attachments:
  - a. SFC PDC Re-Installation Details. See Attached pages 75-113
  - b. Utility Switchgear Feeder and Conduit drawings and photos. See Attached pages 114-128





# Contract 1420: West Power Complex Phase 1 Equipment Installation and Commissioning

# **Pre-Bid Meeting**

Solicitation No. 2023-SWB-97

December 8, 2023

# **Pre-Bid Meeting Agenda**

### **Moment of Care**

# **Key Bid Information**

# **Project Overview**

- Purpose
- Summary of Work Overview

# **Project Details**

- Equipment Installation
- Control System Integration
- Commissioning and Completions

### **Construction Considerations**

- Site Access and Key Considerations
- Schedule

### Wrap up

Questions and Site Walk

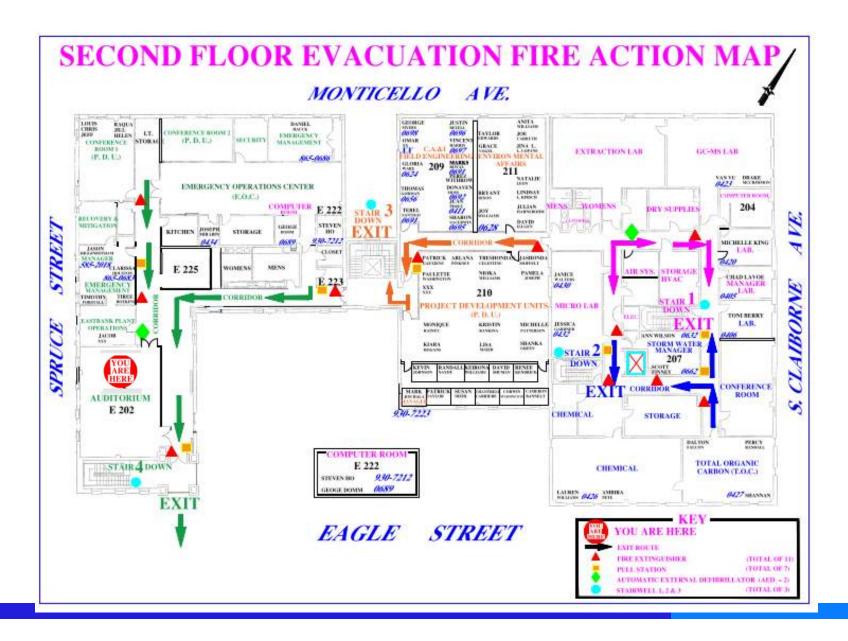
9:00 to 10:30 Presentation & Discussion

10:30 to 12:00 Site Walk

12:00 to 1:00 Travel to Belle Chase

1:00 to 2:00 SFC-1 Walk Through

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### **Bid Schedule**

Last day for questions: Dec 21, 2023

Last day to issue Addendums: Jan 5, 2024

Bids due: Jan 15, 2024

### **Bid Reminders**

Read instructions and follow exactly

- DBE Requirements
- Signature Requirements
- Bid Form Requirements

#### ECONOMICALLY DISADVANTAGED BUSINESS PARTICIPATION SUMMARY SHEET

Minimum Percentage Goal Participation for this Contract is \_\_\_\_%

#### Contract Name and #

Name and Address of Disadvantaged Business Enterprise Company	Name of Contact Person	Scope of Work to be Performed	Dollar Amount of work to be performed	Percentage of Dollar Amount to Total Bid Price
ONLY use companies listed in the most current listing posted on the S&WB Website;  www.swbno.org  ⇒ Doing Business  ⇒ Business Programs  ⇒ Disadx. Businesses  ⇒ Search the SLDBE Directory  DBEs may bid as primes but cannot count their own participation towards meeting the DBE subcontracting goal.	The name of the person representing the DBE company that negotiated terms with your company	Must be an area that the DBE is certified to perform and is a commercially useful function directly related to the completion of this project.  Construction companies cannot perform as suppliers if they are not performing the installation or associated work  The Sewerage and Water Board of New Orleans recognizes the DBE participation of regular dealers, and manufacturers, The Sewerage and Water Board of New Orleans does not recognize brokers or packagers as regular dealers, nor manufacturers.	The dollar value negotiated with the DBE to perform the scope of work	The percentage of the negotiated dollar value of the scope of work, relative to the total bid of the prime contractor.  If total percentage is not equal or greater than goal, follow instructions in specification of documenting Good Faith Effort.

THIS FORM MUST BE COMPLETED AND <u>SUBMITTED\_BY</u> THE TWO LOWEST NUMERICAL BIDDERS, <u>ALONG WITH SIGNED CORRESPONDENCE FROM DBE(s)</u>
<u>ON THEIR OWN LETTERHEAD REAFFIRMING NEGOTIATED TERMS</u>, NO LATER THAN 3 DAYS AFTER THE BID OPENING
(EXCLUSIVE OF SATURDAYS, <u>SUNDAYS</u> AND HOLIDAYS). <u>FAILURE TO DO SO WILL RENDER THE BID NON-RESPONSIVE</u>.
BY SUBMITTAL OF THIS FORM, PRIME CONTRACTOR ACKNOWLEDGES THAT DBE(S) HAVE BEEN CONTACTED AND A FIRM PRICE HAS BEEN OBTAINED.



# DBE

- CORRECTION 30% DBE percentage (to be issued in addenda)
- Utilize SLDBE list at the link below
  - <a href="https://www.swbno.org/Business/DisadvantagedBusinesses">https://www.swbno.org/Business/DisadvantagedBusinesses</a>
- Review list for the type of services needed electrical, mechanical, demo, general construction, etc.
- Contact vendors and discuss scope and pricing; obtained signed letterhead
- If unable to meet the goal (30%) document good faith efforts (refer to specs)
  - Attempts (emails) to vendors, with adequate information and time to respond
  - Advertisements for services
  - Did not unduly reject DBE's without cause









**CUSTOMER SERVICE** 

COMMUNICATIONS

**PROJECTS** 

DOING BUSINESS

ABOUT S&WB

MY ACCOUNT

### Disadvantaged Business Program Overview

The Sewerage and Water Board of New Orleans offers firms exciting business opportunities in Professional Services, Construction, Goods and Services through its Economically Disadvantaged Business Program (EDBP).

To ensure that a broad spectrum of local and small businesses receive equitable contracting opportunities with the Sewerage & Water Board of New Orleans Board, its Board of Directors authorized the State Local Disadvantaged Business Enterprise Program since September 1997.

In 2015, local and small business contracting totaled over \$15 million in construction, goods/services and professional services. Along with local partnering agencies, the State and Local Disadvantaged Business Program creates a level playing field of which small businesses and DBEs can compete fairly for local government funded contracts.

The S&WB strongly encourages participation by Disadvantaged Business Enterprises (DBE) on all open market bids and RFPs.

### Certification Application Process Now Available Online

The City of New Orleans in partnership with the Sewerage and Water Board, New Orleans Aviation Board and Harrah's New Orleans, which operates the State and Local Disadvantaged Business Enterprise Program is pleased to announce our Vendor Electronic Certification System. This system allows vendors the ability to complete an on-line application for certification, update contact information, look-up certified firms, as well as report contract payment information.

SEARCH THE SLDBE DIRECTORY 🗷

APPLY FOR SLDBE CERTIFICATION / RE-CERTIFICATION 2

LOGIN TO THE SLDBE SYSTEM 🗷

### Participation

Participation is, by definition, done by subcontractors. **A prime contractor cannot fulfill the participation goal**. A DBE certified company acting as the prime contractor must subcontract with other DBE companies to meet the bid goal.

DBE Participation Goals are included in the bid documents and if additional information is needed regarding certification or SLDBE Goals, please contact the Economically Disadvantaged Business Program..

# DBE, Co., Inc.

Street Address City, ST ZIP Code

#### Dear Prime Contractor:

Per negotiations, we acknowledge that we will (**Scope of Work**) for (**Dollar Amount**) in regard to (**SWBNO Project Name**).

Sincerely,

#### Company Representative Name

Company Representative Name



Date: 1/9/23

4321 Maplewood Ave., Nashville, TN 12345 (123) 456-7890| (123) 456-7891 relectoud@example.com

To: Joe Bleaux Prime Contractors Group

89 Pacific Ave. San Francisco, CA 54321 (123) 789-0123 Customer ID No. 0549 Expiration Date; 2/9/23

Qty	Description	Unit price	Line total
2	Large Widgets	100.00	200.00
2	Small Smidsets	500.00	1,000.00
		Subtotal	1,200.00
		Sales Tax	0.00
		Total	1,200.00

Quotation prepared by:

This is a quotation on the goods named, subject to the conditions noted below: All sales final, payment due upon receipt.

To accept this quotation, sign here and return: Prime Confiscion

Thank you for your business!



# **HUD Section 3 Compliance**

- Project is partially funded by HUD EDI grant
- → 'Section 3' compliance is an added requirement
- →Attachment F in the Front Ends includes the contract clauses as required by HUD
- 1. What is Section 3?
- 2. Contractor Requirements
- 3. SWBNO Support

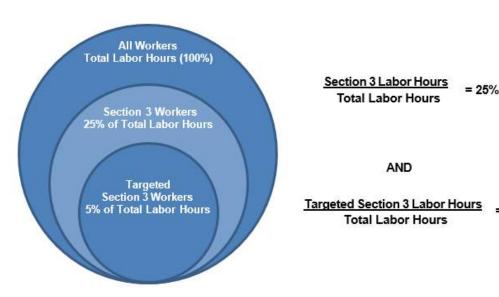


### **Benchmarks**

- 25 percent or more of the total number of labor hours worked by all workers on the project shall be performed by <u>Section 3 workers</u>, and
- 5 percent or more of the total number of labor hours worked by all workers on the project shall be performed by <u>Targeted Section 3 workers</u>.
- Total project labor hours does not include hours for professional services, but any hours conducted by a Section 3 worker on professional services tasks count to the total Section 3 labor hours

Using Section 3 businesses is not a direct requirement, but attempts to contract with Section 3 businesses must be documented







# **Key Definitions**

**Section 3 Residents**: Individuals residing in the area where the HUD assistance is expended. Public housing residents or low-income persons who live in the metropolitan area or non-metropolitan county where the Section 3 covered project is located.

**Section 3 Worker:** Any worker who currently fits or when hired within the past five years fit at least one of the following categories, as documented:

- 1. The worker's income for the previous or annualized calendar year is below the income limit established by HUD.
- 2. The worker is employed by a Section 3 business concern.

**Targeted Section 3 Worker:** for Housing and Community Development Financial Assistance, as defined in 24 CFR §75.21, means a Section 3 worker who is:

- 1. A worker employed by a Section 3 business concern; or
- 2. A worker who currently fits or when hired fit at least one of the following categories, as documented within the past five years:
  - a. Living within the service area or the neighborhood of the project; or
  - b. A YouthBuild participant.



# FY 2023 Income Limits Summary

FY 2023 Income Limit Area	Median Family Limit Categor		Persons in Family							
	Income		1	2	3	4	5	6	7	8
New Orleans- Metairie, LA HUD Metro FMR Area	\$82,000	Very Low (50%) Income Limits (\$)	\$ 28,700	\$ 32,800	\$ 36,900	\$ 41,000	\$ 44,300	\$ 47,600	\$ 50,850	\$ 54,150
		Extremely Low Income Limits (\$)	\$ 17,250	\$ 19,720	\$ 24,860	\$ 30,000	\$ 35,140	\$ 40,280	\$ 45,420	\$ 50,560
		Low (80%) Income Limits (\$)	\$ 45,950	\$ 52,500	\$ 59,050	\$ 65,600	\$ 70,850	\$ 76,100	\$ 81,350	\$ 86,600





- Bidders are required to submit a Section 3 Plan as part of their post-bid documents submission.
  - This form acknowledges "intent to comply" with Section 3 requirements
  - Includes an initial estimate of total project labor hours required, along with subcontractors
- Conduct outreach efforts to employee Section 3 workers and businesses
- Document qualitative 'good faith' efforts to meet benchmarks
- Submit quarterly and project end reports using the provided Section 3 Compliance Report form along with any supporting documentation of qualitative efforts and achievements.



# **SWBNO Support and Requirements**

- Partnership with City and HANO (Housing Authority of New Orleans) to provide access to existing business and worker registries
- Maintains worker and business registry specific to this project
- Support with outreach events (job site poster, job fairs)
- Reporting to HUD on project status and 'good faith efforts' if needed

# **Project Overview**

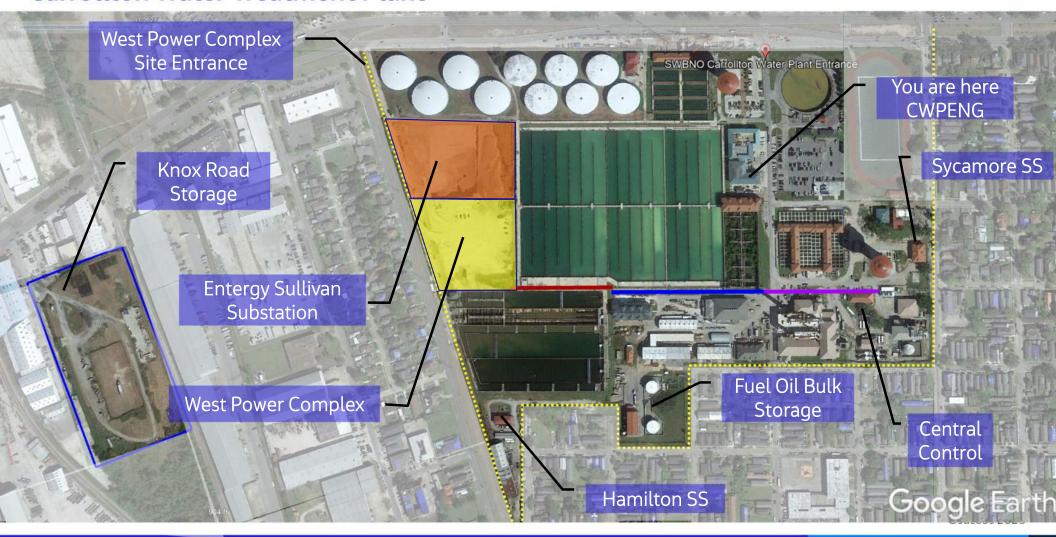
# **Project Purpose**

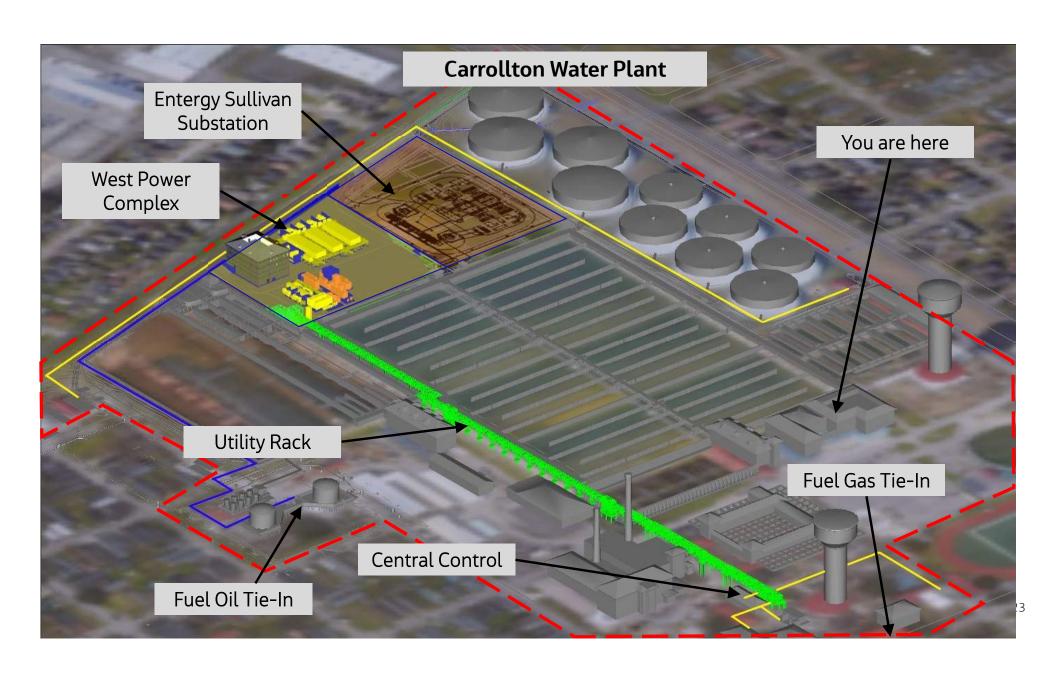
..achieve an interconnected highly reliable mega-watt scale power supply and distribution system between the 60-Hz Utility source and the 60-Hz and 25-Hz loads on the SWBNO managed electrical network.

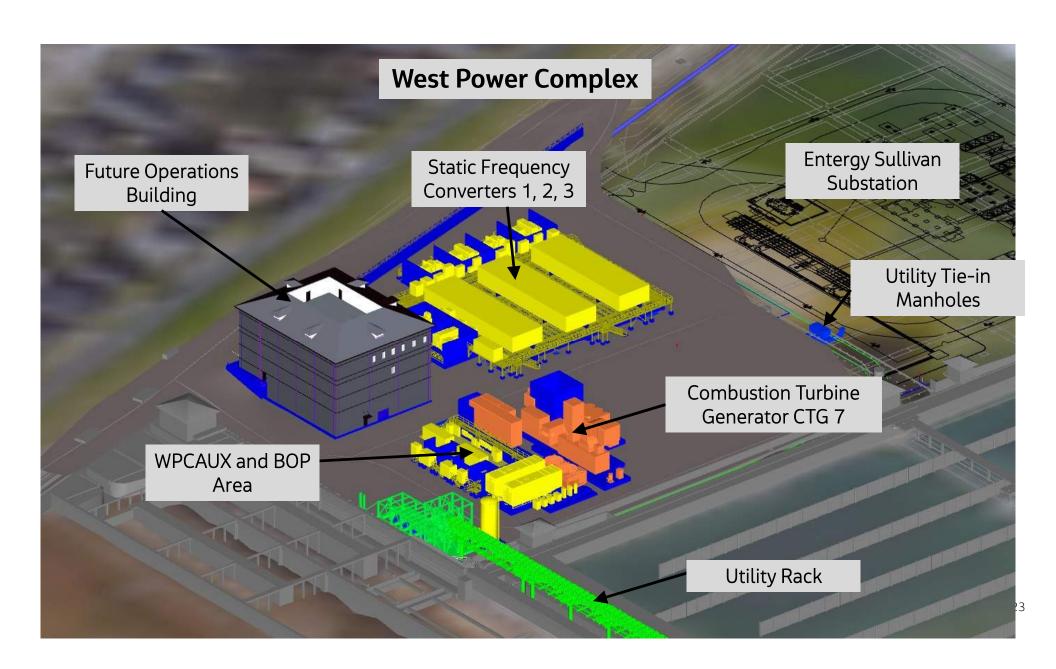
The intent of the WPC is to improve the resiliency and reliability of critical SWBNO managed electrical network infrastructure.



# **Carrollton Water Treatment Plant**

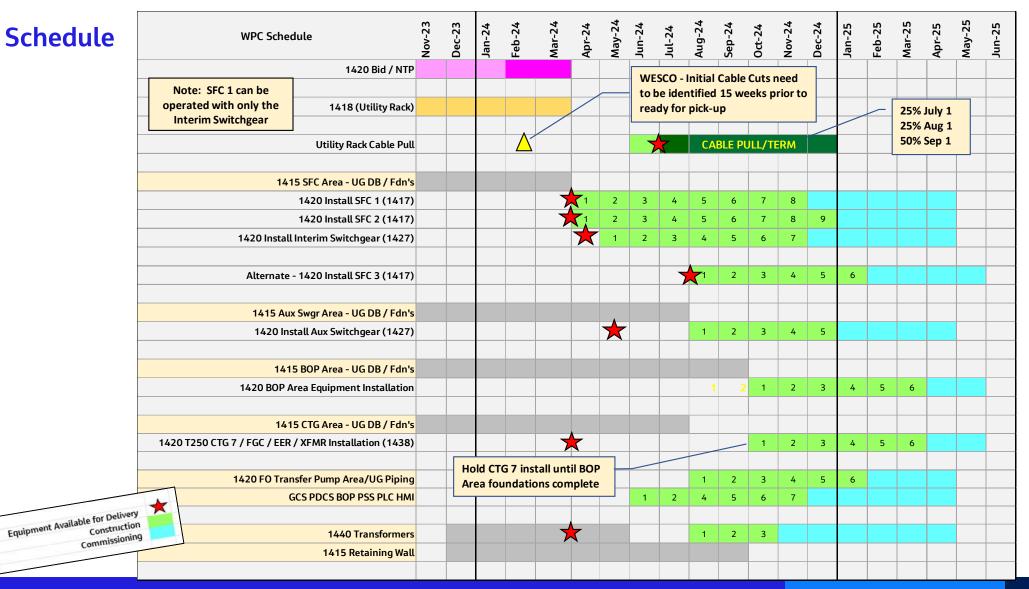






Separable Portion	Description	Milestone		
All	Anticipated	NTP	<del>29-Fcb-24</del>	→ 01-Apr-24
2	CTG T7	RFC -18-Se		→ 29-Mar-25
2	CIGI7	Substantial Completion	14-Mar-25	31-May-25
1	SFC 1	RFC	24 Feb 25	→ 30-Nov-24
1	SPC 1	Substantial Completion	14 <del>-Mar-25</del>	→ 26-Apr-25
3	GSU's	RFC	<del>24-Feb-25</del>	→ 02-Feb-25
3	GSU S	Substantial Completion	14-Mar-25	→ 26-Apr-25
5	FO Forwarding Pumps	RFC	<del>24-Feb-25</del>	> 02-Feb-25
3	ro roi waiting rumps	Substantial Completion	14-Mar-25	→ 26-Apr-25
6	FO Supply Pumps, FO Return	RFC	<del>24-Fcb-25</del>	→ 02-Feb-25
0	Pumps, FO Day tank	Substantial Completion	14-Mar-25	26-Apr-25
7	BOP Miscellaneous Equipment	RFC	<del>24-Feb-25</del>	> 29-Mar-25
,	BOF Miscenaneous Equipment	Substantial Completion	1 <del>4-Mar-25</del>	31-May-25
8	GCS PDCS BOP PSS PLC, HMI	RFC	<del>24-Feb-25</del>	→ 30-Nov-24
0	GCS FDCS BOF FSS FLC, IIWI	Substantial Completion	14-Mar-25	26-Apr-25
4	SFC 2	RFC	24-Mar-25	→ 28-Dec-24
4	SPC 2	Substantial Completion	11-Apr-25	26-Apr-25
Alternate	SFC 3 - Alternate	RFC	<del>21-Apr-25</del>	→ 02-Feb-25
Alternate	SPC 3 - Alternate	Substantial Completion	12-May-25	
All	Facility Substantial Completion		<del>24-Jun-25</del>	→ 05-Jun-25
All	Project Substantial Completion		<del>24-Jun-25</del>	430 Days

### **Schedule**



# **Project Details**

## <u>Owner Provided Equipment – Reference Volume 4 Documentation</u>

#### CP-1417 - SFC's

- WPCSFC1 & WPCSFC2 enclosures, associated 25-Hz and 60-Hz transformers and other associated equipment. Available for delivery from Belle Chase, Louisiana April 2024.
- WPCSFC3 enclosure (Alternate), associated 25-Hz and 60-Hz transformers and associated equipment. Available for delivery from Belle Chase, Louisiana July 2024.

### CP-1427 - Auxiliary Switchgear

WPCAUX PDC-1 & WPCAUX PDC-2 switchgear, enclosures and other associated equipment.
 Available for delivery from Belle Chase, Louisiana April/May 2024.

#### CP-1438 - CTG 7

 WPCCTG 7 22MW dual fuel combustion turbine generator and ancillary equipment including CTG7 Electrical Enclosure Room (EER), Fuel Gas Compressor, CTG7 480V Transformer and other associated equipment. Available for delivery from Houston, Texas April 2024.

### **CP-1440 – GSU Transformers**

 CWPCTG 6 & WPCCTG 7 13.8/24kV 60Hz Generator Step-Up Transformers and other associated equipment. Available for delivery from Laurel, Mississippi April 2024.

# **Owner Provided Equipment**

Reference Volume 4 Documentation

### CP-1435 – Advance Purchase Wire & Cable

- 25 percent July 01, 2024.
- 25 percent Aug 01, 2024
- 50 percent Sept 01, 2024.
- Note that Contractor is responsible for shipment of cable from Suppliers warehouse (anticipated to be Destrehan or Metairie, LA) to site. Refer to C1435 for details regarding shipping and the quantity of cable 'cuts' provided by C1435 Supplier.
- This is an advance bulk purchase of cable. Contractor is responsible for final quantities and any 'shorts'.

Note: An Excel version of the Cable Schedule (Vol3, Part3) will be provided via Addendum.

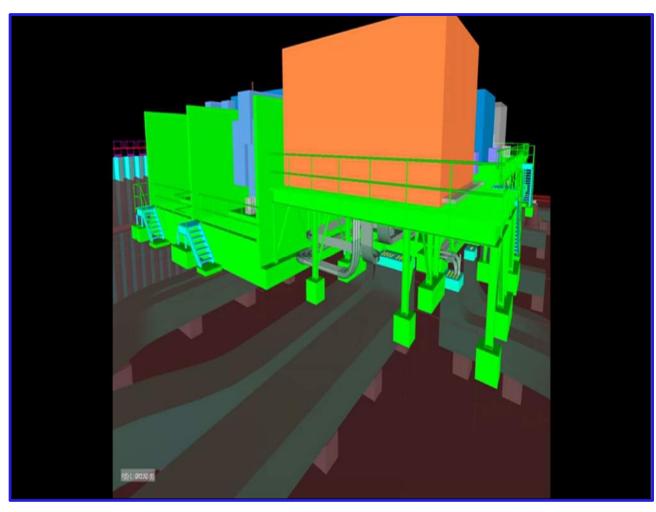
Cable Schedule does not include non-scheduled systems such as Security, Lighting.

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4/C #10 6000 ·	2.000
11 5/C #14 600V	1,000 F
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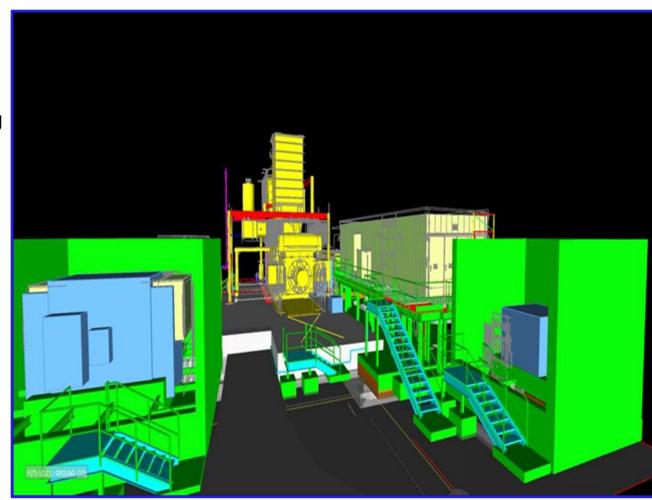
# **WPCSFC Subplot**

- Offload and Assemble 1417/1427 Equipment
- Power and operate HVAC during assembly
- Interconnect Equipment / Cable
- AG Cable Tray/Conduit under Enclosures
- Platforms/Stairs/Handrail
- Grounding and Lighting
- Security and Fire Protection
- Control System Integration
- Equipment Startup and Commissioning



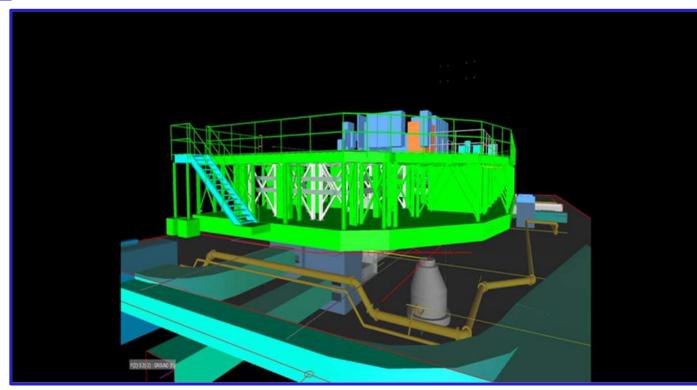
# **WPCCTG.7 Subplot**

- Offload and Assemble 1438/1440 Equipment
- Power and operate HVAC during assembly
- Interconnect Equipment / Piping / Cable
- Platforms/Stairs/Handrail
- Grounding and Lighting
- Security and Fire Protection
- Control System Integration
- Equipment Startup and Commissioning



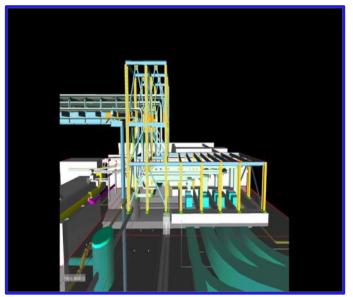
# **WPCAUX and BOP Subplot**

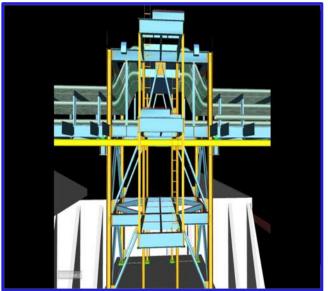
- Offload and Assemble 1427 Equipment
- Procure and Install 1420 Equipment
- Power and operate HVAC during assembly
- Interconnect Equipment / Cable
- Platforms/Stairs/Handrail
- Grounding and Lighting
- Security and Fire Protection
- Control System Integration
- Equipment Startup and Commissioning

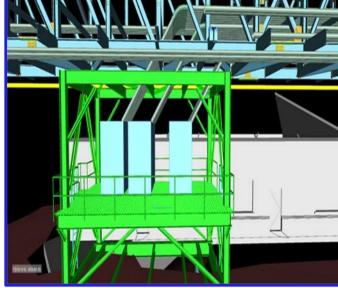


# **WPCUR**

- Cable pull/splice at West Transition Structure (WTS), Pull Box Structures, and East Transition Structure (ETS)
- Procure and Install ETS Transition Boxes
- Procure and Install Non-Seg Bus Duct from ETS Transition Boxes into Central Control Switchgear







West Transition Structure

Typical Pull Box Structure

**East Transition Structure** 

# **CWPYRD and CWPCTG.6**

- Remove existing CTG6 GSU Transformer (Board retains)
- Offload and Install CTG-6 GSU (1427)
- Interconnect Equipment
- Grounding and Lighting
- Control System Integration
- Equipment Startup and Commissioning

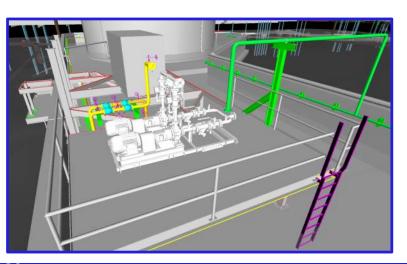


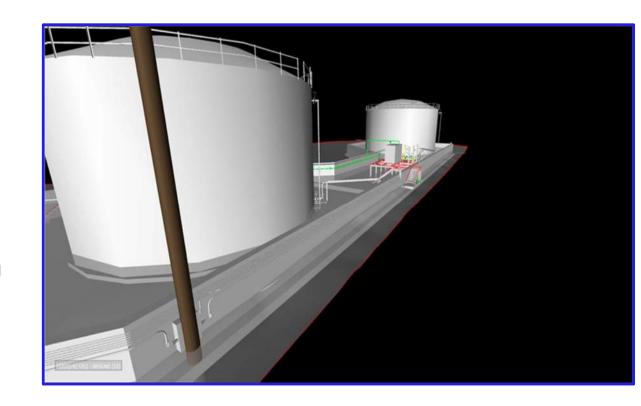




# Fuel Oil Bulk Storage Area

- Procure and Install 1420 Equipment
- Interconnect Equipment
- Platforms/Stairs/Handrail
- Grounding and Lighting
- Piping / Wiring
- Equipment Startup and Commissioning

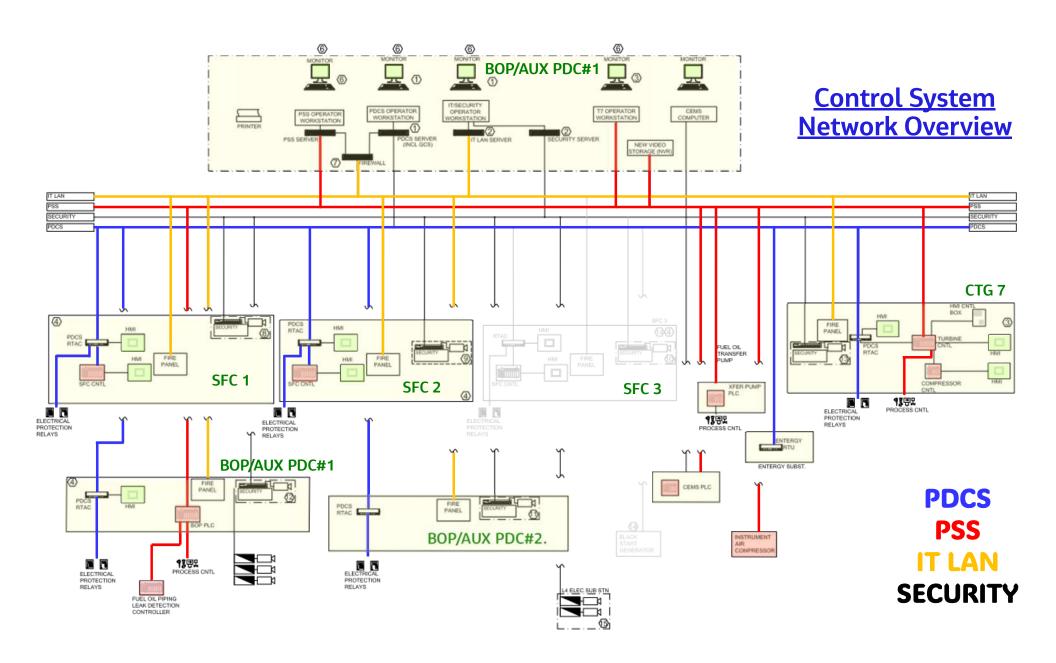




# **Forthcoming Addendums**

- Contract Days April 1, 2024 to June 5, 2025 430 days
- DBE Percentage correction
- Identify that the pre-purchased Cable from Contract 1435 will be located at a warehouse in either Metairie or Destrehan, LA
- Update the Schedule Table (Spec 01 11 01)
- Provide excel version of the Cable Schedule
- 25Hz Switchgear Foundation
- West Power Complex Site Lighting

# **Control System Integration**



### PDCS Scope

- 1. PDCS network configuration updates.
- 2. PDCS main control room HMI updates.
- 3. PDCS historian updates.
- 4. Add safety light modification:
- 5. Safety light configuration.
- 6. Cardkey configuration.
- Make ready for GCS implementation.
- 8. Add pre-programmed sequences.
- 9. Develop shift reports.
- 10. Add/modify/update OTI-PI interface.

### **Power Distribution Control System**

## Grid Control System (GCS) (Not part of 1420)

An overarching PDCS
Subsystem that utilizes the
PDCS control infrastructure
to balance power supply
with load to manage the
SWBNO grid.

The overarching premise of the GCS is the automated coordinated control of generation, distribution, and load assets within the managed electrical distribution network along with purpose specific supplementary automation features.

### Electrical Control System (ECS)

Control of medium voltage switchgear (electrical system elements large enough to disturb the SWBNO grid).

The PDCS primary function is to monitor and control the SWBNO managed electrical distribution network, associated generation assets, and large loads that may affect the stability of the SWBNO managed electrical distribution network or dispatch of generation assets - loosely any medium voltage (>1000V) electrical infrastructure and certain 480V switchgear loads.

Process SCADA System (PSS)
480V MCC Process Loads and
Instrumentation
The PSS primary function is to monitor and
control SWBNO 'process' systems.

CTG Controller

SFC Controllers

#### What is a Use Case?

A defined set of circumstances the Facility must be able to respond to. A Use Case defines the interactions between external actors and the system under consideration to accomplish a goal.

#### In other words, a Use Case is the System/Operator response to "I want/need to ....."

```
...start the CTG to full-speed, no-load.
```

... put SFC-1 on-line.

...transfer Fuel Oil from the Storage Tank to the Day Tank.

...configure our assets to support 30 MW load without the Utility Substation feed in XX minutes.

...configure our assets to support 45 MW load including the Utility Substation feed in XX minutes.

...keep the system operating at 25 MW load, but the Utility Substation feed is dropping.

#### **How will Use Cases be developed?**

Beginning soon after NTP, the CMO will coordinate meetings (no less than monthly) with SWBNO Engineering and Operations, the Commissioning Agent or System Integrator and the Engineer (Jacobs) to develop and refine up to 200 Use Cases.

#### In addition to the above meetings, the following formal Workshops will be conducted:

40 percent System Design: 'system'(s) to be reviewed in workshop are sufficiently technically mature to have most system elements identified.

**75 percent System Design:** 'system'(s) to be reviewed in workshop have been further refined and Use Cases are solid (80 percent).

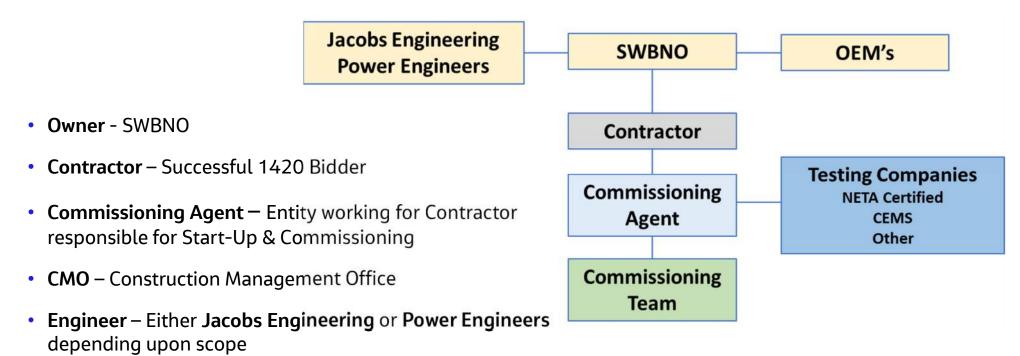
90 percent System Design: 'system'(s) to be reviewed in workshop are past system design freeze and majority of System ConOps documentation has been developed and are ready to release to Control System Integrator.

Pre-FAT: 'System'(s) to be reviewed in workshop have been configured by Control System Integrator and ready for review with expectation that review comments will be incorporated for witness in FAT.

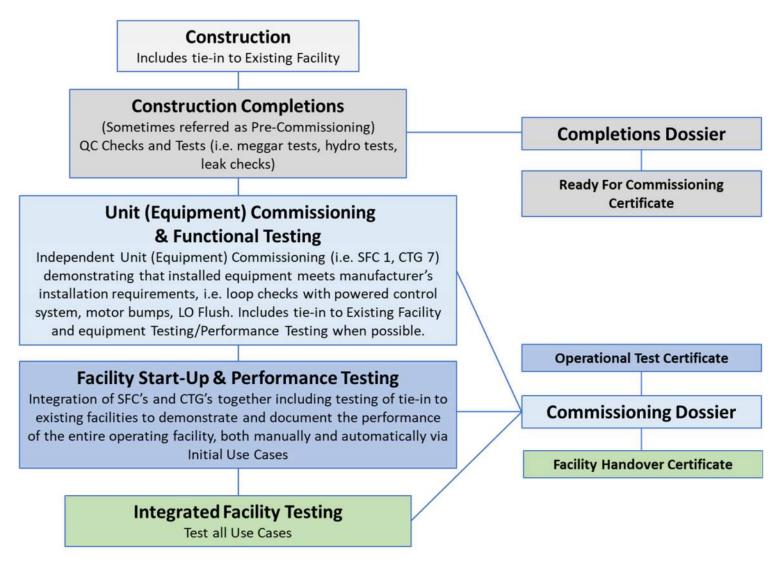
Post-FAT: 'System'(s) to be reviewed have been through FAT and FAT punch list items have been resolved with expectation that Control System will be released for shipment at conclusion of workshop.

# **Completions & Commissioning**

### **Organization**

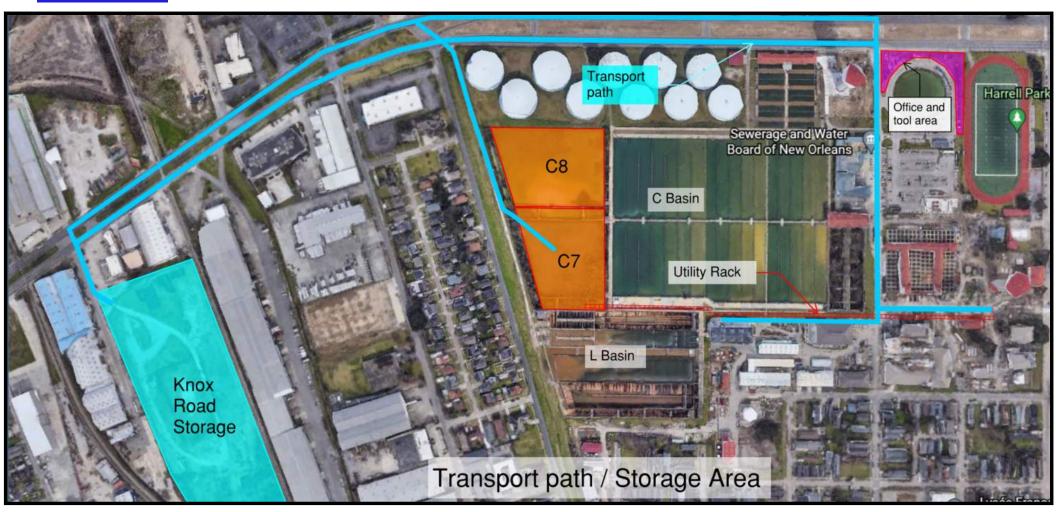


# Completions & Commissioning Workflow



# **Construction Considerations**

### **Site Access**

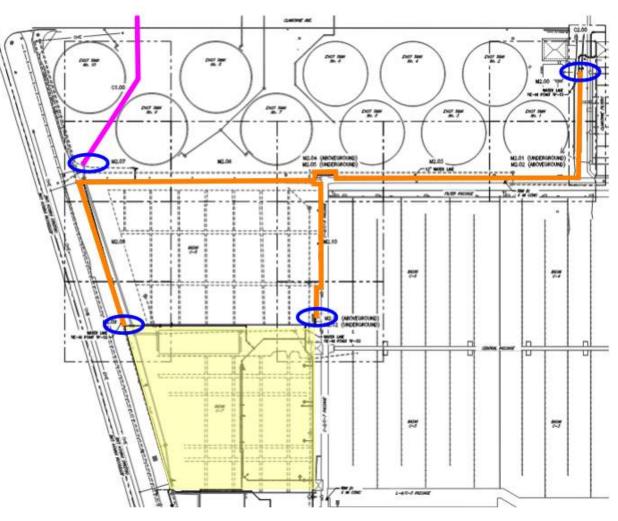


### **Ongoing Construction Work**

C1415 – WPC Underground Ductbank and Foundations

C1418 – Utility Rack

C1443 – CWPT-Claiborne Water Supply and Stormwater Outfall Tie-ins



#### **Key Construction Considerations**

- Working Hours/Days Monday through Friday, Saturday, Sunday, and Holidays with Owner's written consent.
   See General Conditions Article 6.02.
- <u>Site Access and Parking</u> Subject to SWB security protocols while onsite. Only construction vehicles with company logo/designation are allowed in the plant with the permission of the Owner. Contractor responsible for securing offsite facilities for parking and transportation to and from.
- <u>Laydown</u> Limited onsite laydown areas available; coordinate with Owner for review and approval of onsite laydown. Knox Road storage area may be used for staging and storage of construction equipment and materials as space allows.

#### Temporary Facilities

 Power for Contractor's office and construction, internet, phone, sanitary, and water services are the Contractor's responsibility.

#### General Site Conditions

- Maximum ground pressure is 2,500 PSF throughout plant. All cranes and point loading equipment are required to be matted.
- Groundwater table is approximately 2 feet below grade. During and after rain events surface water will be present, and the water table may extend to grade. Water management will be required.
- See additional Site Expectations in Section 01 31 13, Project Coordination.

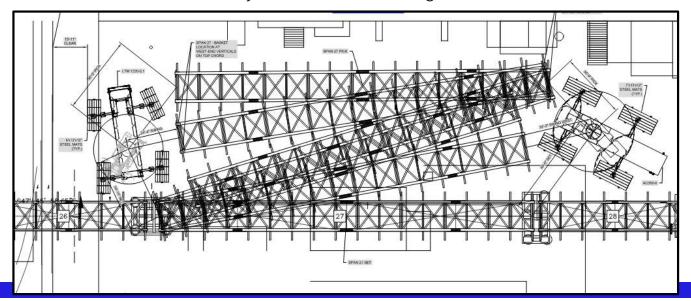
#### **Key Construction Considerations**

- Maintenance of Plant Operations (MOPO) Takes precedence and is <u>not</u> to be interrupted. (Section 01 11 01 3.01 and 01 31 13 1.06)
  - o Provide 14 days advance written request for approval of need to shut down or interrupt a process or facility.
  - Power outages will be considered upon 48 hours written request.
  - o Contractor shall stop work and relinquish area in question in case of a SWB process emergency.
- <u>Safety</u> Contractor's responsibility including Site Specific Safety Plan, Job Hazard Analyses, Reporting, Coordination with Owner Safety Requirements (Electrical Safety Clearance, LOTO, Safety Orientation Notice).
- <u>Protection of Work and Property</u> See various requirements in Section 01 50 00, Temporary Facilities and Controls (i.e., coordination / minimizing disruptions to adjacent processes, site security, barricades and lighting, and dewatering)
- <u>Pollution Prevention (01 50 00, 3.04)</u> Air, noise, and water pollution prevention control required. Notably, the Work will be installed immediately adjacent to existing water treatment basins. It is the Contractor's responsibility to protect from and avoid contamination of the treatment process. (Section 01 31 13 1.04.B)

### **Key Construction Considerations**

- Staging and Lifting Plans (Section 13 30 00)
  - Staging, Lifting and Rigging Plans (signed and sealed by PE) and JSAs shall be submitted AND approved before conducting any lifting operations
  - Prepare in accordance with specifications (i.e., scaled drawings, rigging plans, crane configuration, calculations of working loads relative to equipment and rigging capacities, operator certifications, etc.).
  - Coordinate rigging of equipment with OEM's.
  - Crane capacity limited to 75 percent unless Owner approved.

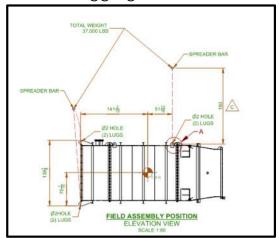
Lift Plan Scaled Drawings



#### Lift Charts and Working Load Calculations

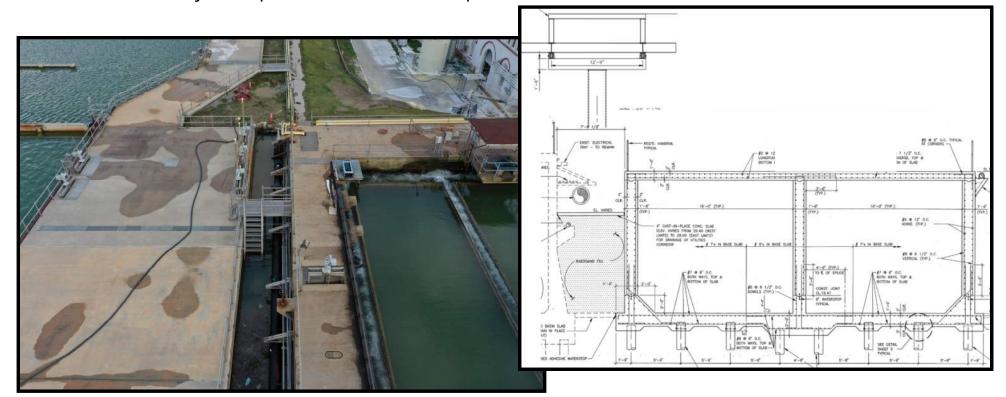
LIEBHERR LTM 1220-5-1		PICK	MIN. SWING	SET
CRANE CONFIGURATION		T	T	1
MAIN BOOM LENGTH	(FT.)	100.0	100.0	100.0
MAIN BOOM CONFIGURATION	(LBS.)	0+46+46+46+46+	0+46+46+46+46+	0+46+46+46+46+
MAIN COUNTERWEIGHT	(LBS.)	163,100	163,100	163,100
MAIN BOOM ANGLE	(LBS.)	67	74,0	68.3
ACTUAL LIFT RADIUS	(FT.)	36.0	24.3	33.8
CHART RADIUS	(FT.)	36.0	27.0	36.0
CAPACITY AS CONFIGURED	(LBS.)	134,000	168,000	134,000
BLOCK WEIGHT	(LBS.)	2,293	2,293	2,293
AUXILIARY BLOCK WEIGHT	(LBS.)	1,103	1,103	1,103
JIB DEDUCTION	(LBS.)	1,345	1,345	1,345
RIGGING WEIGHT		700	700	700
LOAD WEIGHT	(LBS.)	97,500	97,500	97,500
TOTAL LIFTED WEIGHT	(LBS.)	102,941	102,941	102,941
PERCENTAGE OF CHART CAPACITY	(16)	76.82%	61.27%	76.82%
MAXIMUM SINGLE LINE PULL	(LBS.)	23,400	23,400	23,400
PARTS OF LINE	{u}	6	6	6
TOTAL LINE CAPACITY	(LBS.)	135,100	135,100	136,100
PERCENTAGE OF LINE CAPACITY	(96)	76.20%	76.20%	75.64%
HOOK BLOCK CAPACITY	(TONS)	79.25	78.28	78.25
PERCENTAGE OF HOOK BLOCK CAPACITY	(96)	65.75%	65.75%	65.78%
MAXIMUM ALLOWABLE WIND SPEED	(MPH)		15.00	

#### Rigging Details



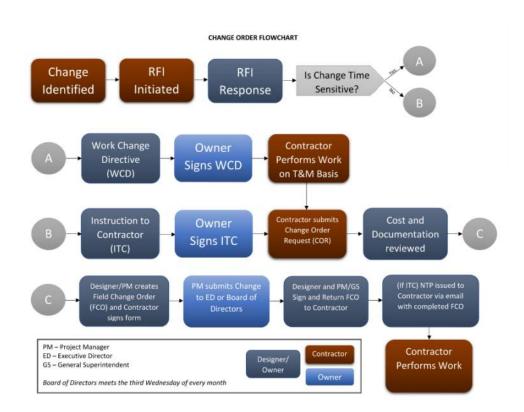
### **Key Construction Considerations - Access to Utility Rack Segment B**

- Reference Drawings provided in Volume 4 of Bid Documents provide details
- Contractor to provide calculations regarding any load to be placed atop Influent Channel
  - Refer to Specification 01 31 13 Project Coordination Paragraph 1.01 B.3
- Full containment of any/all oil/potential contaminants required



# **Construction Administration**

- <u>Contract Modification Procedures (01 26 00)</u> Outlines administrative procedures to identify a
  changed condition, quantify the impacts to Contract Price and Time, initiate the additional Work,
  and amend Contract to include the changed condition.
  - RFI Request for Information
  - COR Change Order Request
  - ITC Instruction to Contractor
  - WCD Work Change Directive
  - FCO Field Change Order



#### Payment Procedures (01 29 00 and General Conditions Article 14)

- Prepare Schedule of Values and Schedule of Estimated Progress Payments
- Submit Applications for Payment monthly with supporting information including but not limited to Updated Progress
  Schedule, latest 3-week lookahead schedule, confirmation of daily reporting, confirmation of as-built maintenance, stored
  materials reports, evidence of current insurance, certified payrolls and wage rate compliance per Section 3 HUD
  requirements, evidence of DBE payments)
- <u>Failure to submit required materials</u> in support of payment application will constitute grounds for <u>rejection</u>.
- SWB requires <u>submission of up to three separate payment applications</u> to support reimbursement from various funding sources.

#### Project Meetings (01 31 19)

- Pre-construction Conference
- Preliminary Schedule Review
- Progress Meetings (time TBD)
- Quality Control
- Use Case Development
- Shop Drawing / Submittal Coordination
- Pre-installation
- Facility Start-up

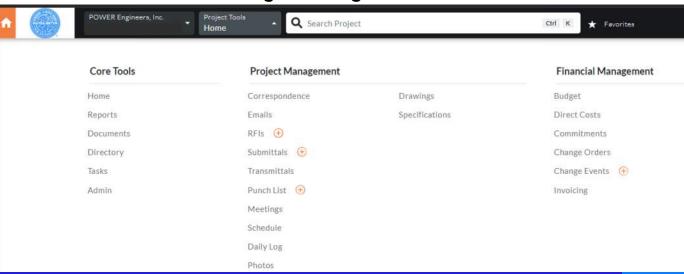
- Progress Documentation / Schedules (01 32 00)
  - Format Primavera P6 or Engineer-approved equivalent
  - Scheduler Qualifications 5 years minimum experience
  - Submittals Preliminary, Detailed Baseline, Detailed Progress, 3-Week Lookaheads (submit 24 hours prior to weekly progress meeting), Progress Reports
  - Total Float Jointly owned by Contractor and Owner
  - Weather Days Specified in Contract, adjust work calendar to incorporate Weather Days. Unused Weather Days to be returned to Contract monthly as Float

### **Preliminary Progress Schedule** Submit within 10 days after the Effective date of the Agreement. Include detailed schedule, beginning with Notice to Proceed, for minimum duration of 120 days, and a summary of balance of Project through Final Completion Update Monthly. Not Acceptable Correct within 10 days and resubmit Acceptable **Detailed Baseline Schedule** 16 hr. workshop preceding submittal Submit initial Detailed Baseline Schedule within 10 days after NTP Not Acceptable Correct within 10 days and resubmit Acceptable **Detailed Progress Schedule**

Updated monthly

<sup>\*</sup> No site work allowed until Preliminary Schedule is submitted and approved.

- Submittal Procedures (01 33 00)
  - Timeliness Schedule and submit in accordance with Schedule of Submittals (see summary of required submittals for in specification supplement for reference)
  - Engineer Review 14 calendar days
    - Approved
    - Approved as Noted
    - Revise and Resubmit
    - Rejected
  - See Submittal Procedures Supplement for additional administrative requirements (Transmittal Cover Sheet, naming conventions, etc.)
- Construction Administration Activities Managed through Procore



#### **Supporting Subcontractors Experience Required**

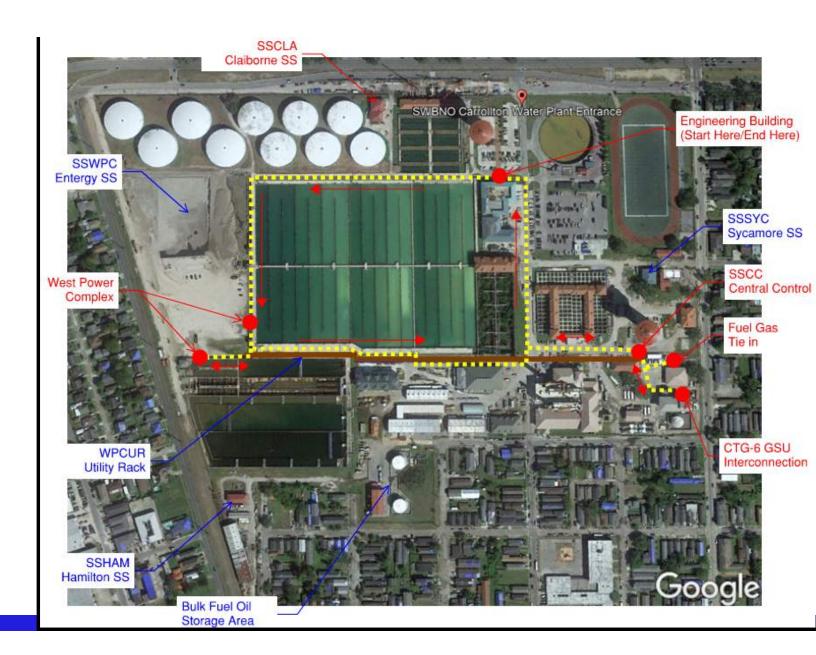
- Commissioning Agent (01 91 14 Part 1.02.B.2)
  - o Certification as a Certified Commissioning Firm with the Building Commissioning Association (or similar organization).
  - Experience with at least four projects of similar Managerial and Technical Complexity.
  - o 5 Years minimum field experience with energy systems performance, startup, troubleshooting & maintenance.
- PDCS Integrator (40 94 23PDCS Part 2.10.L)
  - Systems Integration Specialist with experience in designing electrical protection control systems.
  - Experienced in at least 10 projects with a power capacity of at least 50MW.
  - Experience in Electrical Network Projects.
- CTG Installation (01 73 20 Part 1.01.D.6)
  - o Minimum of 10 years experience with installation of CTG's similar in size and complexity.
  - Projects must be submitted for owner's approval.
- Testing Company: (01 91 14 Part 1.02.B.3.a)
  - Should meet OSHA 29 CFR 1907 Criteria and be a certified NETA member
- Scheduler (Section 01 32 00 Part 1.01.A.1)
  - o Minimum of 5 years experience in scheduling similarly sized construction projects
  - Must be able to use Primavera P6 or an alternative Engineer-approved scheduling software.

# Wrap Up

Questions and Site Visit

### **Site Walk**

PPE required
Safety glasses
Hard hat
Steel toe shoes





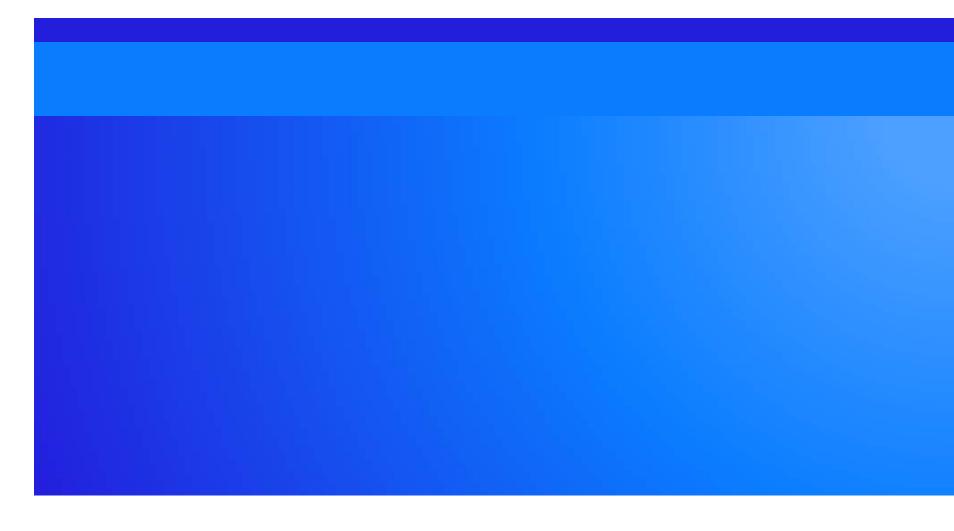
Sign in at the office and follow all safety rules at PEP.

PPE required to come on site.

Safety glasses Hard hat Steel toe shoes.

**Point Eight Power** 1510 Engineers Rd. Belle Chase, LA 70037













#### Please write legibly



# SEWERAGE & WATER BOARD OF NEW ORLEANS ATTENDANCE SHEET

PROJECT: -Pre-Bid Conference: 20	23-SWB-97 Contract 1420 West Power Complex Phase	MEETING DATE: December 8, 2023. 9:00 A.M.
Equipment Installation and Commis	ssioning	
PLACE/ROOM: Carrollton Water Plant Auditorium Room E202		FACILITATOR: Connor Metcalf, Procurement Analyst
NAME	COMPANY	EMAIL
Connor Metcalf	SWBNO	Cmetcalf@swbno.org
Scott Burchett	Primoris	Sburchett@prim.com
Joseph Bondank	Power Engineers	Joseph.bondank@powereng.com
M. Ron Spooner	SWBNO	rspooner@swbno.org
Celso Antunez	SWBNO	cantunez@swbno.org
Bill Ducote	Barnes Electric	bducote@wjbe.com
William Dowling	Frischhertz Electric	Wdowling@frishhertz.com
Ryan Frischhertz	Frischhertz Electric	ryan@frischhertz.com
Doug Shrogas	Frischhertz Electric	<u>Dshrugas@frischhertz.com</u>
Ashton Rothy	MR Pittman Group	Ashton@mrpittman.com
Craig Duplantis	Triad	Craig duplantis@thenewtrongroup.com

#### Please write legibly



# SEWERAGE & WATER BOARD OF NEW ORLEANS ATTENDANCE SHEET

PROJECT: -Pre-Bid Conference: 20 Equipment Installation and Commis	23-SWB-97 Contract 1420 West Power Complex Phase ssioning	MEETING DATE: December 8, 2023. 9:00 A.M.
PLACE/ROOM: Carrollton Water Plant Auditorium Room E202		FACILITATOR: Connor Metcalf, Procurement Analyst
NAME	COMPANY	EMAIL
Mike Rooney	Triad	mike_rooney@thenewtrongroup.com
Laura Kelly	Infinity Engineering	<u>Lkelly@infityec.com</u>
York Brogden	Jacobs Engineering	York.brogden@jacobs.com
Kaitlin Tymrak	SWBNO	ktymrak@swbno.org
Bill Ellis	Walter Barnes	Bellis@wjbe.com
Mustafa Afaneh	Jacobs Engineering	mustafa.afaneh@jacobs.com
Alvin Porter	SWBNO	Aporter@swbno.org
Roy Snover	Jacobs Engineering	roy.snover@jacobs.com
Chris Bergeron	SWBNO	cbergeron@swbno.org
Rodney Carpenter	Jacobs Engineering	rodney.carpenter@jacobs.com
Sonya Reiser	Jacobs Engineering	Sonya.reiser@jacobs.com

#### Please write legibly



# SEWERAGE & WATER BOARD OF NEW ORLEANS ATTENDANCE SHEET

PROJECT: -Pre-Bid Conference: 2023-SWE Equipment Installation and Commissioning	3-97 Contract 1420 West Power Complex Phase	MEETING DATE: December 8, 2023. 9:00 A.M.
PLACE/ROOM: Carrollton Water Plant Auditorium Room E202		FACILITATOR: Connor Metcalf, Procurement Analyst
NAME	COMPANY	EMAIL
Brad Hall	Jacobs Engineering	Bradley.hall@jacobs.com
Joel Tillery	Jacobs Engineering	Joel.tillery@jacobs.com
Monica Stochl	Jacobs Engineering	Monica.Stochl@jacobs.com
Suliman Hamed	Jacobs Engineering	Suliman.Hamed@jacobs.com
Angel Johnson	SWBNO	Ajohnson4@swbno.org
Max Newton	Jacobs Engineering	max.newton@jacobs.com
Kirubel Beyene	Jacobs Engineering	kirubel.beyene@jacobs.com
Tim Morgan	Wallace C. Drennan	tmorgan@wallacecdrennan.com
Jeff Handwork	Jacobs Engineering	<u>Jeffery.handwork@jacobs.com</u>
Michael Volker	Jacobs Engineering	Michael.Volker@jacobs.com

#### LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: Sewerage and Water Board of New Orleans
Purchasing Department, Room 133
625 St. Joseph St
New Orleans, LA 70165

CONTRACT 1420: WPC PHASE 1 INSTALLATION AND COMMISSIONING

er to provide name and address of owner)	(Owner to provide name of project and other identifying information)
Documents, b) has not received, relied on, or base addenda, c) has personally inspected and is familia appliances and facilities as required to perform, in	sents that she/he; a) has carefully examined and understands the Bidding and his bid on any verbal instructions contrary to the Bidding Documents or any ar with the project site, and hereby proposes to provide all labor, materials, too a workmanlike manner, all work and services for the construction and accordance with the Bidding Documents prepared by: 2023
Bidders must acknowledge all addenda. The Bidde Designer has assigned to each of the addenda that	er acknowledges receipt of the following <b>ADDENDA:</b> (Enter the number the the Bidder is acknowledging)
TOTAL BASE BID: For all work required by the but not alternates) the sum of:	e Bidding Documents (including any and all unit prices designated "Base Bid
	Dollars (\$)
<b>ALTERNATES:</b> For any and all work required designated as alternates in the unit price description	d by the Bidding Documents for Alternates including any and all unit pricon.
Alternate No. 1 (Owner to provide description of alternate	and state whether add or deduct) for the lump sum of:
Alternate No. 2 (Owner to provide description of alternate	e and state whether add or deduct) for the lump sum of:
Alternate No. 3 (Owner to provide description of alternate	
Alternate No. 4 (Owner to provide description of alternate	
NOTE TO BIDDERS: (Insert Applicable No	otes if Alternates are required)
NAME OF BIDDER:	
ADDRESS OF BIDDER:	
<del></del>	UMBER:
NAME OF AUTHORIZED SIGNATORY OF	BIDDER:
TITLE OF AUTHORIZED SIGNATORY OF	BIDDER:
SIGNATURE OF AUTHORIZED SIGNATOR	RY OF BIDDER **:
<b>DATE:</b>	

### THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

- \* The <u>Unit Price Form</u> shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.
- \*\* A CORPORATE RESOLUTION OR WRITTEN EVIDENCE of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

**BID SECURITY** in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

v1

Sewerage and Water Board of New Orleans

TO:

# LOUISIANA UNIFORM PUBLIC WORK BID FORM <u>UNIT PRICE FORM</u>

**BID FOR:** CONTRACT 1420:

625 St. Joseph Street, New Orleans LA 70165		WPC I	PHASE 1 INSTALLATION AND COMMISSIONING	
(Owner to provid	de name and address of c	owner)	(Owner t	o provide name of project and other identifying information)
UNIT PRICES: This	form shall be used	for any and all work requir	red by the Bidding Documents and described as unit prices	. Amounts shall be stated in figures and only in figures.
DESCRIPTION:	☐ Base Bid or ☐ including but not l outside the enclose equipment through	Alt.# Offload SFC-1 Equi imited to SFC Power Electron are. Set and install enclosure to	pment: Receive, offload, assemble and install all SFC-1 equipmeics enclosure, 60Hz Transformer, 25Hz Transformer, and all ass	ent and enclosures provided by C1417 OEM and/or Contractor ociated electrical and mechanical equipment shipped inside and d interconnection of power and control wiring between all SFC-1
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
1	1	LS		
DESCRIPTION:	provided by other	, 6.6kV termination points at S Contracts and through raceway	Equipment: Installation, interconnection, and testing of electrica SSCC, and 480V termination points at WPCAUX PDC-1. Cable ys provided and installed by this Contract, which are included in ical and control cable required for this bid item.	and wire installation will be through electrical raceways
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
2	1	LS		
DESCRIPTION:	outside the enclose equipment through	imited to SFC Power Electron are. Set and install enclosure to	pment: Receive, offload, assemble and install all SFC-2 equipments enclosure, 60Hz Transformer, 25Hz Transformer, and all assemble permanent weatherproofed condition. Complete installation and by other Contracts and this Contract. The enclosure's HVAC sy	ociated electrical and mechanical equipment shipped inside and d interconnection of power and control wiring between all SFC-2
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
3	1	LS		
DESCRIPTION:	provided by other the C1435 Supplie	, 6.6kV termination points at S Contracts and through raceway	Equipment: Installation, interconnection, and testing of electrica SSCC, and 480V termination points at WPCAUX PDC-1. Cable ys provided and installed by this Contract, which are included in ical and control cable required for this bid item.	and wire installation will be through electrical raceways
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
4	1	LS		
DESCRIPTION:	Set and install ence	or Contractor including but not losure to permanent weatherpr s provided by other Contracts:	PDC-1 Equipment: Receive, offload, assemble and install all equal trimited to PDC-1 enclosure and all associated electrical and moreofed condition. Complete installation and interconnection of pound through raceways provided and installed by this Contract, we need via Contractor supplied temporary power system.	echanical equipment shipped inside and outside the enclosure.  ower and control wiring between all PDC-1 equipment through
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
5	1	LS		
DESCRIPTION:	⊠ Base Bid or □	Alt.# Interconnect WPCA		of electrical and control cable from PDC-1 to 4.16kV

	installation will be	through electrical raceways pr	age termination points at WPCAUX XFMR 301A, low voltage ovided by other Contracts and through raceways provided and the C1435 Supplier regarding readiness of electrical and control		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
6	1	LS			
DESCRIPTION:	C1427 OEM and/or and install enclosur electrical raceways	r Contractor including but not e to permanent weatherproofe provided by other Contracts a	limited to PDC-2 enclosure and all associated electrical and med condition. Complete installation and interconnection of power	quipment and enclosures associated with PDC-2 provided by the echanical equipment shipped inside and outside the enclosure. Set er and control wiring between all PDC-2 equipment through which are included in this bid item. Enclosure's HVAC system	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
7	1	LS			
DESCRIPTION:	points at SSWPC, 2 installation will be	24kV termination points at WF through electrical raceways pr			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
8	1	LS			
DESCRIPTION:	transformer, support personnel to complete quipment through	rt structures and all associated ete mechanical installation of th electrical raceways provided	all C1438 equipment and components. Complete installation a	C1438 OEM and/or Contractor. Provide materials and qualified and interconnection of power and control wiring between all CTG-led by this Contract, which are included in this bid item. EER's	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
9	1	LS			
DESCRIPTION:	temporary heaters. this Contract. Instatermination points. which are included	Complete installation and into Illation, interconnection, and to Cable and wire installation w in this bid item. Includes but	erconnection of power and control wiring between GSU equipmenting of electrical and control cable from CTG 6 GSU to 24kV ill be through electrical raceways provided by other Contracts	and through raceways provided and installed by this Contract, ng readiness of electrical and control cable required for this bid	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
10	1	LS			
DESCRIPTION:	Base Bid or □ Alt.# CTG 7 GSU Transformer: Receive, offload, assemble and set CTG 7 GSU Transformer provided by C1440 OEM. Connect, operate and maintain temporary heaters. Complete installation and interconnection of power and control wiring between GSU equipment through electrical raceways provided by other Contracts and this Contract. Installation, interconnection, and testing of electrical and control cable from CTG 7 GSU to 24kV termination points, 13.8kV termination points, and 480V termination points. Cable and wire installation will be through electrical raceways provided by other Contracts and through raceways provided and installed by this Contract, which are included in this bid item. Includes but is not limited to coordination with the C1435 Supplier regarding readiness of electrical and control cable required for this bid item.				
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)	
11	1	LS			
DESCRIPTION:		g, wire and cable. Install all BO	PC Area): Provide Contractor supplied Balance of Plant Mecha DP equipment, piping, wire and cable including Owner supplied pressors, fuel oil day tank and pumps, and all associated grouting	d components in the WPC area. Includes, but is not limited to	

REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
12	1	LS		
DESCRIPTION:	not limited to Elect	ping, wire and cable and insta rical components, Fuel Oil Fo	all all Fuel Oil equipment, piping, wire and cable including Own	Mechanical, Electrical, Controls and Instrumentation equipment ner supplied components outside the WPC area. Includes, but is ts, as well as tie-in to existing facility and/or WPC. Supply and Installation of Leak Detection System.
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
13	1	LS		
DESCRIPTION:	at the east end of th		nnect the existing natural gas pipe at the west end of the Utility	t natural gas piping at Utility meter to the existing natural gas pipe Rack to the WPC CTG7 Fuel Gas Compressor. Includes, but is
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
14	1	LS		
DESCRIPTION:		ut not limited to East Transitio	Raceway (WPCUR Interface): Provide Contractor delegated des on Structure Non-Segregated bus duct interface. Provide Contractited to interface with ground level raceway infrastructure.	rigned and supplied raceway to interconnect WPCUR raceway to ctor delegated designed and supplied raceway interface at the
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
15	1	LS		
DESCRIPTION:	☐ Base Bid or ☐ A Includes, but is not		Raceway (Utility Connection): Provide Contractor supplied race way through the SFC area from PDC-2 to the Utility tie-in poin	way to interconnect WPC infrastructure to the Utility Substation.  It, and coordination with the Utility.
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
16	1	LS		
DESCRIPTION:			Configuration: Supply and implement protective relays as outlin ration, and power quality protection validation.	ed in the Contract Documents. Includes but is not limited to
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
17	1	LS		
DESCRIPTION:		Alt.# Load Bank Relocation  OEM to confirm adequacy-forms	on: Relocation and configuration of existing Load Bank to the Vor-purpose.	WPCAUX systems. Includes but is not limited to coordination
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
18	1	LS		
DESCRIPTION:			a: Fabricate and install elevated steel platforms, handrails, and dimensions of Owner-provided structures equipment and enclo	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
19	1	LS		
DESCRIPTION:	☐ Base Bid or ☐ A fabrication shall be services.		Area: Fabricate and install elevated steel platforms, handrails, and dimensions of Owner-provided structures equipment and enclo	nd ancillary items in the CTG-7 work area. Shop drawings and sures. Includes but is not limited to testing and inspection
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
20	1	LS		
DESCRIPTION:	☐ Base Bid or ☐ A and fabrication sha services.		ox Area: Fabricate and install elevated steel platforms, handrails fied dimensions of Owner-provided structures equipment and e	s, and ancillary items in the BOP/AUX work area. Shop drawings inclosures. Includes but is not limited to testing and inspection

REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
21	1	LS		
DESCRIPTION:	nodes and upgradin GCS implementation necessary cable and CWPENG, CWPEI	g existing nodes with network on, adding pre-programmed se raceway for EWS and printe LS, CWPSHP, CWPL4G3, CV	I integration of components into the Power Distribution Controls configuration updates, HMI updates, historian updates, safety equences, developing shift reports, adding/modifying/updating or network connection to the PDCS. PDCS scope is included in WPPH, CWPYRD, SSCC, SSCLA, SSHAM, SSPFC, SSSYC, S node are defined in the Contract Documents.	light modifications, cardkey configuration, making ready for OTI-PI interfaces, and adding all associate cable and raceway the following Functional Areas: CWPCC, CWPCTG.6,
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
22	1	LS		
DESCRIPTION:		Repurpose spare SSYRD swit	ngear: Install new switchgear. Provide and install new manhole chgear breaker. Includes but is not limited to testing and comm	and ductbanks. Reroute and terminate feeders associated with hissioning cables and switchgear.
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
23	1	LS		
DESCRIPTION:	B primary tap from but is not limited to	13.8kV to 24kV. Supply, instesting and commissioning care	stall, configure, and commission SEL 787 transformer protectionables and switchgear.	ng west manhole to existing south manhole. Reconfigure XFMR n relay. Relocate PH MCC 5 from PFC to CWPYRD. Includes
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
24	1	LS		
DESCRIPTION:	including but not lin	mited to cardkey configuration	otection Systems: Provide, install, and commission all component, CCTV configuration, and addressable fire alarm system with Complete all interconnection, testing and commissioning.	ents required for the Security and Fire Protection Systems, partial emergency communication. Coordinate and install fiber,
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
25	1	LS		
DESCRIPTION:		ed and installed by others und	Provide, install and commission Cathodic Protection Systems. er C1418. Supply, install, interconnect and commission all other or capital capit	Interconnect and commission Utility Rack cathodic protection er cathodic protection components as indicated in the Contract
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
26	1	LS		
DESCRIPTION:	□ D D'1 □ A			
DESCRIPTION:	Base Bid or □ A to all equipment ins	Alt.# Equipment Grounding talled by Contractor.	ng: Interconnect and commission grounding system. Includes b	ut not limited to connecting grounding grid installed under C1415
REF. NO.		talled by Contractor. UNIT OF MEASURE:	ng: Interconnect and commission grounding system. Includes b  UNIT PRICE	ut not limited to connecting grounding grid installed under C1415  UNIT PRICE EXTENSION (Quantity times Unit Price)
	to all equipment ins	stalled by Contractor.		
REF. NO.	to all equipment ins  QUANTITY:  1  Base Bid or  A	talled by Contractor.  UNIT OF MEASURE:  LS  Alt.# Lighting: Interconne	UNIT PRICE  ct and commission Utility Rack Lighting components supplied	UNIT PRICE EXTENSION (Quantity times Unit Price)
REF. NO.  27  DESCRIPTION:  REF. NO.	to all equipment ins  QUANTITY:  1  ⊠ Base Bid or □ A  interconnect and co	talled by Contractor.  UNIT OF MEASURE:  LS  Alt.# Lighting: Interconne	UNIT PRICE  ct and commission Utility Rack Lighting components supplied	UNIT PRICE EXTENSION (Quantity times Unit Price) and installed by others under C1418. Supply, install,
REF. NO. 27  DESCRIPTION:	to all equipment ins  QUANTITY:  1  Base Bid or  A  interconnect and co  Contractor.	unit of MEASURE:  LS  Lighting: Interconne mmission all other equipment	UNIT PRICE  ct and commission Utility Rack Lighting components supplied blighting as indicated in the Contract Documents. Includes installed	UNIT PRICE EXTENSION (Quantity times Unit Price)  and installed by others under C1418. Supply, install, allation of power and control cable supplied under C1435 and/or
REF. NO.  27  DESCRIPTION:  REF. NO.	to all equipment ins  QUANTITY:  1  Base Bid or	LS  LIS Lighting: Interconne mmission all other equipment  UNIT OF MEASURE:  UNIT OF MEASURE:  LS  LS  LS  LS  LS  LS  LS  LS  LS  L	UNIT PRICE  ct and commission Utility Rack Lighting components supplied the lighting as indicated in the Contract Documents. Includes instance UNIT PRICE  Shipping, management and coordination of Owner supplied poproject site. Includes direct communication with C1435 supplied.	UNIT PRICE EXTENSION (Quantity times Unit Price)  and installed by others under C1418. Supply, install, allation of power and control cable supplied under C1435 and/or  UNIT PRICE EXTENSION (Quantity times Unit Price)  wer and control cables provided under C1435, located at a

29	1	LS		
DESCRIPTION:	and Test Plans. Pro	ting, Facility Startup and Perference Operation Test Procedure	ormance Testing, and Integrated Facility Testing. Provide and m	elated to Construction Completions, Equipment Commissioning naintain a Completions Management System. Prepare Inspection of and maintain a schedule. Prepare documentation, record results are, Contractor, and OEM/Suppliers.
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
30	1	LS		
DESCRIPTION:	<ul><li>☑ Base Bid or ☐ A equipment and command coordinated wi</li></ul>	ponents provided by C1417 C	Commissioning (SFCs and PDCs): Startup and Commissioning of DEM and C1427 OEM and/or Contractor. Startup and Commissione Owner, Contractor, and OEM/Supplier.	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
31	1	LS		
DESCRIPTION:	⊠ Base Bid or □ A OEM and/or Contra Contractor, and OE	actor. Startup and Commissio	Commissioning (CTG-7): Commissioning of CTG-7 including a ning efforts will be facilitated by the Commissioning Agent and	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
32	1	LS		
DESCRIPTION:	the Owner, Contrac	OEM and/or Contractor. Statestor, and OEM/Supplier.		issioning Agent and coordinated with personnel associated with
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
33	1	LS		
DESCRIPTION:				ng of all other components in the WPC including but not limited commissioning Agent and coordinated with personnel associated
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
34	1	LS		
DESCRIPTION:			Commissioning (Contractor Supplied outside WPC Area): Committup and Commissioning efforts will be facilitated by the Commissioning efforts will be a commission of the Commission efforts will be a commission of the Commission efforts will be a commission of the Commission efforts will be accommission efforts will be a commission effort will be	nissioning of all other components outside the WPC including hissioning Agent and coordinated with personnel associated with
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
35	1	LS		
DESCRIPTION:	☐ Base Bid or ☐ A Commissioning Ag OEM/Suppliers, an	gent. Integrated Commissionin	oning: Services associated with Integrated Commissioning and g efforts will be facilitated by the Commissioning Agent and co	implementation of all Use Cases developed by the ordinated with personnel associated with the Owner, Contractor,
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
36	1	LS		
DESCRIPTION:	including but not li outside the enclosu equipment through	mited to SFC Power Electronics. Set and install enclosure to		ociated electrical and mechanical equipment shipped inside and d interconnection of power and control wiring between all SFC-3

REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
37	1	LS				
DESCRIPTION:	DESCRIPTION:  Base Bid or  Alt.#_2_ Interconnect SFC-3 Equipment: Installation, interconnection, and testing of electrical and control cable from SFC-3 to 24kV termination points at WPCAUX PDC-2, 6.6kV termination points at SSCC, and 480V termination points at WPCAUX PDC-1. Cable and wire installation will be through electrical raceways provided by other Contracts and through raceways provided and installed by this Contract, which are included in this bid item. Includes but is not limited to coordination with the C1435 Supplier regarding readiness of electrical and control cable required for this bid item.					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
38	1	LS				
DESCRIPTION:	DESCRIPTION:  □ Base Bid or ☑ Alt.#_3 Equipment Startup/Commissioning (SFC-3): Startup and Commissioning of SFC-3 including all associated equipment and components provided by C1417 OEM and/or Contractor. Startup and Commissioning efforts will be facilitated by the Commissioning Agent and coordinated with personnel associated with the Owner, Contractor, and OEM/Supplier.					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
39	1	LS				
-						
DESCRIPTION:	DESCRIPTION:  Base Bid or  Alt.#_4_ Integrated Commissioning (SFC-3): Commissioning Agent services associated with Integrated Commissioning and Implementation of Use Cases associated with SFC-3. Integrated Commissioning efforts will be facilitated by the Commissioning Agent and coordinated with personnel associated with the Owner, Contractor, OEM/Suppliers, and Utility.					
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)		
40	1	LS				

Wording for "DESCRIPTION" is to be provided by the Owner. All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

#### 1-2 ADDITIONAL REQUIREMENTS

All blank spaces in this Proposal section shall be filled. A bid price shall be indicated for each bid item. Bids received without all such items completed will be considered non-responsive. The bid shall contain an acknowledgement of receipt of all Addenda in space provided. The Louisiana Uniform Public Work Bid Form & Unit Price Form (if applicable) and the amount of Deposit or Bid Bond five percent (5%) of the total amount of the proposal is REQUIRED to be submitted in a sealed envelope on bid opening date. The two (2) lowest numerical bidders have three (3) days after the bid opening (exclusive of Saturdays, Sundays and Holidays) to submit any additional information such as (Voluntary Extension Sheet, Affidavit, Economically Disadvantage Business Summary Sheet if applicable) as well as requirements of Sections 1-3 through 1-6 below. Failure to do so will render the bid non-responsive.

1-3 <u>BIDDER DECLARATION</u>	
do hereby declare that the only person interested in this proposal and that no other person than the one herein named have any interest herein or in the contract proposed to be taken; that it is made without any connection with any other person or persons making proposal for the same work and that it is in all respects fair and without collusion or fraud; also that no member of the Sewerage and Water Board or of the City Council of the City of New Orleans or any officer or employee of the City of New Orleans or of the several boards thereof, who are by law excluded from participation herein, and directly or indirectly interested herein or in furnishing bond or in any portion of the profits hereof.	
do hereby also declare that have LOUISIANA CONTRACTOR'S LICENSE in the field	of
with NUMBER	
And do further declare that have carefully examined the annexed specifications and the drawings furnished, and personally inspected the ground and that will contract to provide the necessary tools, machinery and apparatus and other means of construction, and to furnish all labor and material specified in this contract or called for by the plans, necessary to complete the work in the manner specified and within the time mentioned in the specifications and according to the requirements of the Engineer, as herein set forth.	
1-4 In accordance with Louisiana Revised Statute 38:2227 the following affidavit shown on the next page must be submitted with the bid, or no later than 3 days after the bid opening (excluding Saturdays, Sundays, and Holidays). Failure to do so will render the bid non-responsive. <b>Please note, THE AFFIDAVIT MUST BE NOTARIZED.</b>	
1-5 <u>GUARANTEES</u>	
guarantee that the whole of the work under this contract will be substantially completed within [430] calendar days after the date of the "Commencement of Contract Times."	
In case of delay in the completion of the contract beyond the contract time of completion as determined by the Board hereby agree to pay, as liquidated damages, the sum of <b>Twenty Thousand Dollars (\$20,000.00)</b> for each calendar day of such delay, which liquidated damages shall become due by the mere elapsing of the delay without the necessity of putting in default.	
1-6 <u>EMERGENCY PROCEDURES</u>	
Contractor must furnish telephone numbers for routine or emergency telephone calls.	
NAME TITLE	
TELEPHONE NO.: NORMAL CALLS	

### STATE OF LOUISIANA PARISH OF ORLEANS

### **AFFIDAVIT**

personally			qualified and sworn in and for the State and Parish aforesaid, who after being duly sworn, did depose and say as						
1)	He/she is the	(title) of	(company);						
2)									
3)	The contracting entity, person or corporation whose principal(s), member(s), and /or Officer(s) have, within the preceding 5 years, not been convicted or plead guilty to, a felony under state or federal statutes, for embezzlement, theft of public funds, bribery, falsification or destruction of public records; (City Code Section 2-8)								
4)	The following is a list of individual partners, incorporators, directors, managers, officers, organizers, or members who have a minimum ten percent interest ownership interest in the bidding entity:								
		(name)	_(name)						
		(name)	(name)						
		(name)	(name)						
5)	No other persons hold an ownersh	ip interest in the bidding entity vi	a a counter letter.						
6)	6) None of the above named individual partners, incorporators, directors, managers, officers, organizers, or members, who has a minimum ten percent interest ownership in the bidding entity, been convicted of, or has entered a plea of guilty or nolo contendere to any of the crimes, or equivalent federal crimes, listed in Louisiana Revised Statute 38:2227, specifically: public bribery, corrupt influencing, extortion, money laundering, theft, identity theft, theft of a business record, false accounting, issuing worthless checks, bank fraud, forgery, contractors misapplication of payments, malfeasance in office.								
7)	He/she is not delinquent on any tax Section 2-8)	xes owed the City of New Orlean	s or fees/charges to the Sewerage and Water Board. (City Code						
The	following sections apply only to Pu	blic Works Contracts:							
8)	system" of the Illegal Immigration	n Reform and Immigrant Respon	ed herein is registered and participates in the "Status verification sibility Act of 1996, 8 U.S.C. 1324(a), known as the "E-Verify" egal citizens of the United States or are legal aliens.						
9)	The entity represented herein shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the state of Louisiana.								
10)	The entity represented herein shall the Status verification system.	I require all subcontractors to sub	omit to the contractor a sworn affidavit verifying compliance with						
WITNES	SES:								
			FIANT						
		— AF	FIANI						
SWORN	TO AND SUBSCRIBED BEFORE	ME ON THIS							
	DAY OF	, 20							
	NOTARY PUBLIC		Notary Id. No. or Bar Roll No.						
PLEASE	PRINT NAME OF NOTARY	_							

## New Orleans Sewerage & Water Board W21-109-TP Static Frequency Convertor-1 Building PDC Reinstallation Manual. Point Eight Power Job No. R50620-01

The purpose of this manual is to help guide the site installation contractor reinstall the building and its components back together at site. The use of this manual and the R50620-01 building drawing package which included the structural skid modules and electrical interconnection drawings.

Reference dwg 5E *Field Instructions for Building Assembly* to get started with the placement and installation of the 4 building sections. This drawing provides the main source of information on the installation procedure and the steps needed to bolt and seal the building sections together.

When the building is prepped for shipping from the PEP facility major exterior components that protrude outward from the building will have to be removed for shipping and reinstalled at site.

### These exterior items are:

- HVAC's and HVAC platforms.
- SWGR Arc ducts.
- Door canopy's, SFC HEX units and platforms.
- Down spouts.

The interior items that will be removed for shipping are:

- Column top hat covers.
- Shipping Split Junction boxes and associated control wiring, associated wire ways, Gnd bus.
- Cable tray shipping spits-associated cables.
- High Voltage cable conduits.

The building will ship from PEP facility in the 4 skid sections with the shipping split walls protected from the weather. This will have to be removed once at site. All HVAC penetrations and HEX unit openings will be covered for shipment. These covers will have to be removed as equipment is reinstalled.

Once the 4 building skid sections have been installed, completely assembled and sealed from the weather you can proceed to install the HVAC skids and HEX unit skids. Next would be the installation of the HVAC units. When lifting the HVAC use the forklift pad made within the HVAC structure and make sure the HVACs are placed in the correct location as shown on R50620-01 dwg sheet 2 for HVAC numbering locations.

When installing the HVAC to the building make sure the silicone caulking is applied to the top and 2 vertical sections of the HVAC flange that mates to the building to prevent any water leaks. Then reinstall the HVAC rain shield on top the HVAC and apply silicone sealant where the rain shield meets the building.

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		DCEEDING AS BUILT REVISIONS	
	COVER SHEET REV.	REVISION, AFFECTED SHEETS, AND DESCRIPTION OF CHANGE	
Α			
В			
С			
J			
D			
Ε			
F			
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Н	NOTE		
	THE A SHALL AFTER	ABOVE PROCEEDING AS BUILT REVISIONS AREA . BE USED TO RECORD ALL DRAVING CHANGES ? THE REVISION LEVEL OF AS BUILT, ALL	

### NEW ORLEANS SEWERAGE & WATER BOARD W21-109-TP STATIC FREQUENCY CONVERTER -1 BLDG. 93'X26'X12' P.O. NO. W21-109-TP-2030

DRAWING LIST						
DWG. NO.	SHEET	REV	DRAWING TITLE			
R50620-01	1	2	COVER SHEET WITH DRAWING LIST AND DETAILS			
R50620-01	2	2	PLAN VIEW			
R50620-01	3	2	FLOOR CUTOUTS			
R50620-01	ЗА	2	FLOOR CUTOUT DIMENSIONS, (DETAIL-1)			
R50620-01	3B	2	FLOOR CUTOUT DIMENSIONS, (DETAIL-2)			
R50620-01	4	2	BASE DETAIL			
R50620-01	4A	2	PIER REFERENCE DETAILS			
R50620-01	4B	2	PIER DIMENSION DETAILS, (BLDG & HVAC SUPPORT LOCATIONS)			
R50620-01	4C	2	PIER DIMENSION DETAILS, (HEX UNIT SUPPORT LOCATIONS)			
R50620-01	5	2	ELEVATION VIEWS, (1 & 3)			
R50620-01	5A	2	ELEVATION VIEWS, (2 & 4)			
R50620-01	5B	2	BUILDING SHIPPING SPLIT DETAILS-1			
R50620-01	5C	2	BUILDING SHIPPING SPLIT DETAILS-2			
R50620-01	5D	2	BUILDING RE-ASSEMBLY AND CAULKING DETAILS			
R50620-01	5E	2	FIELD INSTRUCTIONS FOR BUILDING REASSEMBLY			
R50620-01	5F	2	HVAC UNIT SUPPORT LANDING DETAILS			
R50620-01	5G	2	AIR-TO-AIR HEX UNIT SUPPORT LANDING DETAILS			
R50620-01	5H	2	ROOF CAP RE-ASSEMBLY DETAILS			
R50620-01	6	2	CABLE TRAY DETAILS			
R50620-01	7	2	GROUNDING DETAILS			
R50620-01	8	2	ELECTRICAL PLAN VIEW			
R50620-01	9	2	AC WIRING DIAGRAM 1			
R50620-01	9A	2	AC WIRING DIAGRAM HIGH VOLTAGE			
R50620-01	10	2	AC WIRING DIAGRAM 2			
R50620-01	11	2	DC WIRING DIAGRAM 1			
R50620-01	12	2	UPS DISTRIBUTION DIAGRAM			
R50620-01	INT-1	2	INTERCONNECTS SHEET 1			
R50620-01	INT-2	2	INTERCONNECTS SHEET 2			
R50620-01	INT-3	2	INTERCONNECTS SHEET 3			
R50620-01	JB−1	2	JUNCTION BOX 1			
R50620-01	JB-2	2	JUNCTION BOX 2			
R50620-01	JB-3	2	JUNCTION BOX 3			
R50620-01	JB-4	2	JUNCTION BOX 4			
R50620-01	F1	2	REM□VED			
R50620-01	LIFT-1	2	SUGGESTED LIFT PLAN, (SECTION-1)			
R50620-01	LIFT-2	2	SUGGESTED LIFT PLAN, (SECTION-2)			
R50620-01	LIFT-3	2	SUGGESTED LIFT PLAN, (SECTION-3)			
R50620-01	LIFT-4	2	SUGGESTED LIFT PLAN, (SECTION-4)			
R50620-01	R50620-01 BDM 2 BILL OF MATERIALS (REFERENCE 8.5 X 11 SHEETS)					



### CONSTRUCTION DETAILS

- 1. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 LATEST EDITION.
- 2. ALL WELDS SHALL BE IN ACCORDANCE WITH PEP BASE DETAIL WELD STANDARDS.

  3. STRUCTURE SHALL BE ADEQUATELY SUPPORTED DURING FABRICATION TO PREVENT EXCESS DEFLECTION.
- 4. BUILDING LIFT WILL BE IN ACCORDANCE WITH PEP SUGGESTED LIFT PLAN.
- 5. BUILDING BASE ELEVATION FROM GRADE SHALL BE LIMITED TO 10'-0" MAXIMUM.

### PAINT DETAILS

1. ALL PAINTING SHALL CONFORM TO PEP PAINT QUALITY STANDARDS FOR PCD BUILDINGS. SEE R50620-01-BOM FOR DETAILS.

### BILL OF MATERIAL DETAILS

1. REFERENCE DOCUMENT NO. R50620-01-BOM

A	AS-BUILT	11/17/23	SV	SC	G	
Δ	RE-ISSUED FOR CONSTRUCTION	04/12/23	£	ZL	DDB	
<b>7</b> 6	RE-ISSUED FOR CONSTRUCTION	09/28/22	SWL	ZC	DDB	
Æ	RE-ISSUED FOR CONSTRUCTION	08/11/22	SWC	ZL	DDB	
ΛA	RE-ISSUED FOR CONSTRUCTION	05/24/22	SWL	SL	DDB	
$\Lambda$	ISSUED FOR CONSTRUCTION	01/20/22	SWL	ZL	CG	
ΔÃ	RE-ISSUED FOR APPROVAL	12/08/21	JAL	ZL	BG	ےا
<b>6</b>	RE-ISSUED FOR APPROVAL	11/12/21	SWL	ZC	ÿ	u
NO.	REVISION	DATE	BY	РМ	APP	
NOTE: "THIS DRAWING CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION OF POINT EIGHT POWER INC., AND IS LOANED IN CONFIDENCE WITH THE UNDERSTANDING THAT IT						

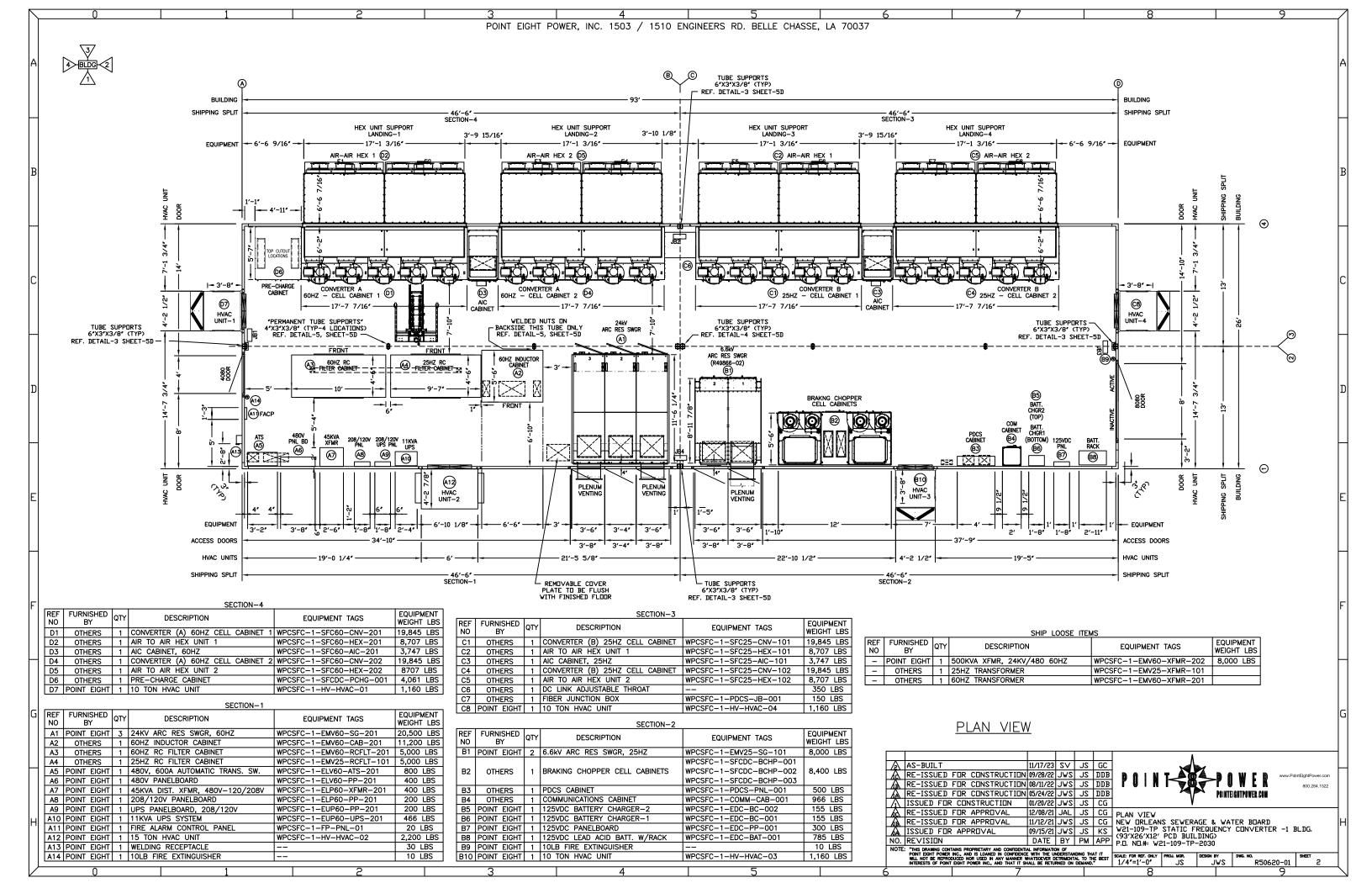
WILL NOT BE REPRODUCED NOR USED IN ANY MANNER WHATSOEVER DETRIBUTED THE BEST INTERESTS OF POINT EIGHT POWER INC., AND THAT IT SHALL BE RETURNED ON DEMAND."

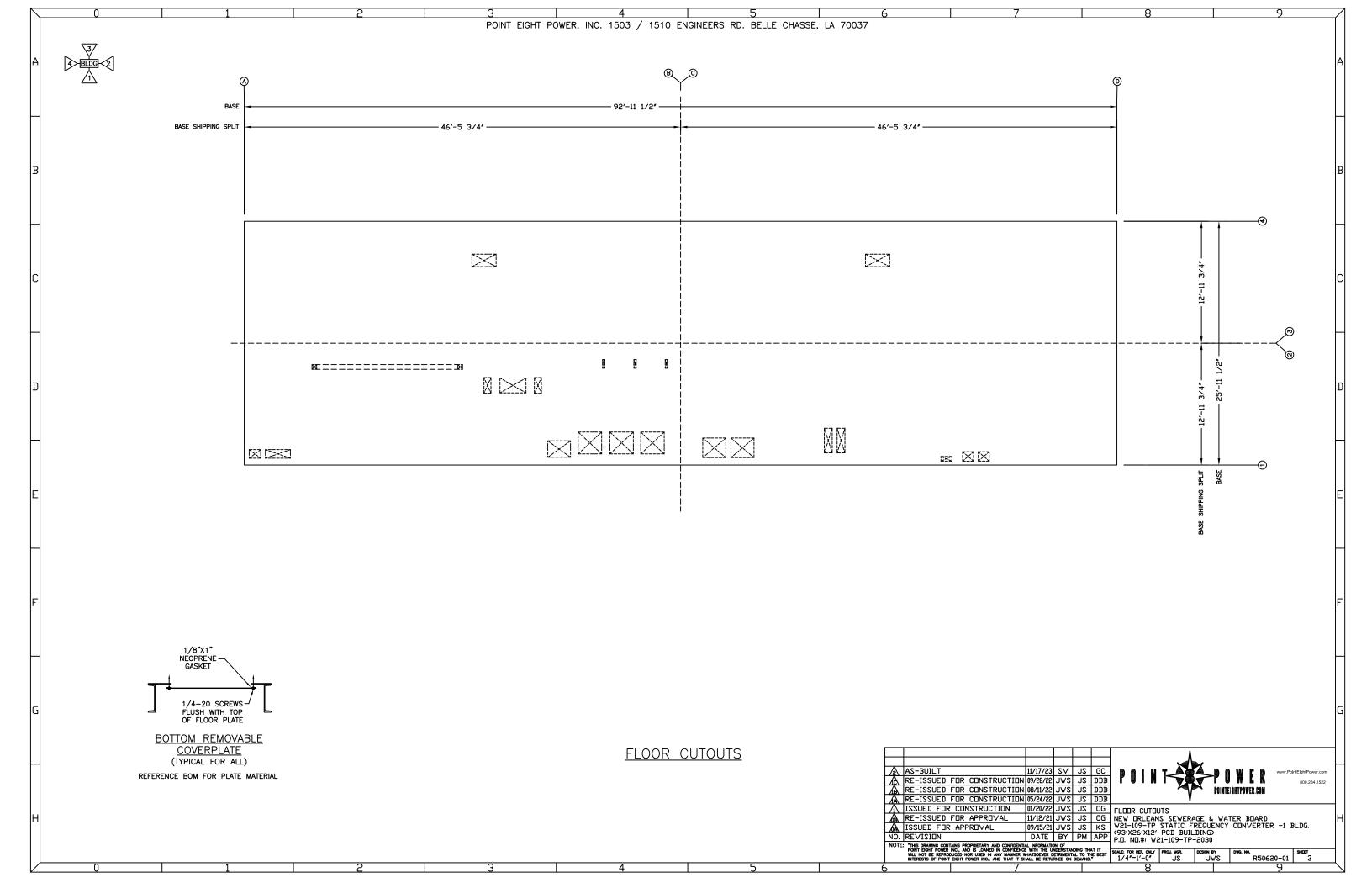


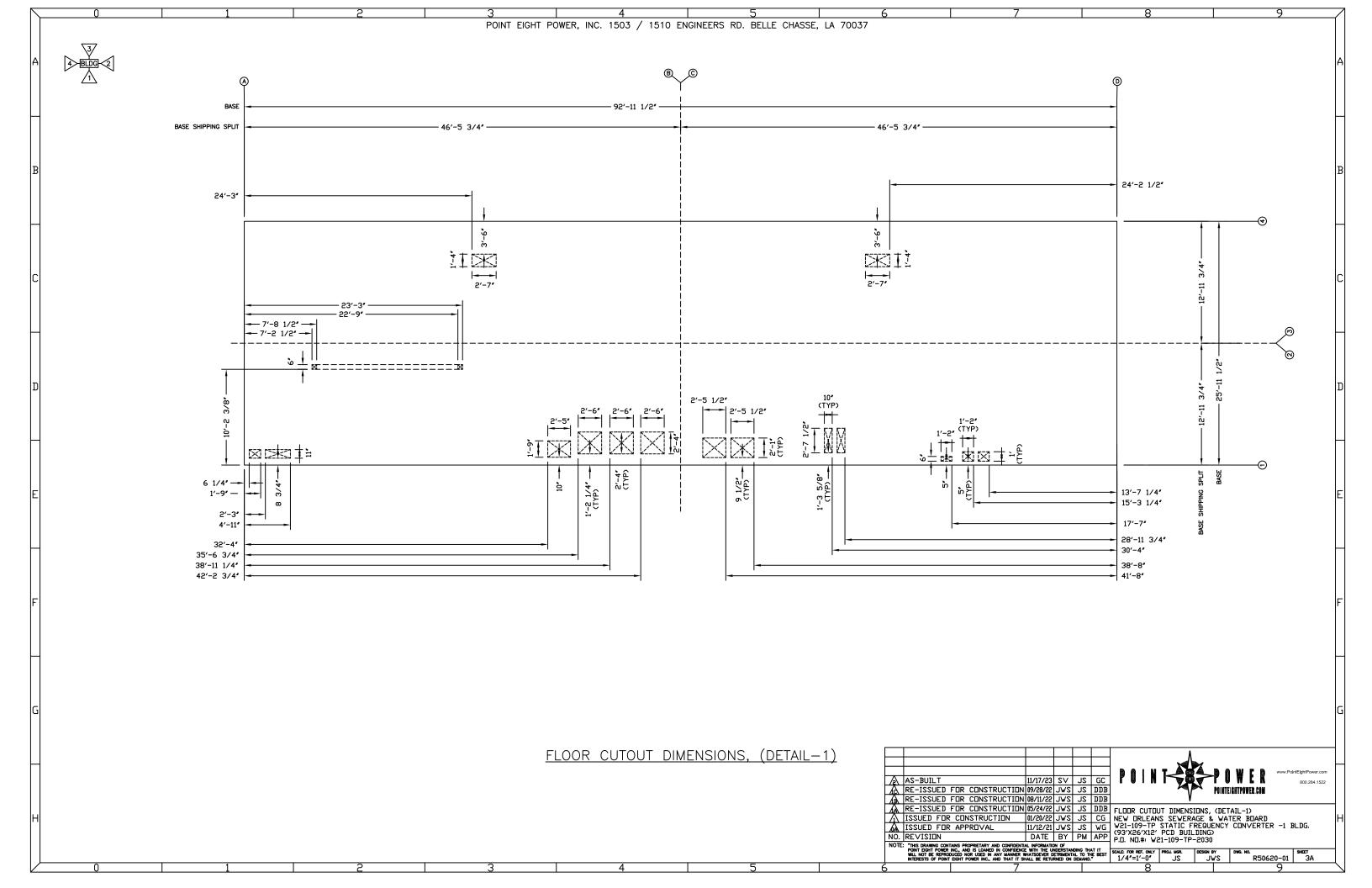
COVER SHEET WITH DRAWING LIST AND DETAILS NEW DRLEANS SEWERAGE & WATER BDARD
W21-109-TP STATIC FREQUENCY CONVERTER -1 BLDG.
(93'X26'X12' PCD BUILDING)

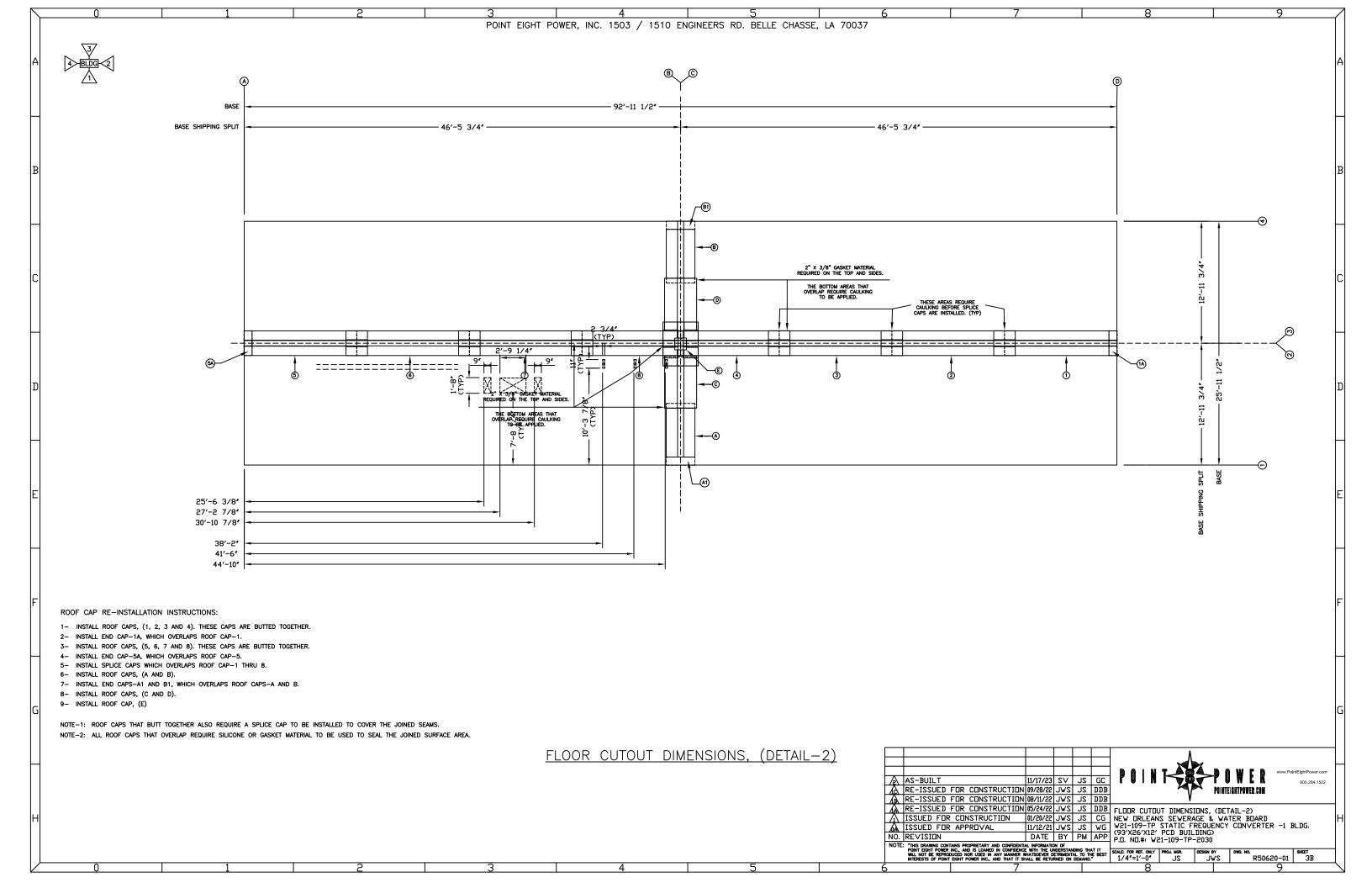
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FOR REF. ONLY	PROJ. MGR.	DESIGN BY	DWG. NO.					
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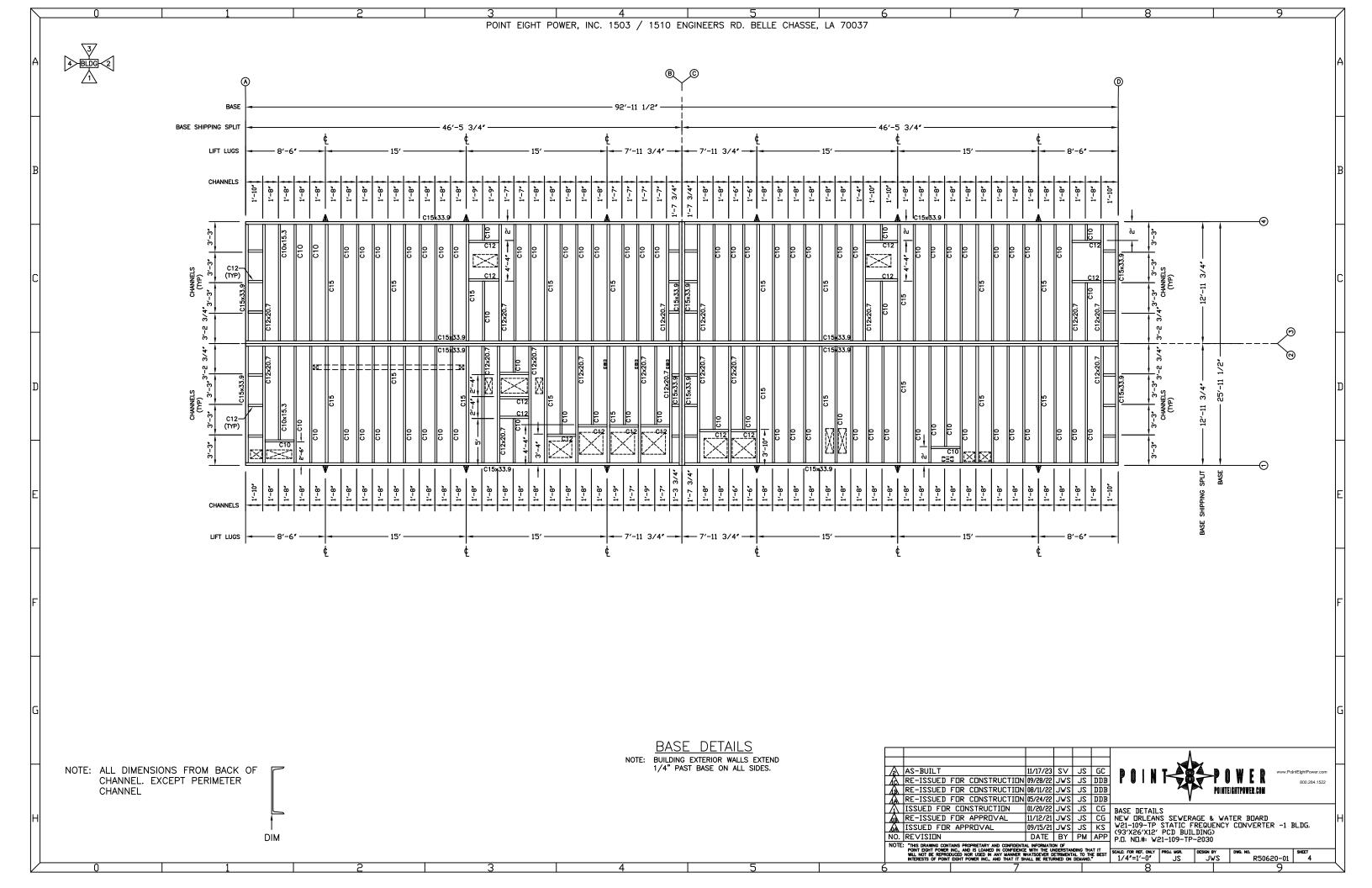
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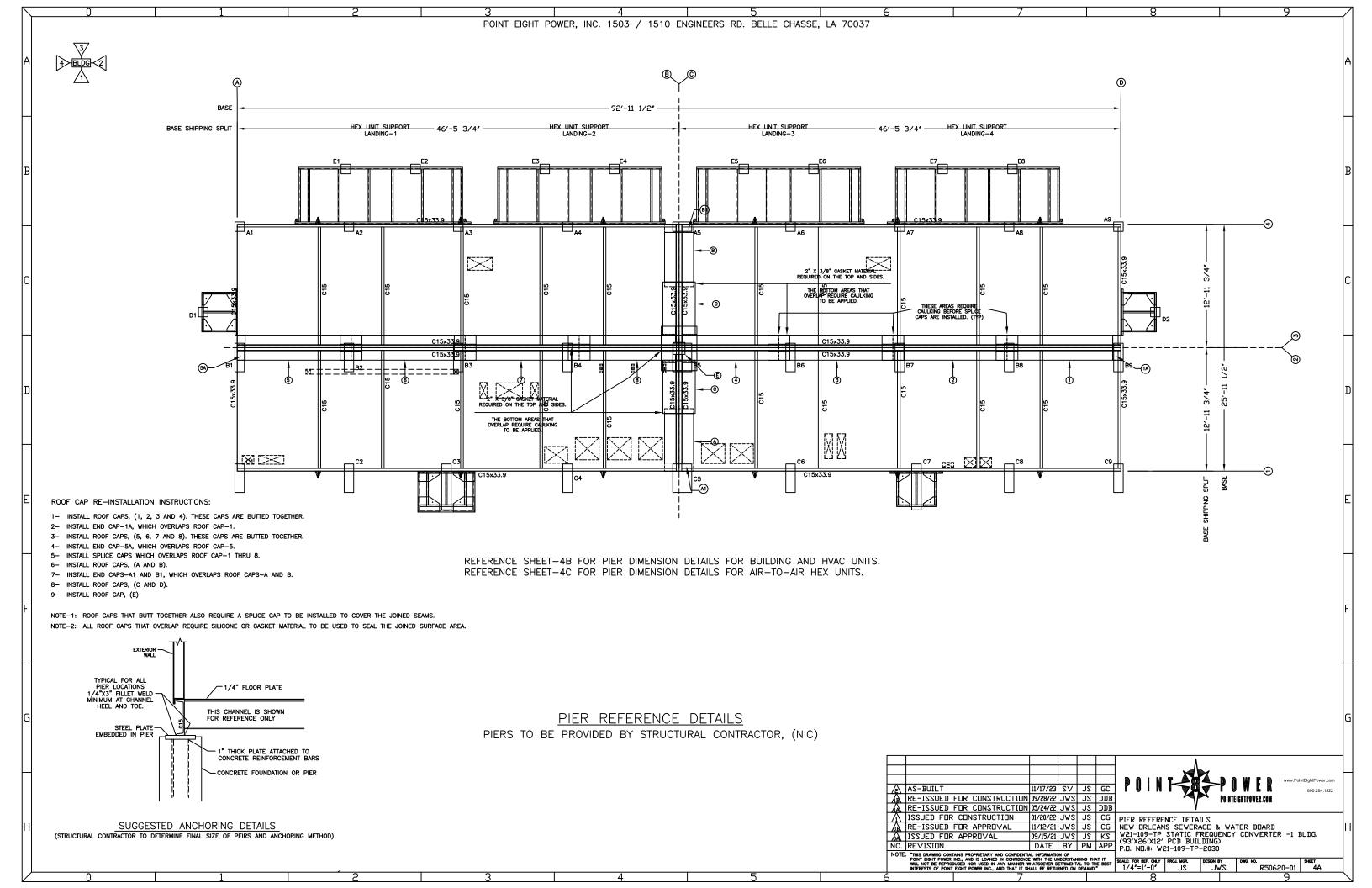


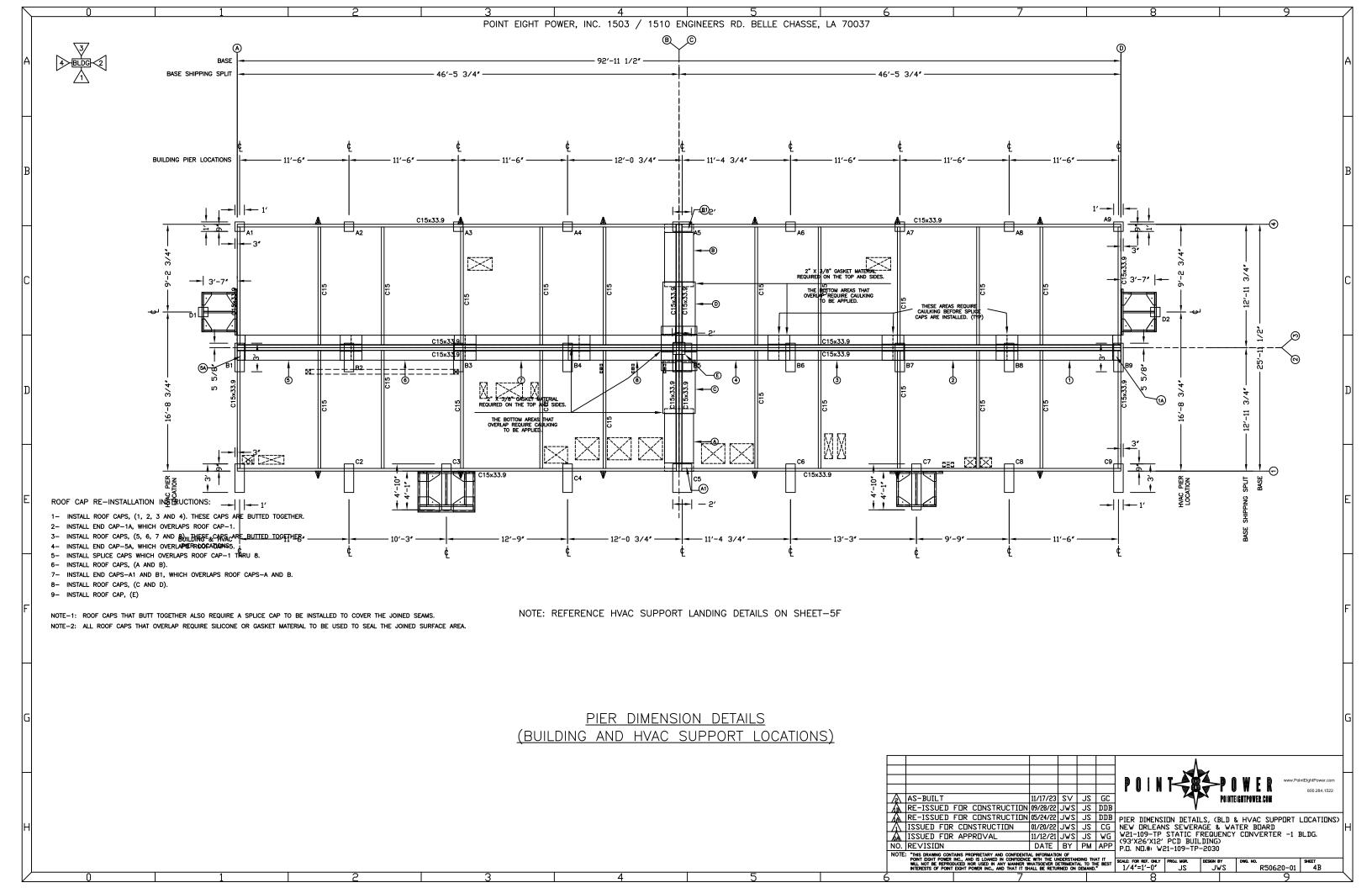


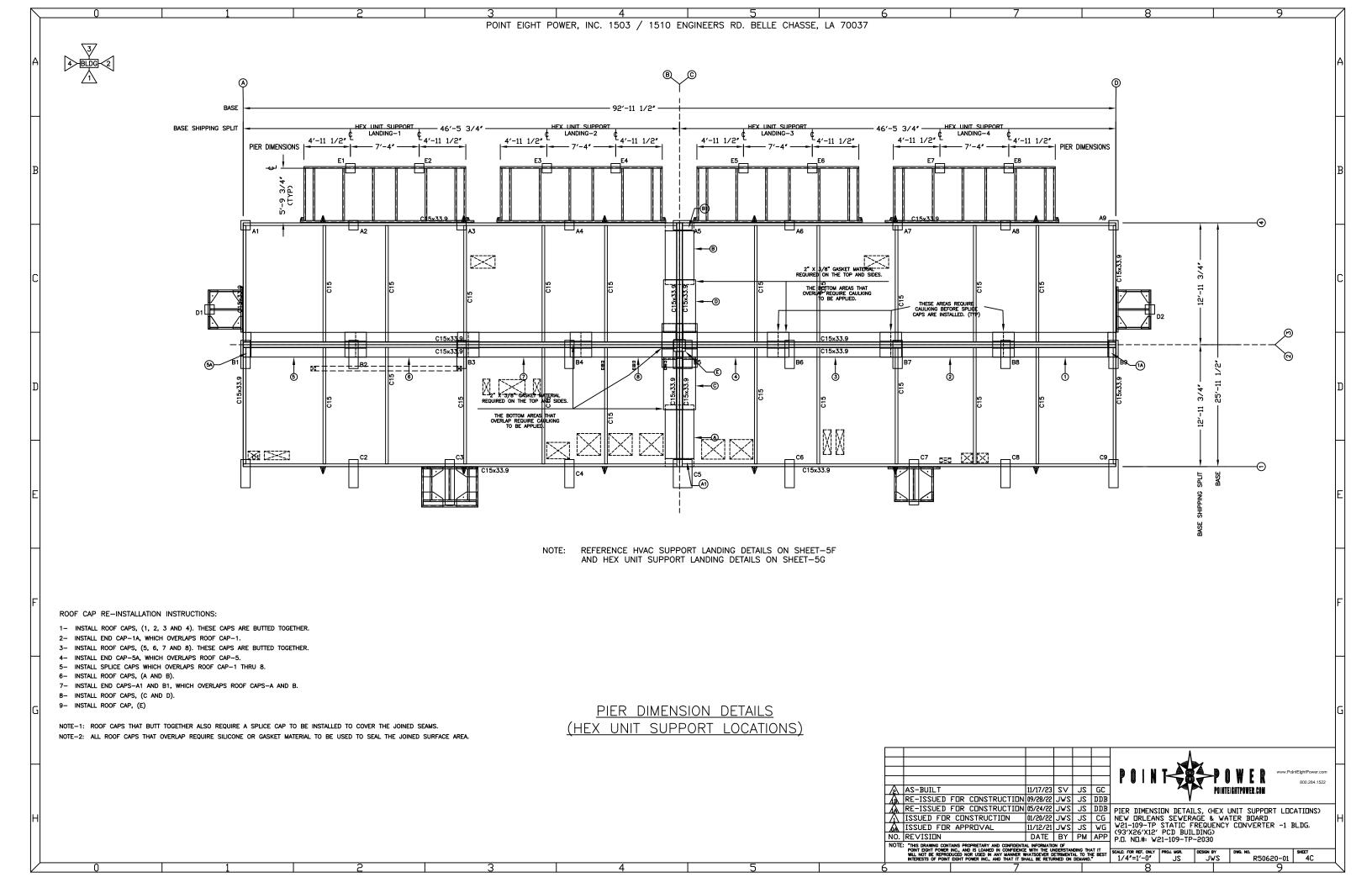


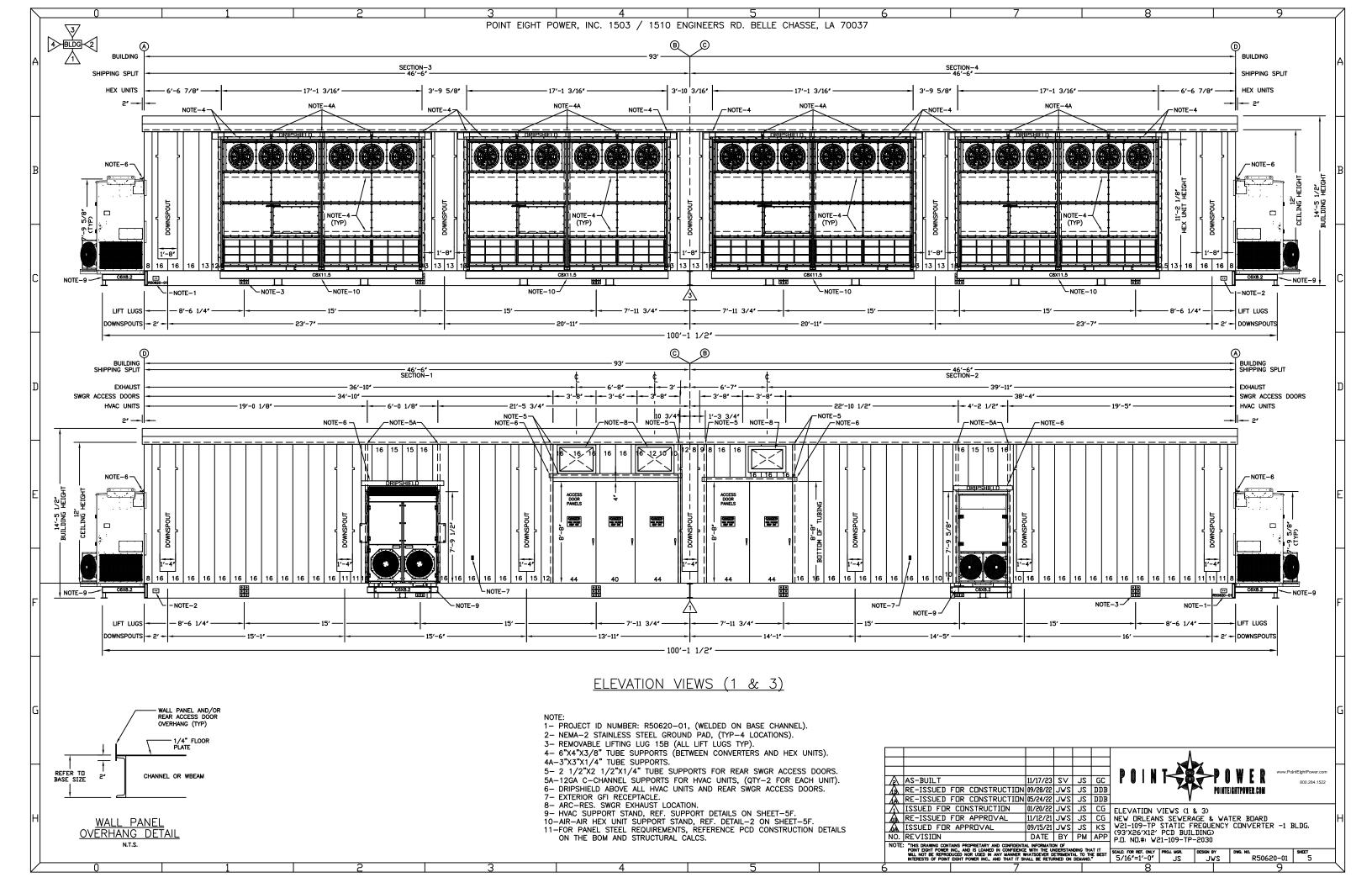


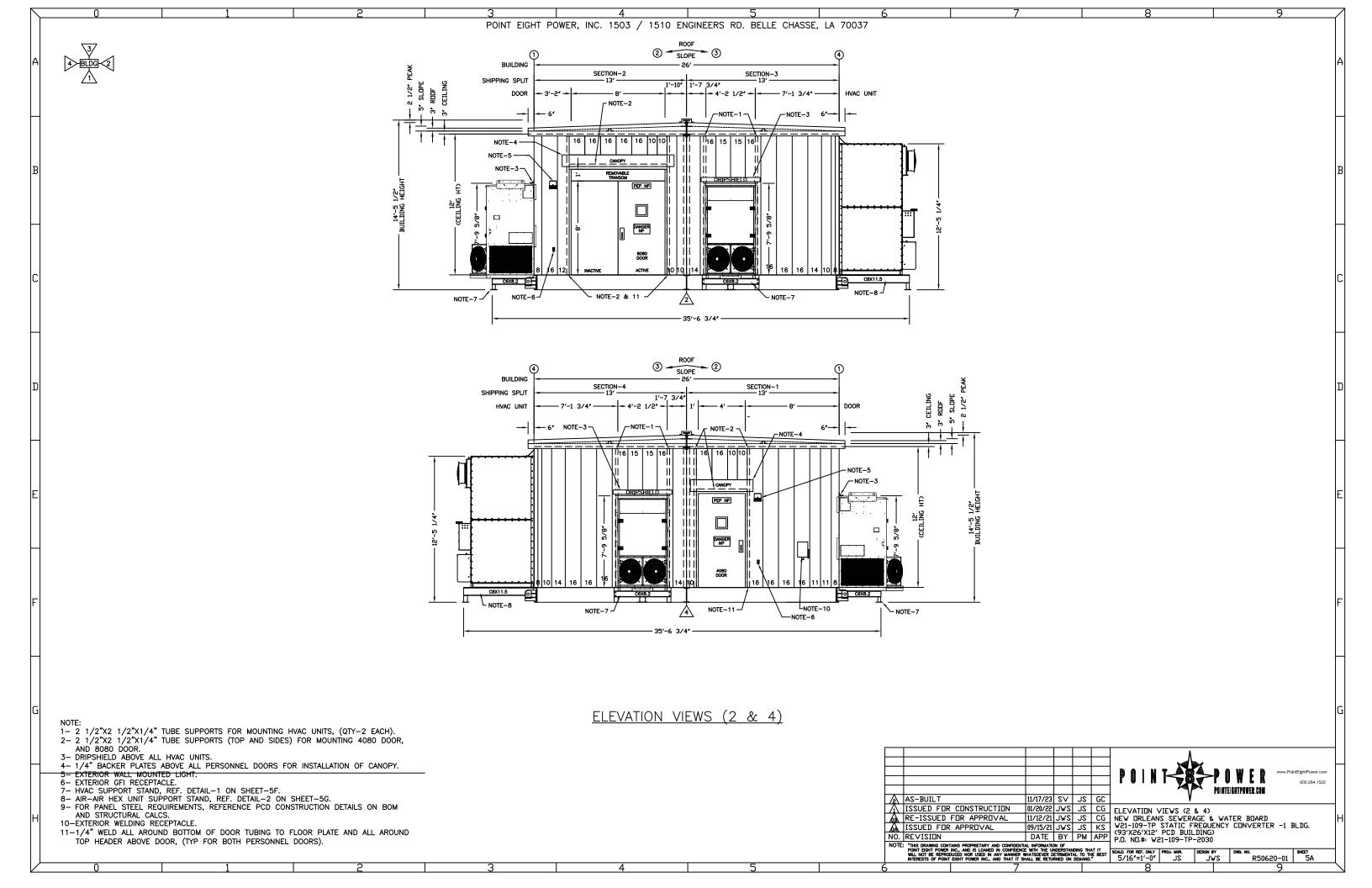


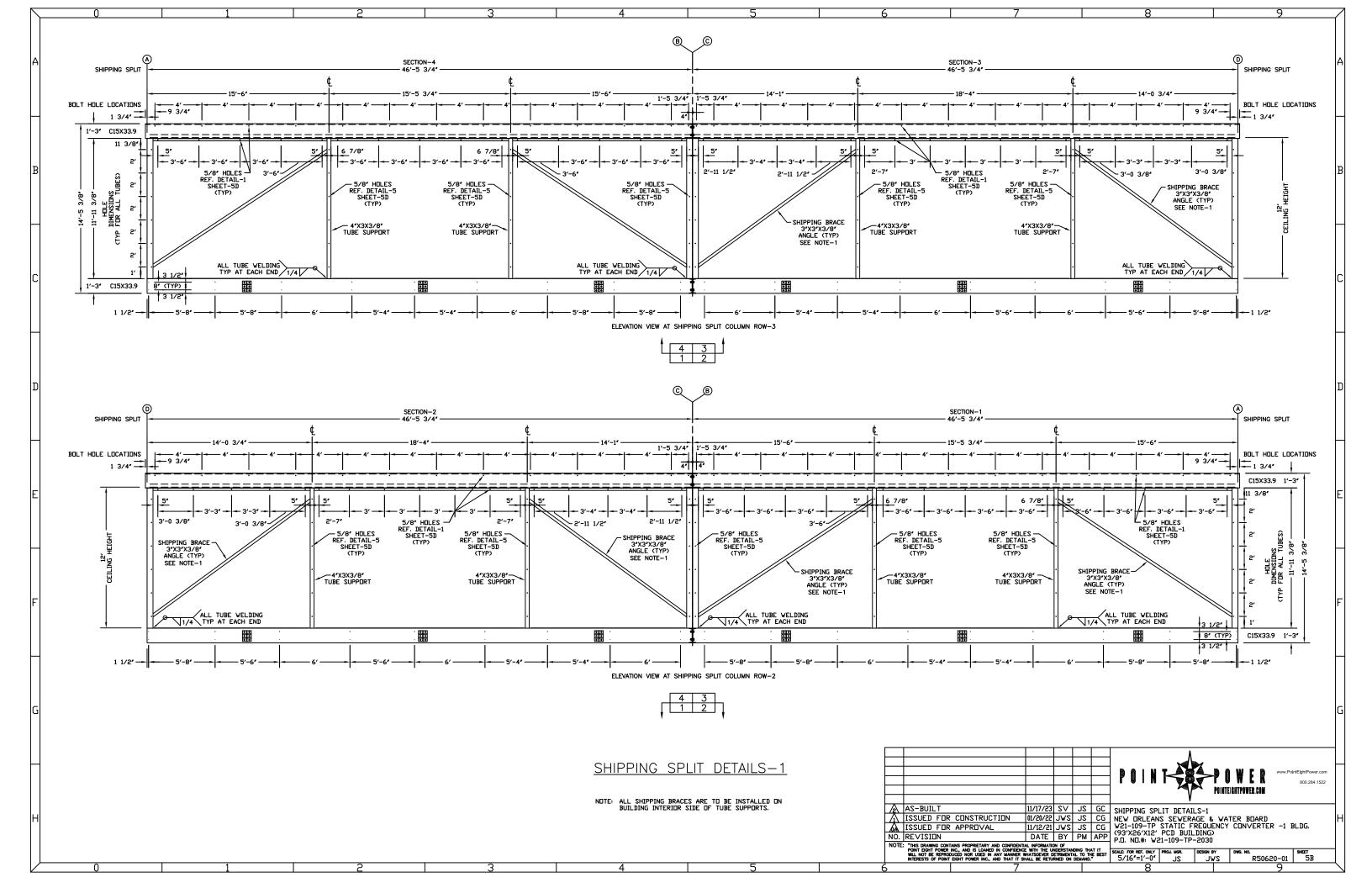


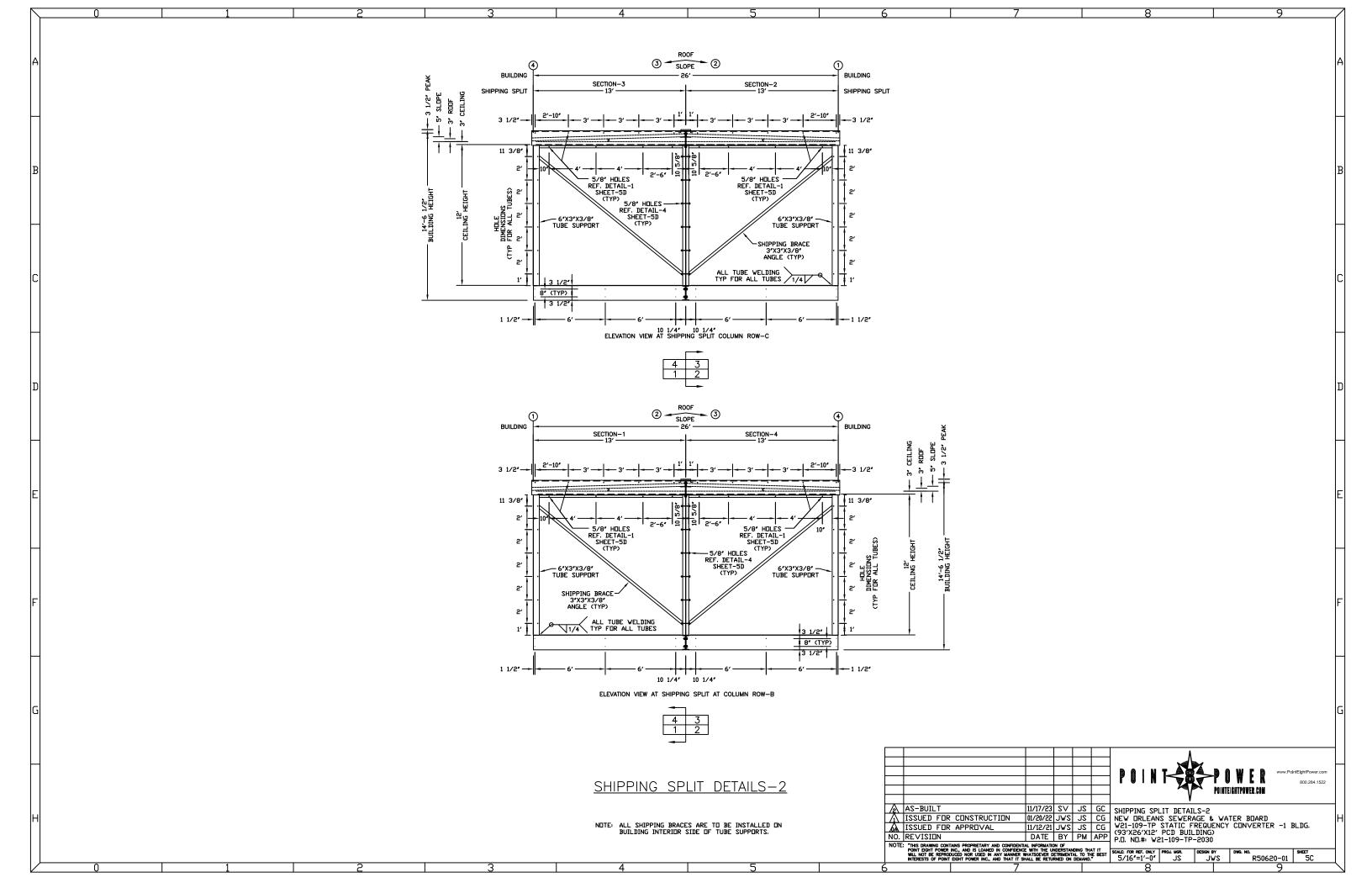


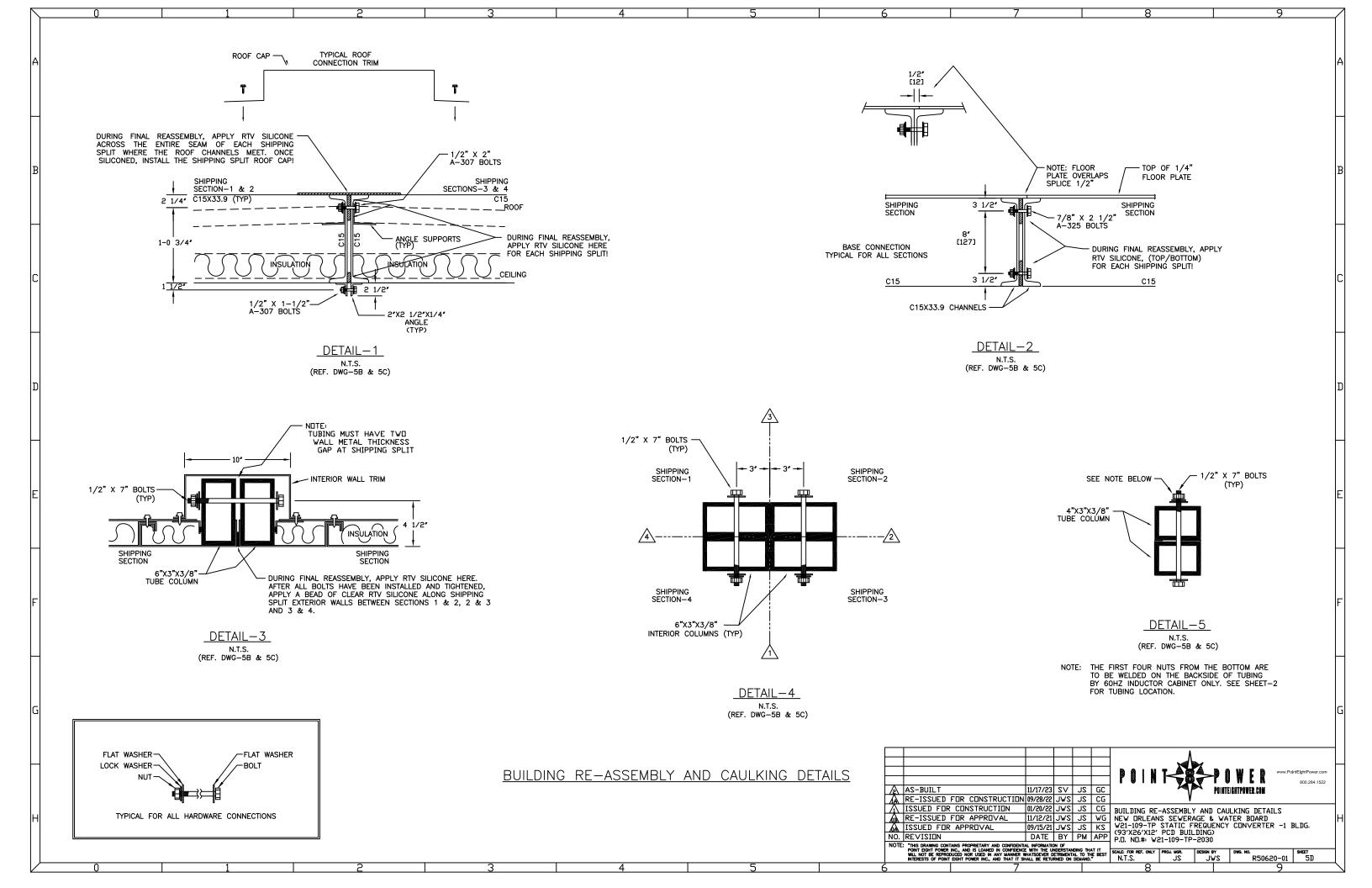


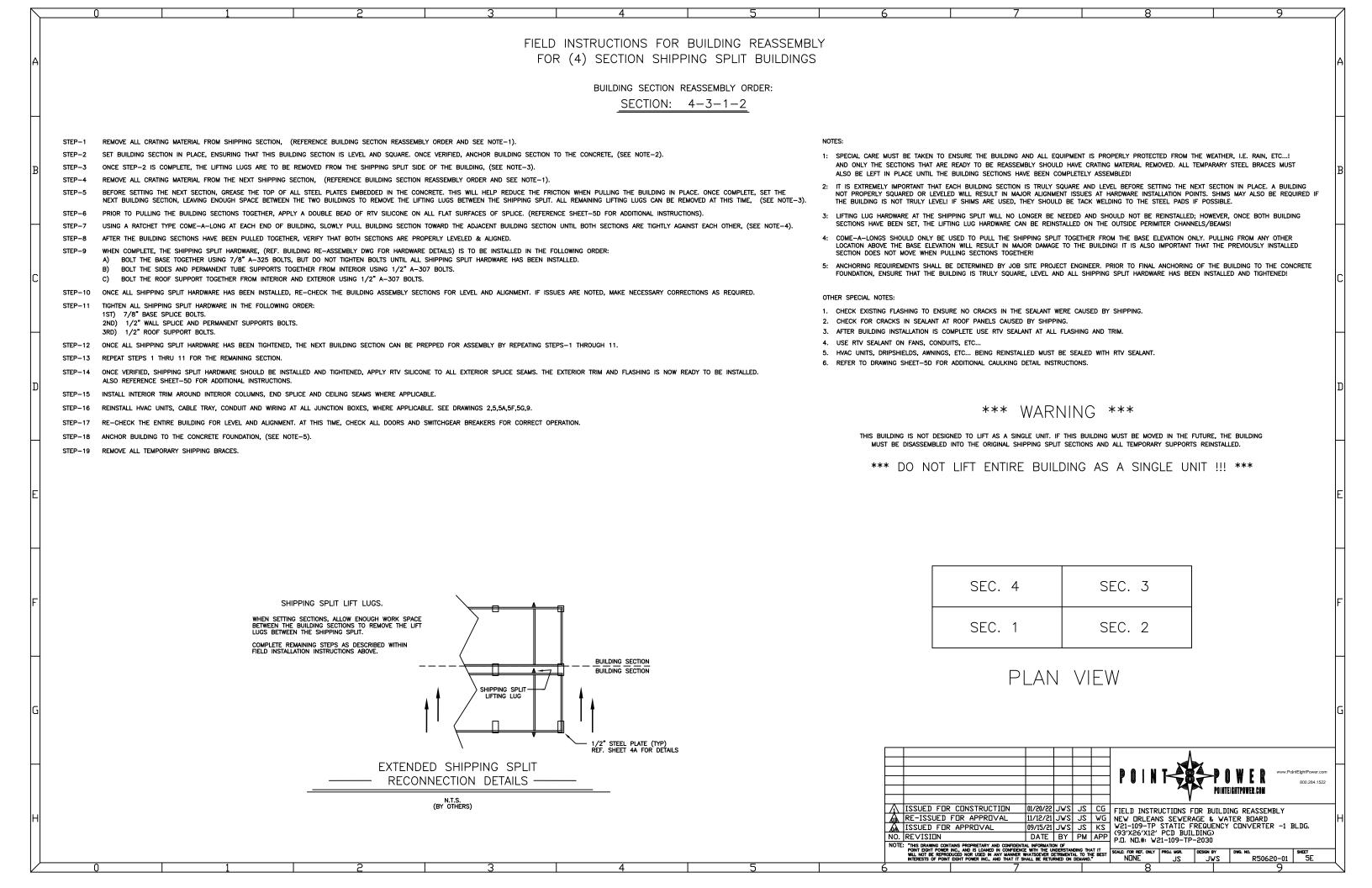


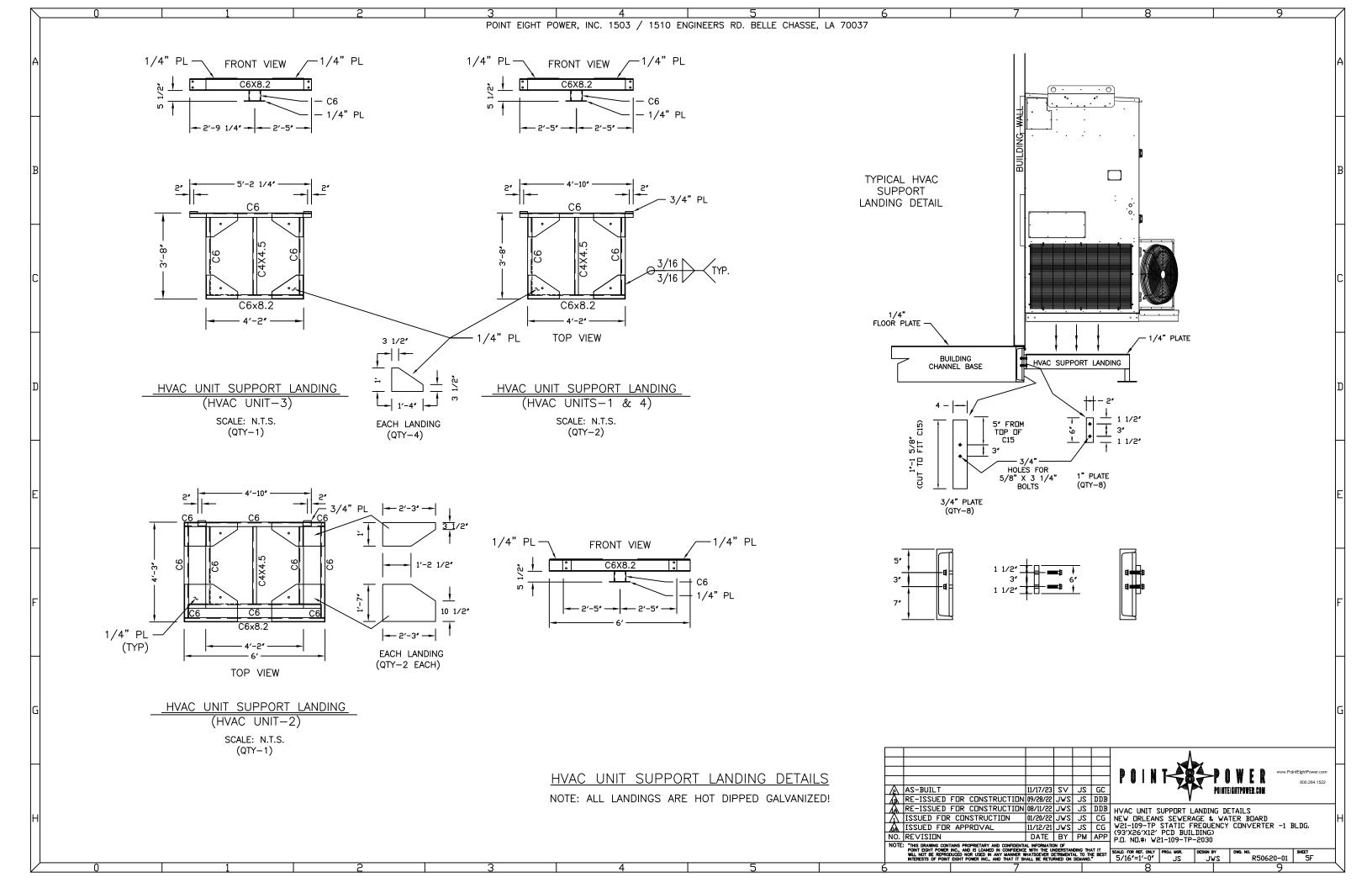


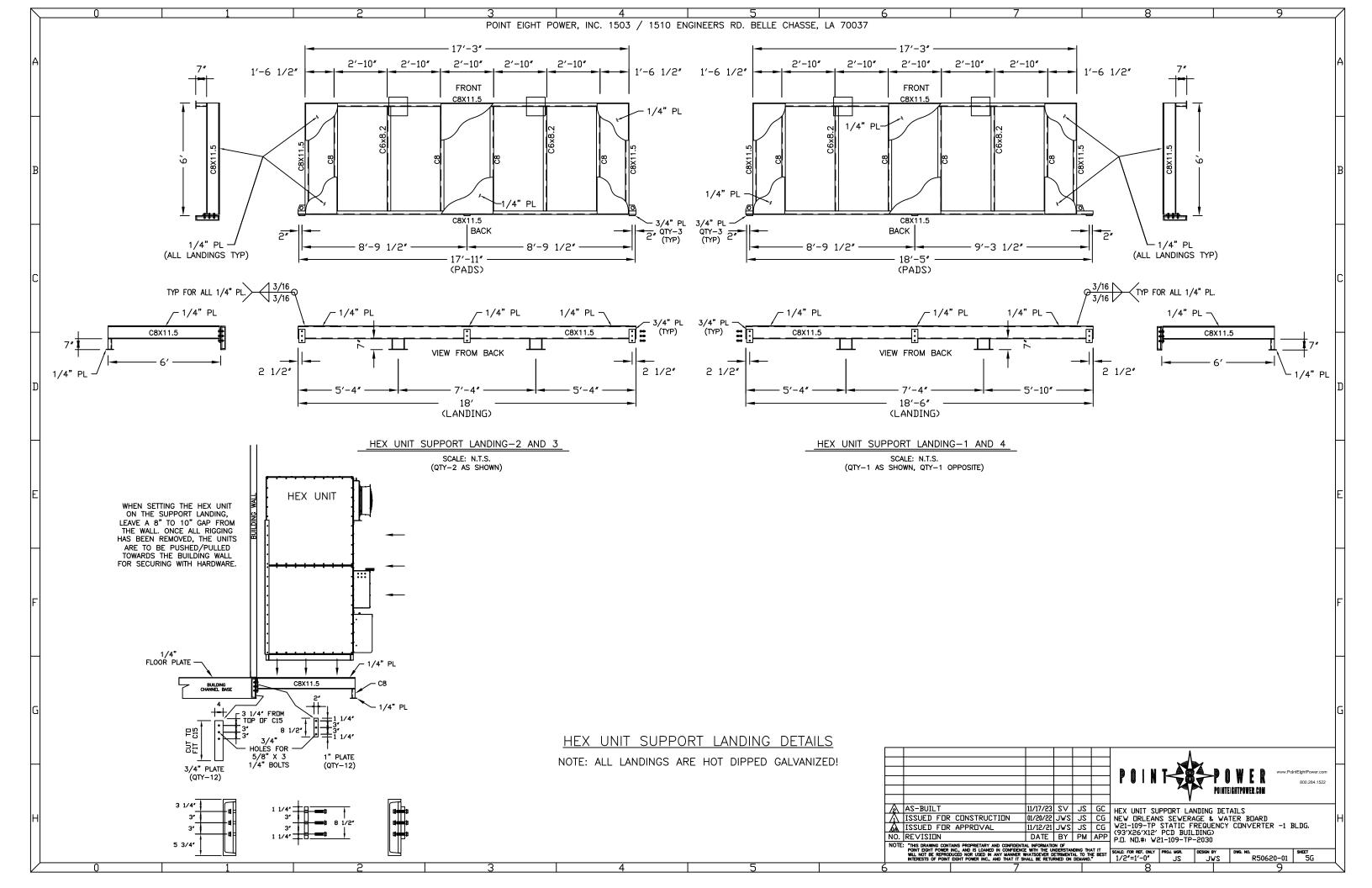


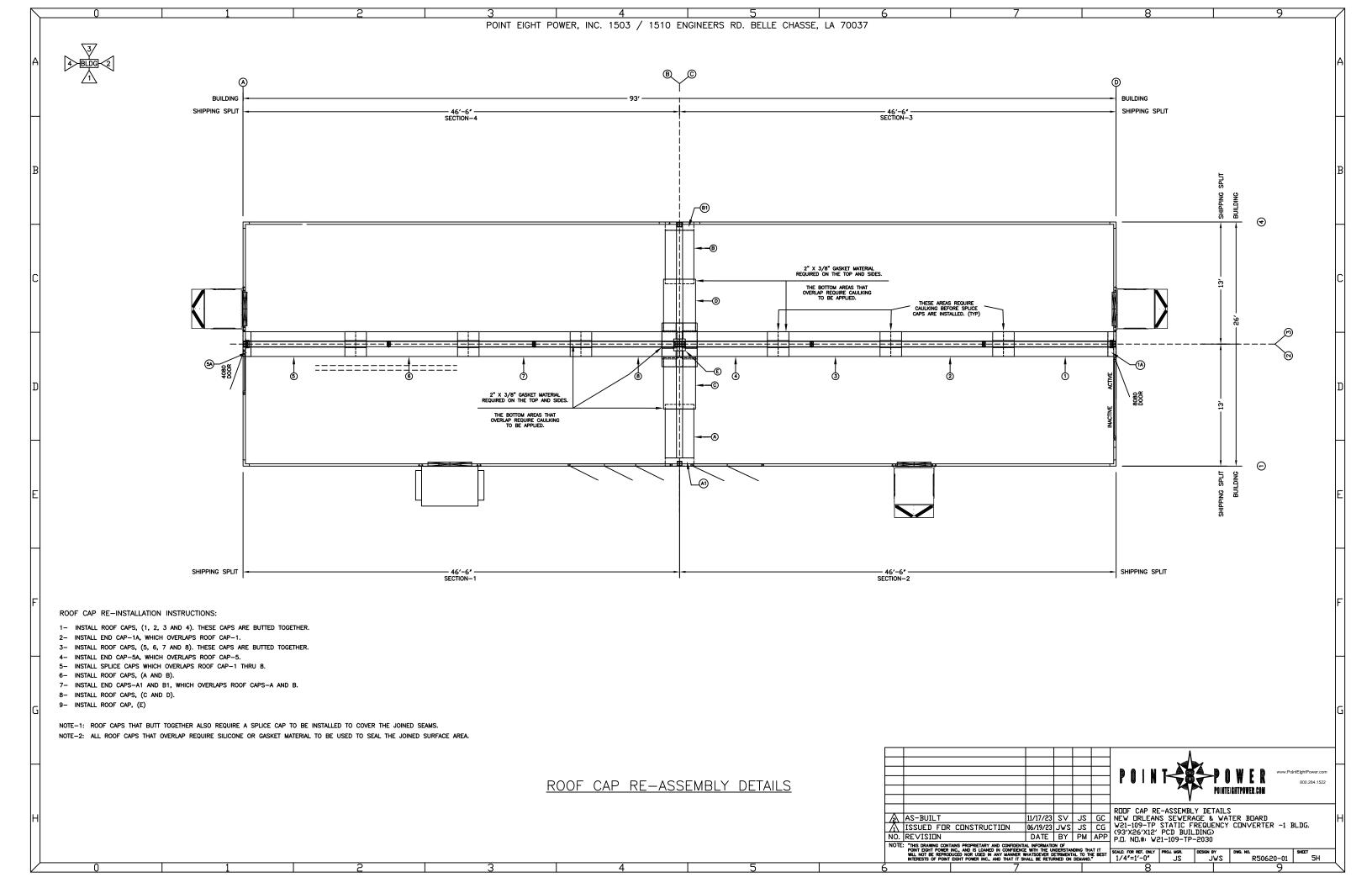


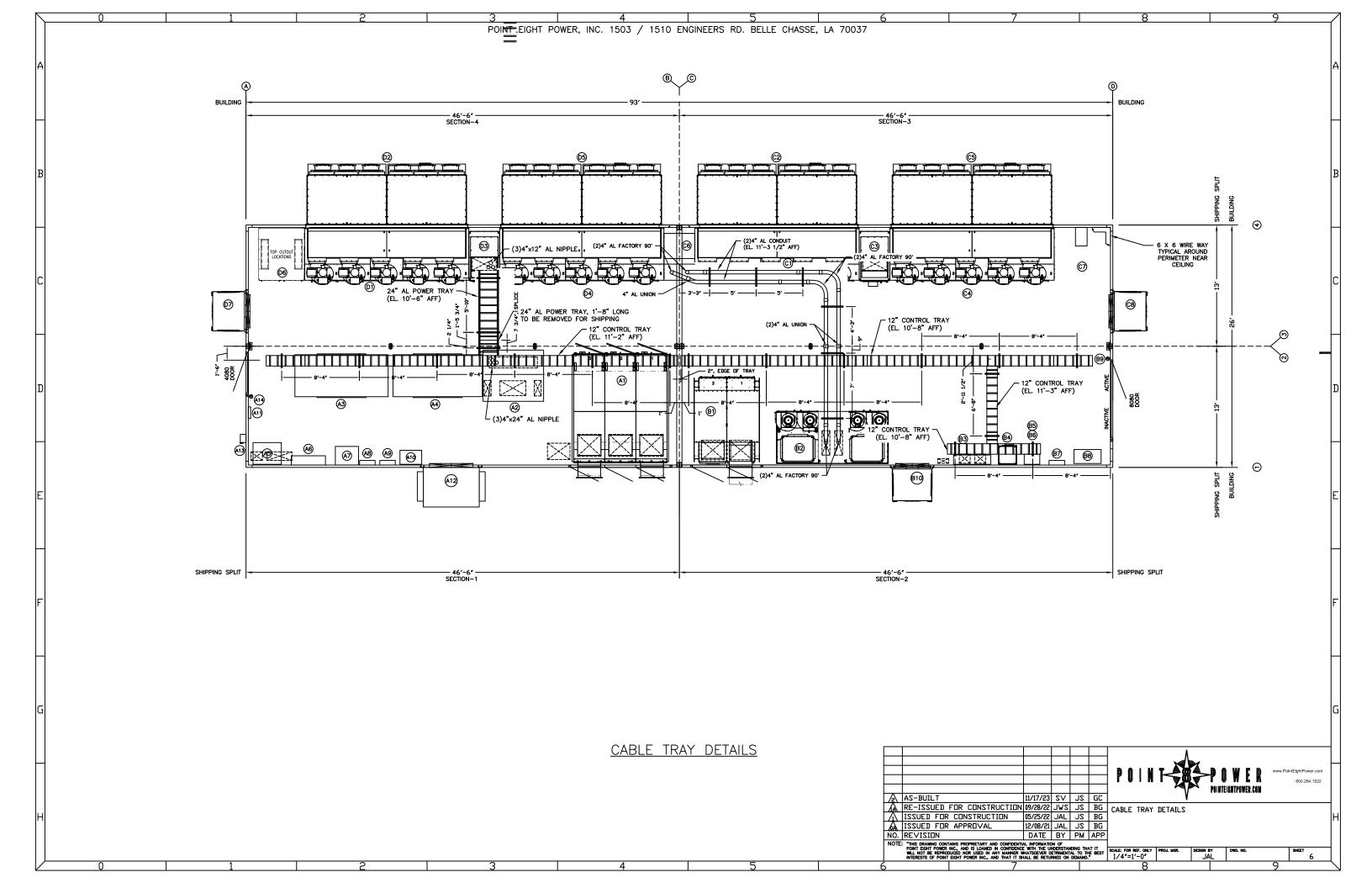


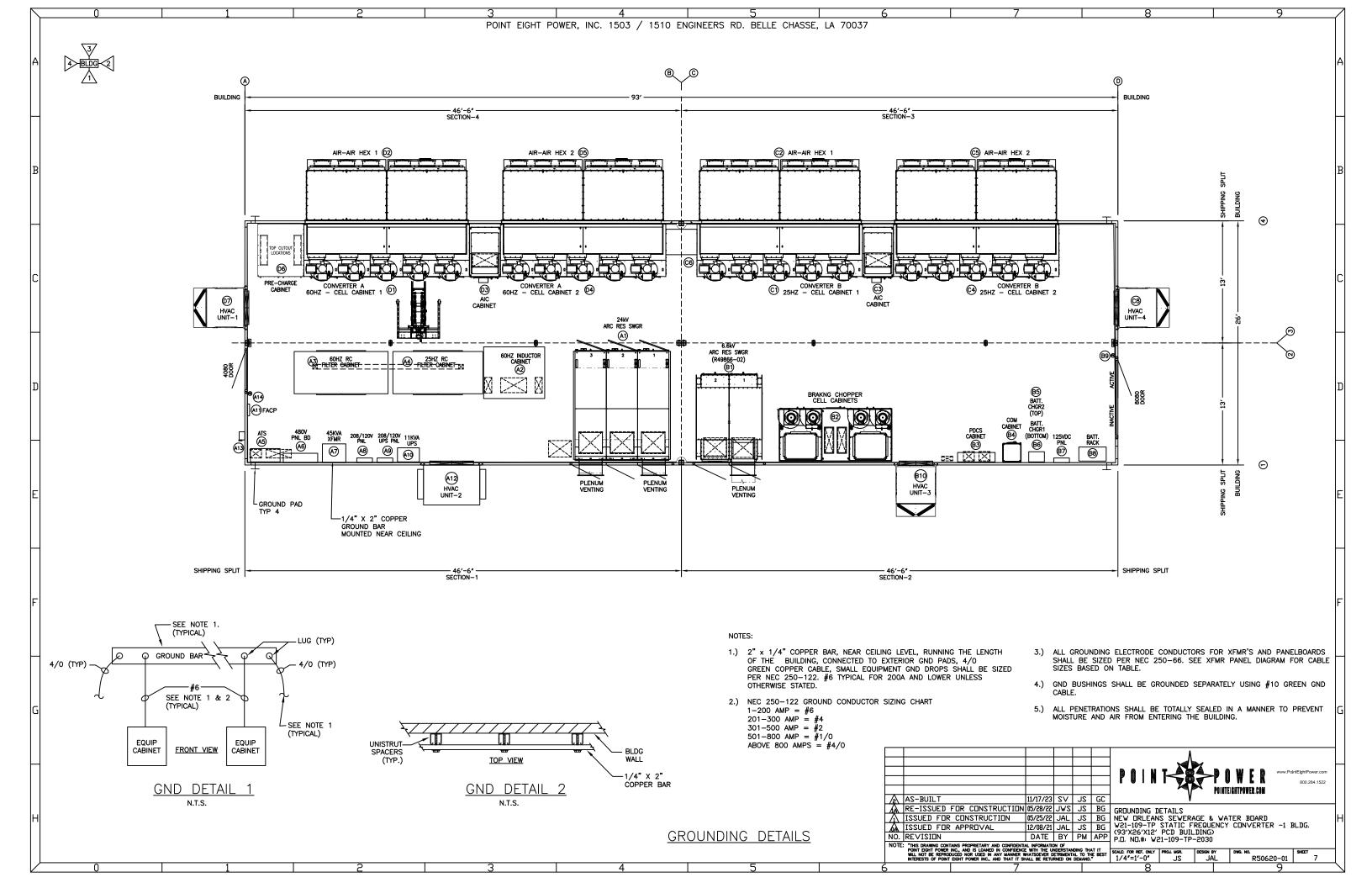


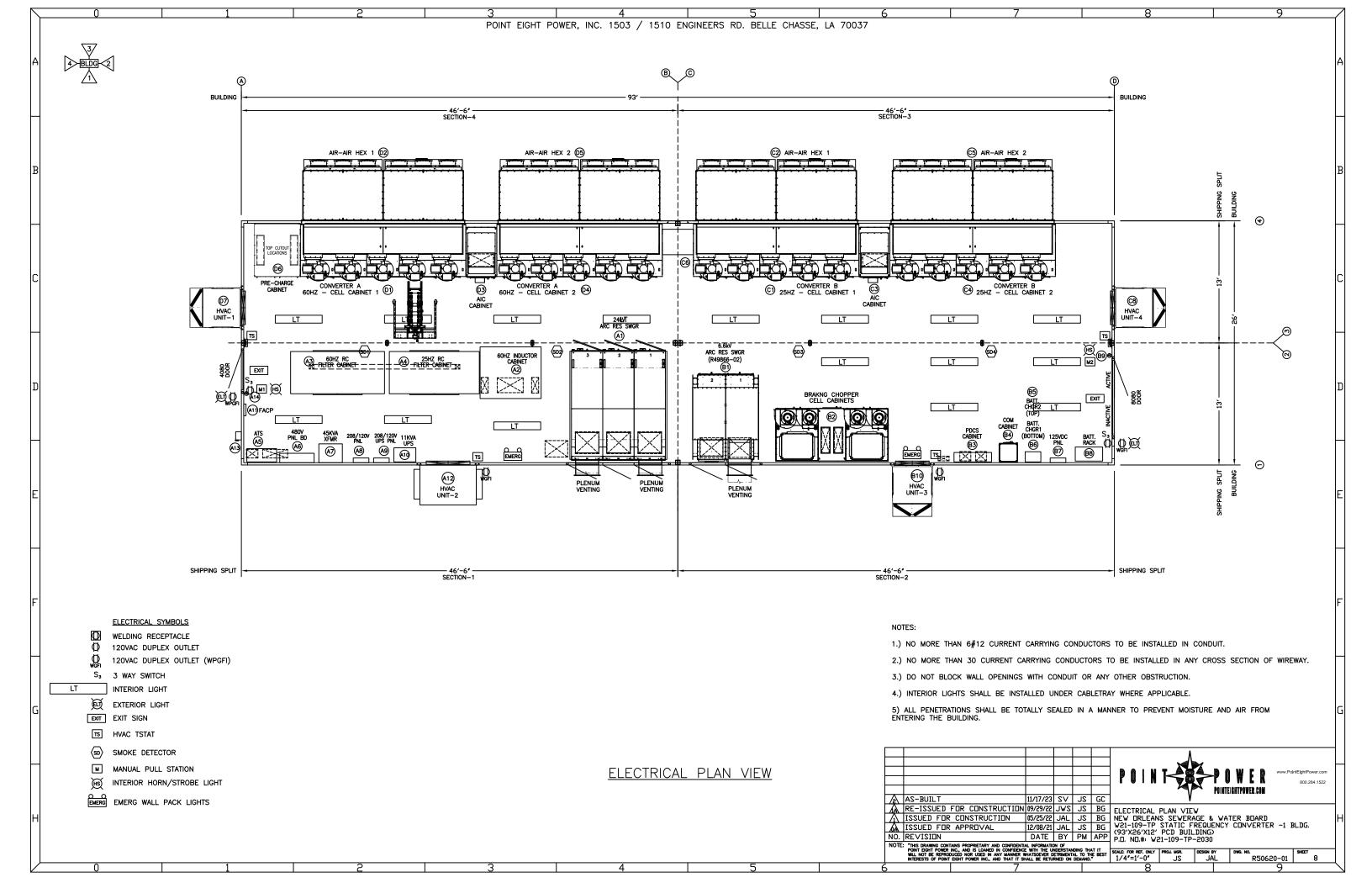


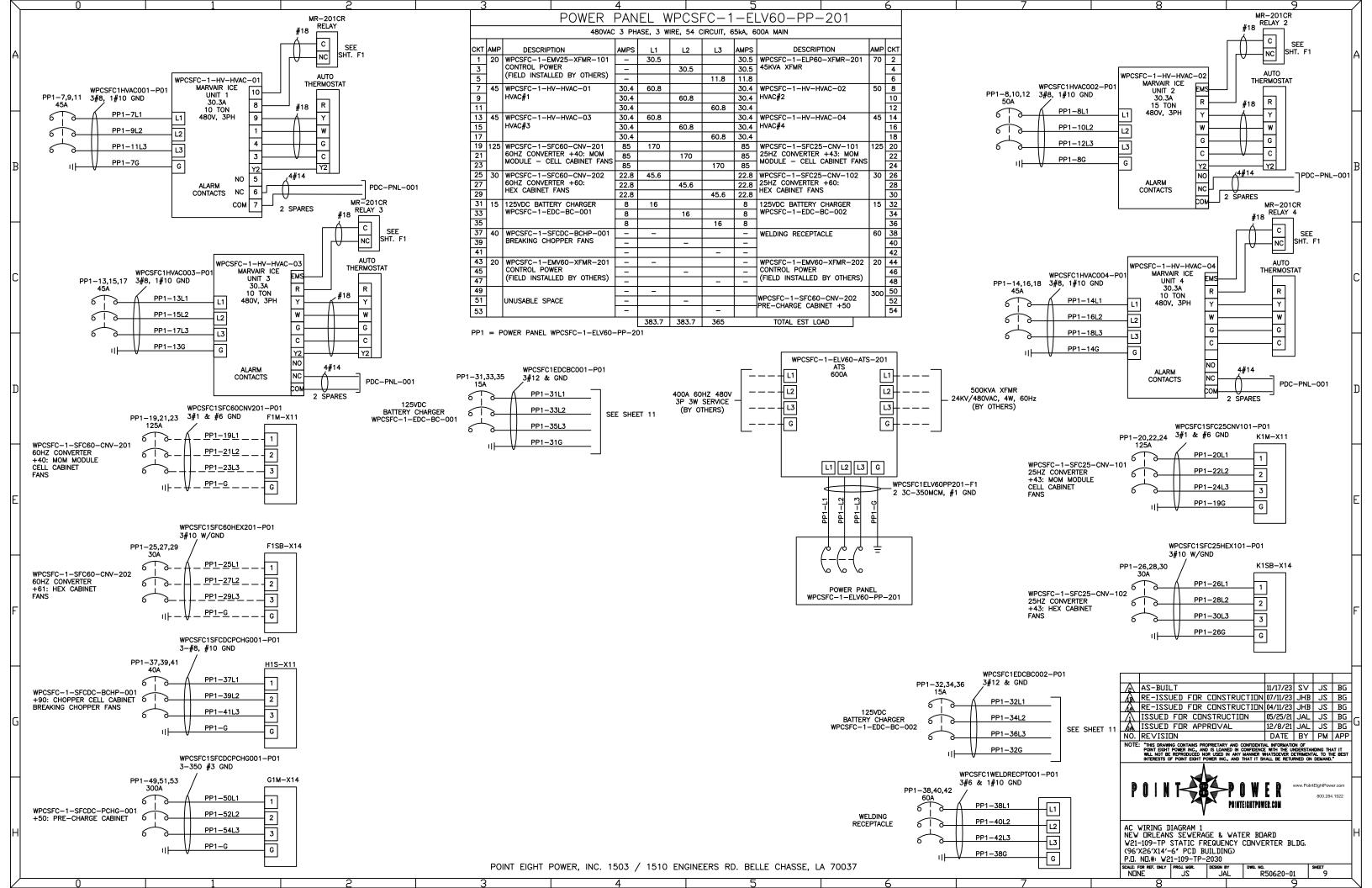


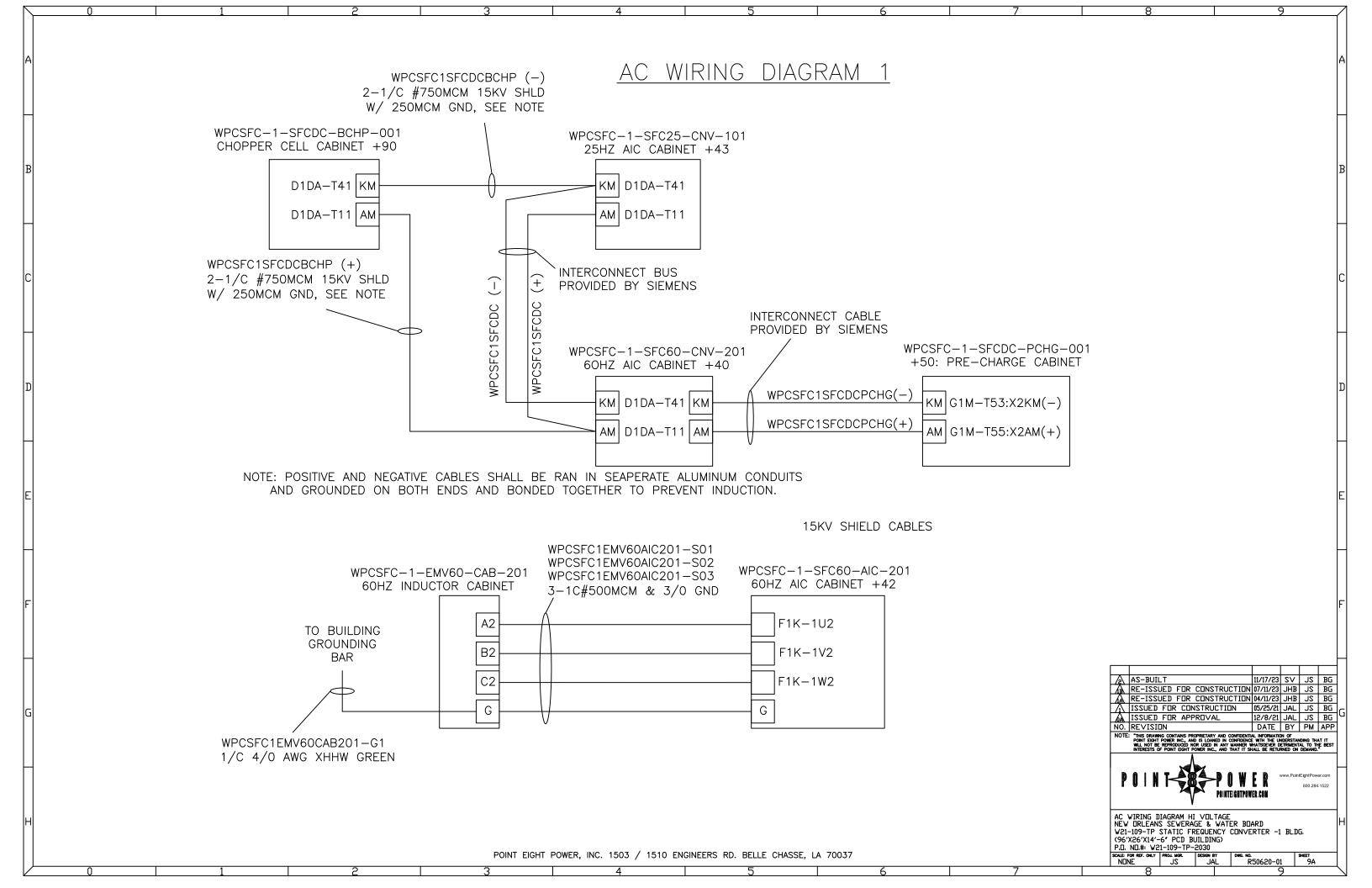


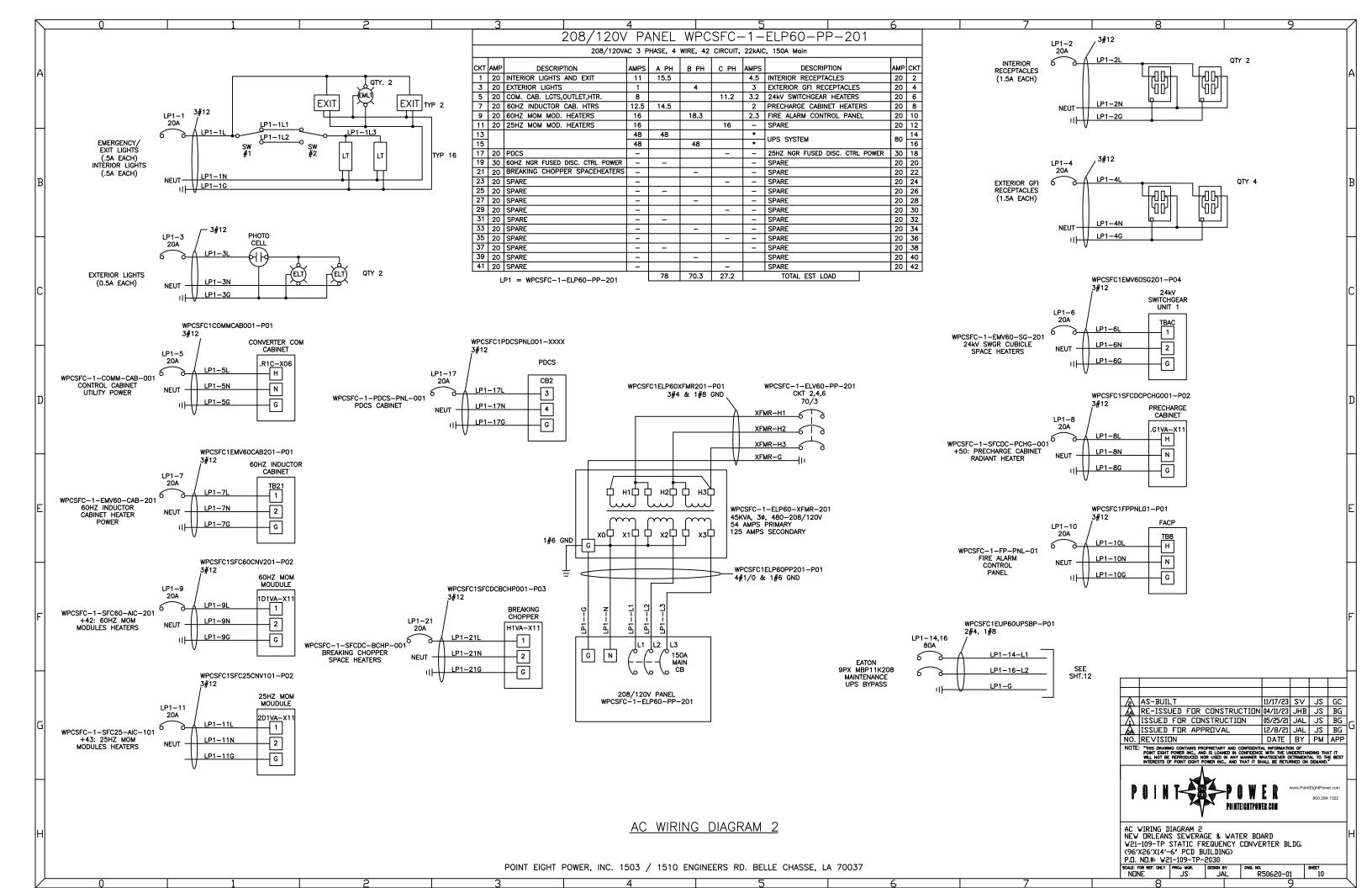


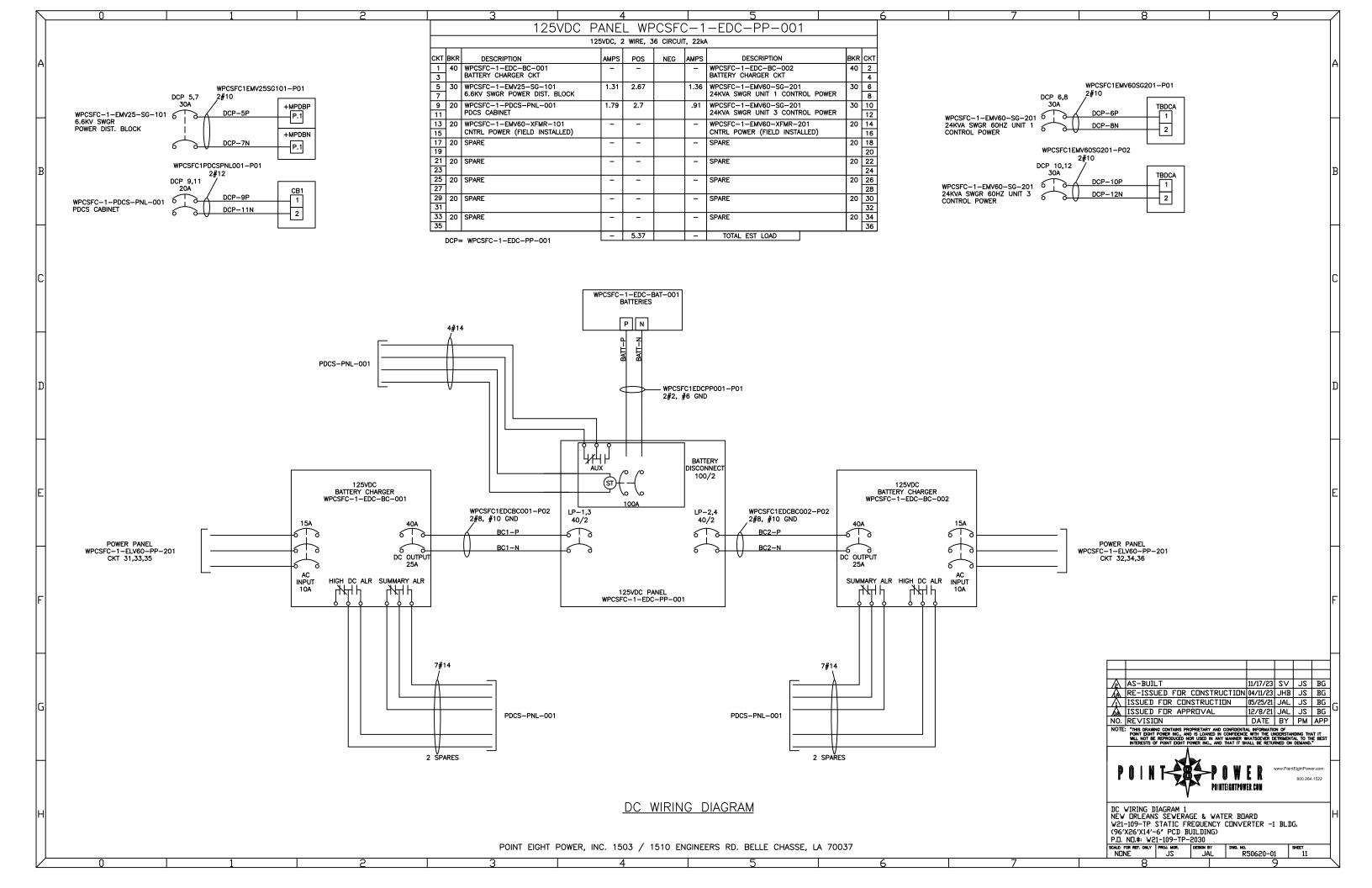


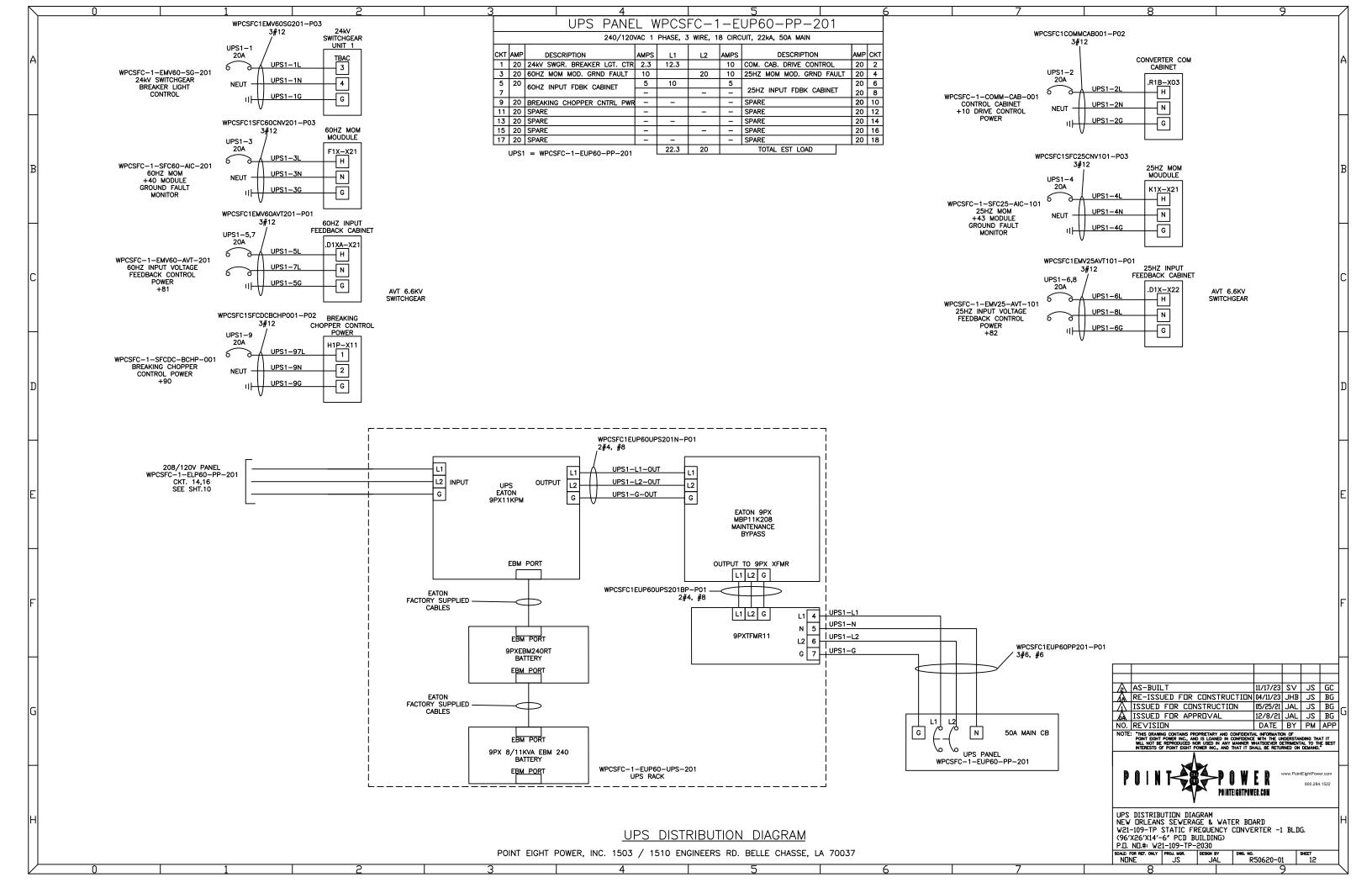












FIRE AL	ARM SYMBOL LEGEND					
SYMBOL	DESCRIPTION					
FACP	FIRE ALARM CONTROL PANEL					
V cd	STROBE, MOUNT 80" A.F.F., 2 1/8" DEEP, 4" SQUARE W/1 1/2" DEEP EXT. RING. (WALL MOUNTED)					
XX A/V	HORN STROBE, 2 1/8" DEEP, 4" SQUARE W/1 1/2" DEEP EXT. RING. (CEILING MOUNTED)					
	SMOKE DETECTOR (4" OCTAGON)					
F	PULL STATION (2-1/8" DEEP, 4" SQUARE)					
R	RELAY MODULE (2-1/8" DEEP, 4" SQUARE)					
WP	"WP" INDICATES WEATHER PROOF DEVICE					

FIRE ALAR	M WIRE LEGEND					
1A	18/2 TWISTED FOR SLC DATA					
1B	14/2 TWISTED FOR 24VDC					
1C	14/2 TWISTED FOR STROBE					
1D	18/2 TWISTED SHIELDED FOR SPEAKERS					
1E	18/2 TWISTED SHIELDED FOR ANNUNCIATOR DATA					
1F	18/2 TWISTED SHIELDED FOR FIRE PHONES					
1G	18/2 AND 14/2 FOR SOUNDER BASES					
1H	CAT6 FOR AREA OF REFUGE					
NOTE: ALL WIRING MUST BE FREE OF GROUNDS, SHIELDED CONDUCTOR DRAIN WIRES MUST BE MADE CONTINUOUS THROUGHOUT THE CIRCUIT AND MUST BE FREE OF GROUNDS. TWIST DRAIN WIRES TOGETHER AT EACH DEVICE, WRAP AROUND CONDUCTORS AND TAPE. CIRCUITS UTILIZING						

EOL RESISTORS SHOULD READ EOL RESISTOR WHEN READ WITH A METER AND EACH CONDUCTOR

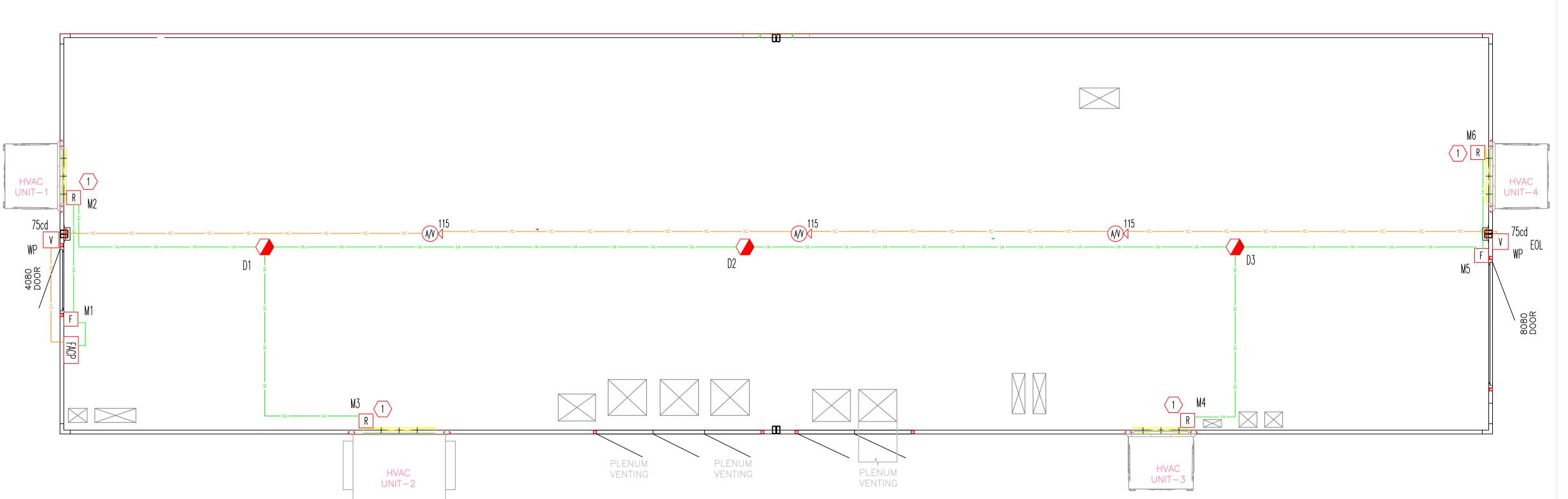
- 1. PER NFPA 72, SMOKE DETECTORS SHALL BE MOUNTED ON THE CEILING NO NEARER THAN 12 INCHES FROM A SIDE WALL.
- 2. PER NFPA 72, IF LOCATED ON THE SIDE WALL, THE TOP OF THE DETECTOR SHALL BE LOCATED BETWEEN 4 AND 12 INCHES BELOW THE CEILING.
- 3. PER NFPA 72, SMOKE DETECTORS SHALL NOT BE LOCATED IN DIRECT AIR FLOW, NOR NEARER THAN 3 FEET FROM AN AIR SUPPLY DIFFUSER. ALSO DETECTORS SHALL NOT BE INSTALLED WITHIN 4 INCHES OF A SPRINKLER HEAD.
- 4. PER NFPA 72, SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL THE CONSTRUCTION CLEAN-UP OF ALL OTHER TRADES IS COMPLETE AND FINAL.
- 5. PER NFPA 72 AND ADA REQUIREMENTS, PULL STATIONS SHALL BE MOUNTED AT A HEIGHT OF 48 INCHES TO THE TOP.
- 6. PER NFPA 72 AND ADA REQUIREMENTS, VISUALS AND AUDIO VISUALS SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80 INCHES AND NOT GREATER THAN 96 INCHES ABOVE THE FINISHED FLOOR, MINIMUM 6" BELOW CEILING TO TOP OF LENS.
- 7. ALL WIRING INSTALLED PER NFPA 72.
- 8. ALL CONDUIT TO BE 3/4" MINIMUM.
- 9. ALL CONDUIT STUB-UPS TO HAVE BUSHING INSTALLED TO PROTECT WIRE 3/4" MINIMUM.
- 10. NO CONDUIT ENTRY IS ALLOWED IN BOTTOM OF FIRE ALARM CONTROL PANEL (FACP) OR FIRE CONTROL POWER SUPPLY (FCPS). OR VOICE EVAC
- 11. ALL VISIBLE NOTIFICATION DEVICES LOCATED WITHIN THE FIELD OF VIEW SHALL BE SYNCHRONIZED.
- 12. ALL AUDIBLE INDICATING APPLIANCES SHALL BE EFFECTIVELY HEARD ABOVE AVERAGE AMBIENT SOUND LEVEL OCCURRING UNDER NORMAL CONDITIONS OF OCCUPANCY.

## FIRE ALARM SPECIAL NOTES

1 RELAY IS SHALL SHUT UNIT OFF IN GENERAL ALARM

# FIRE ALARM SEQUENCE OF OPERATION MATRIX

INITIATION ACTION	MANUAL PULL STATION	SMOKE DETECTOR	WATER FLOW SWITCH	OPENS, SHORTS, AND GROUNDS ON CIRCUITS	REMOVING, TAMPERING OR OPENING DEVICES	ABNORMAL VOLTAGE, BATTERY OR FACP TROUBLES	ABNORMAL SWITCH POSITION AT FACP
CONTINUOUSLY OPERATE ALARM NOTIFICATION DEVICES	X	X	X				
IDENTIFY ALARM AT FIRE ALARM CONTROL UNIT AND REMOTE ANNUNCIATOR	X	X	X				
TRANSMIT ALARM SIGNAL TO THE MONITORING SERVICE	X	X	X				
DISPLAY SUPERVISION CONDITION AT FACP	X	X	X				
TRANSMIT SUPERVISORY SIGNAL TO THE MONITORING SERVICES	X	X	X				
TRANSMIT TROUBLE SIGNAL TO THE MONITORING SERVICES				X	X	X	X
DISPLAY TROUBLE CONDITION AT FACP				X	X	X	X
RECORD EVENTS IN THE SYSTEM MEMORY	X	X	X	X	X	X	X





30 VETERANS BLVD KENNER, LA 70062 PHONE: 504.471.0917 FAX: 504.471.9024

> FIRE ALARM SHOP DRAWINGS

SCALE: 1/4"=1'-0"

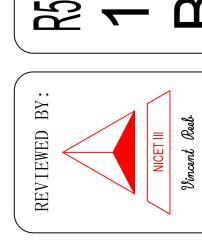
**DESIGNED BY** 

DATE DRAWN:

11/07/2022

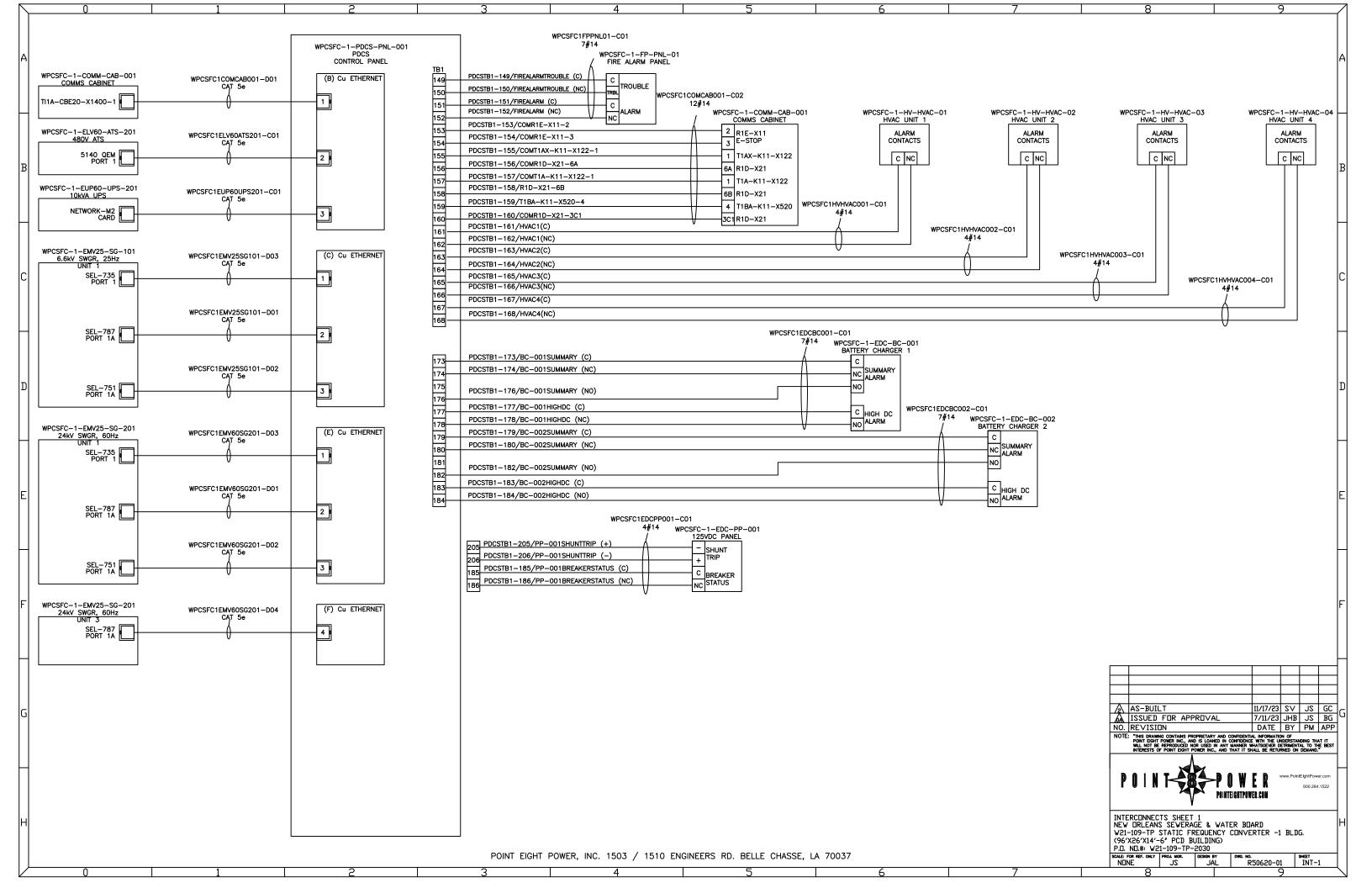
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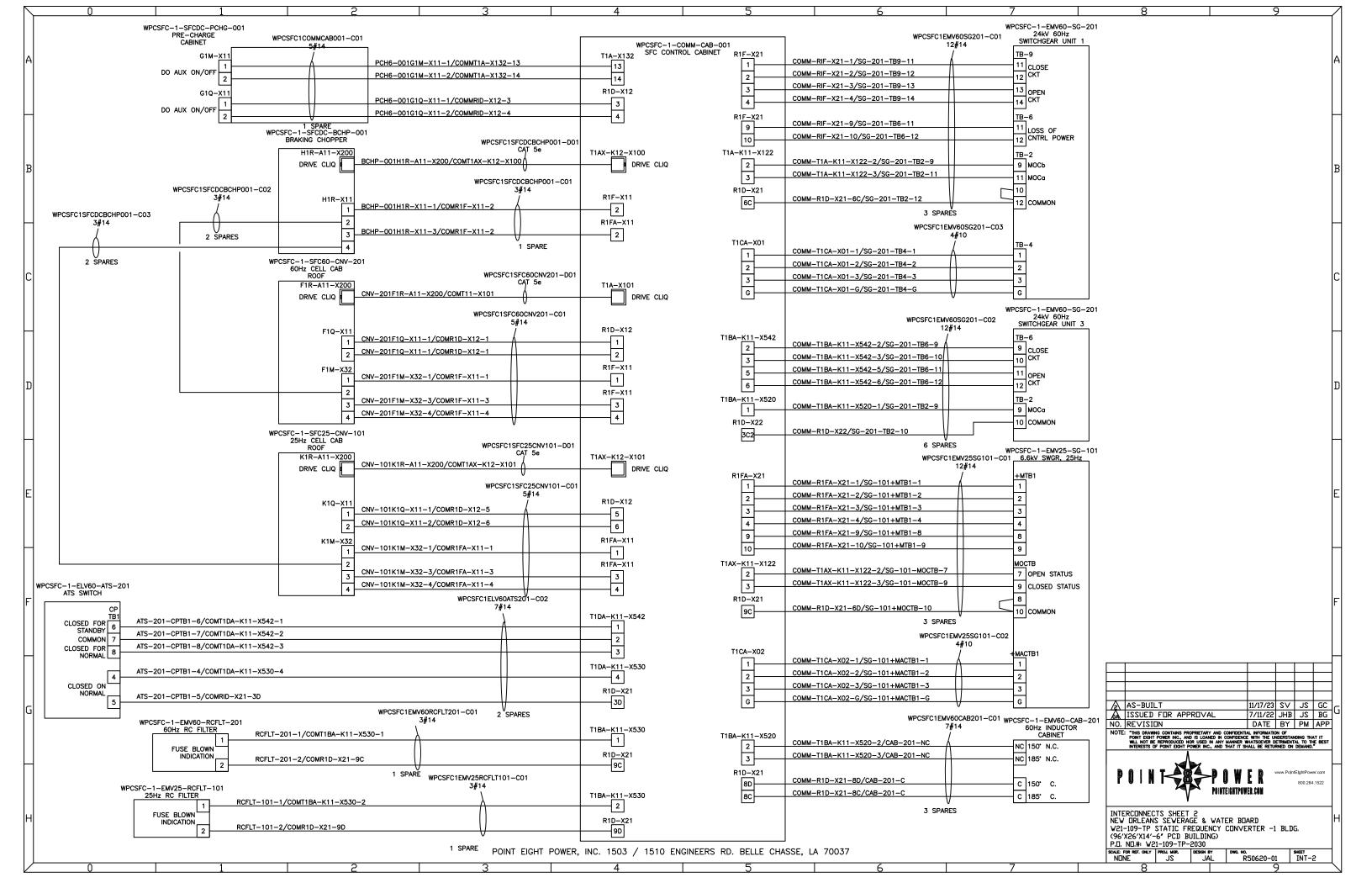
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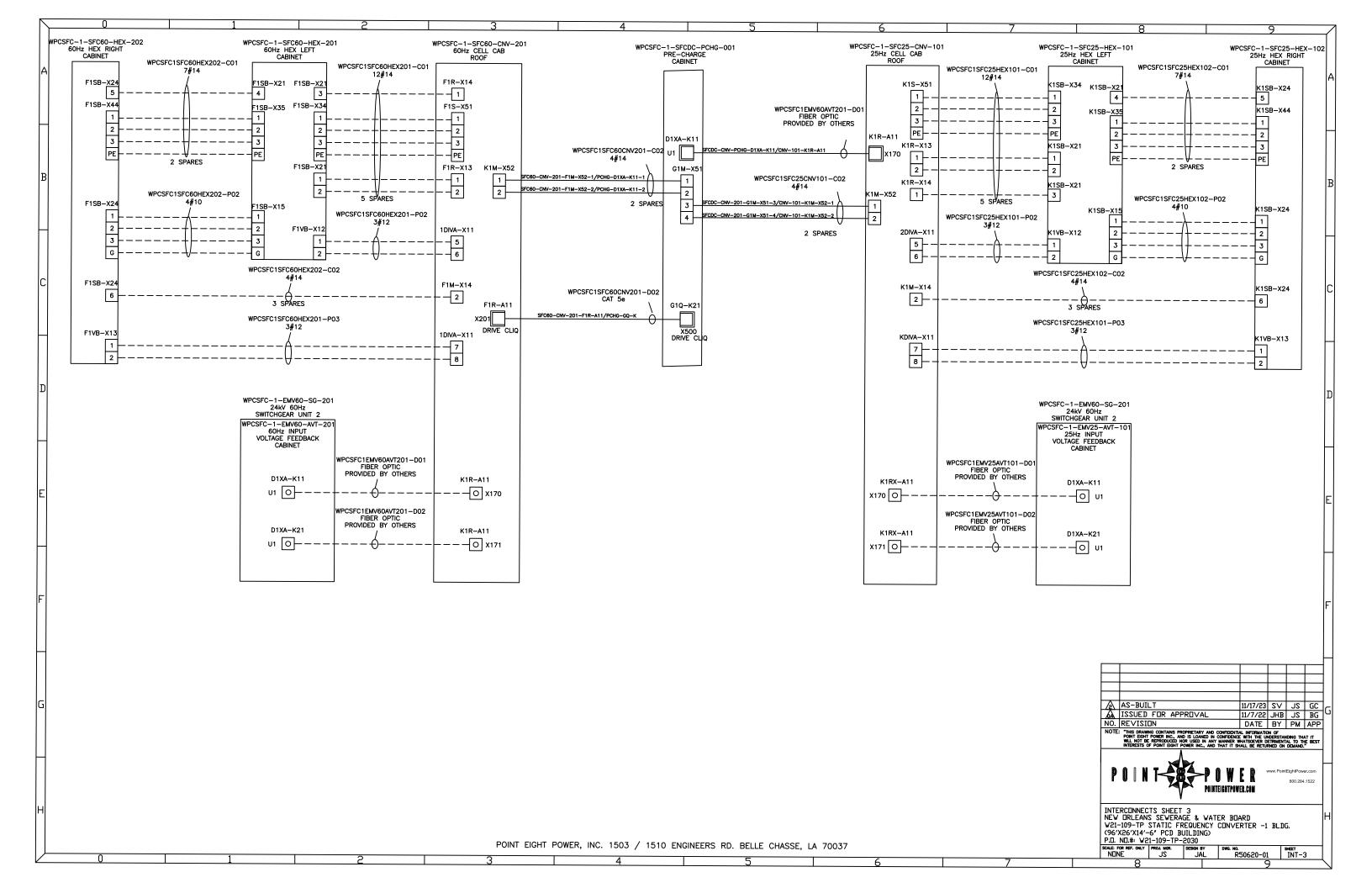


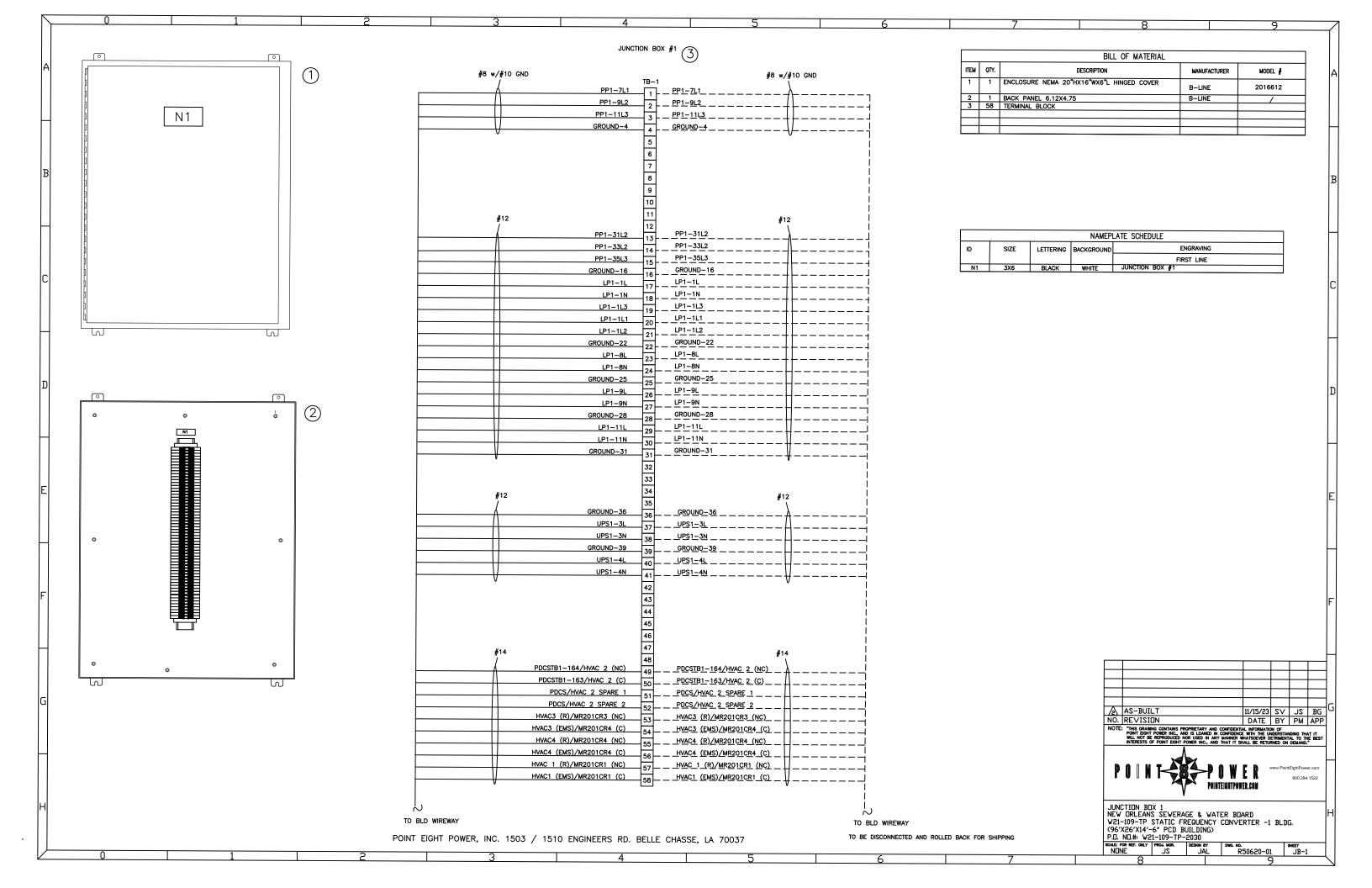
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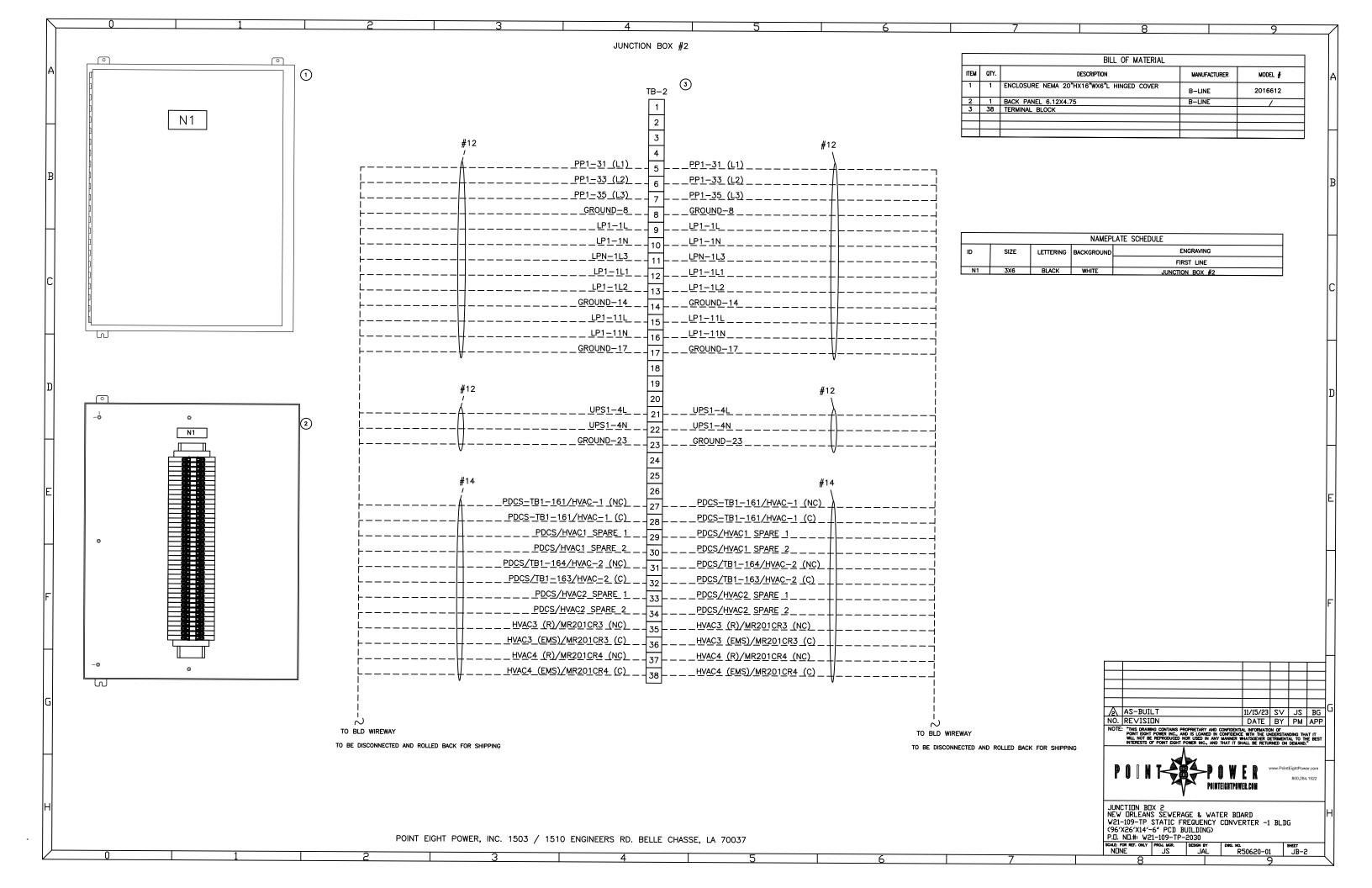
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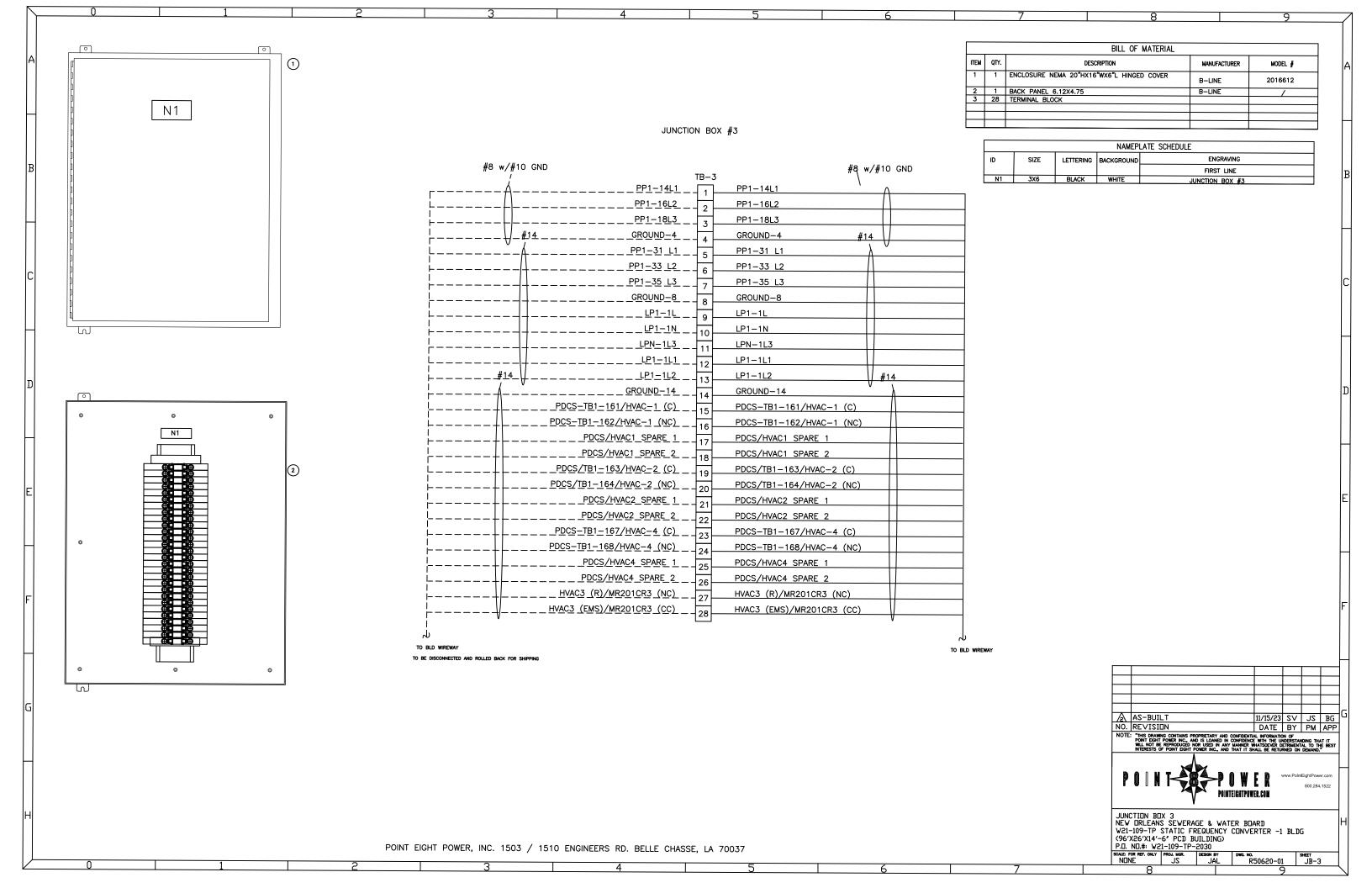


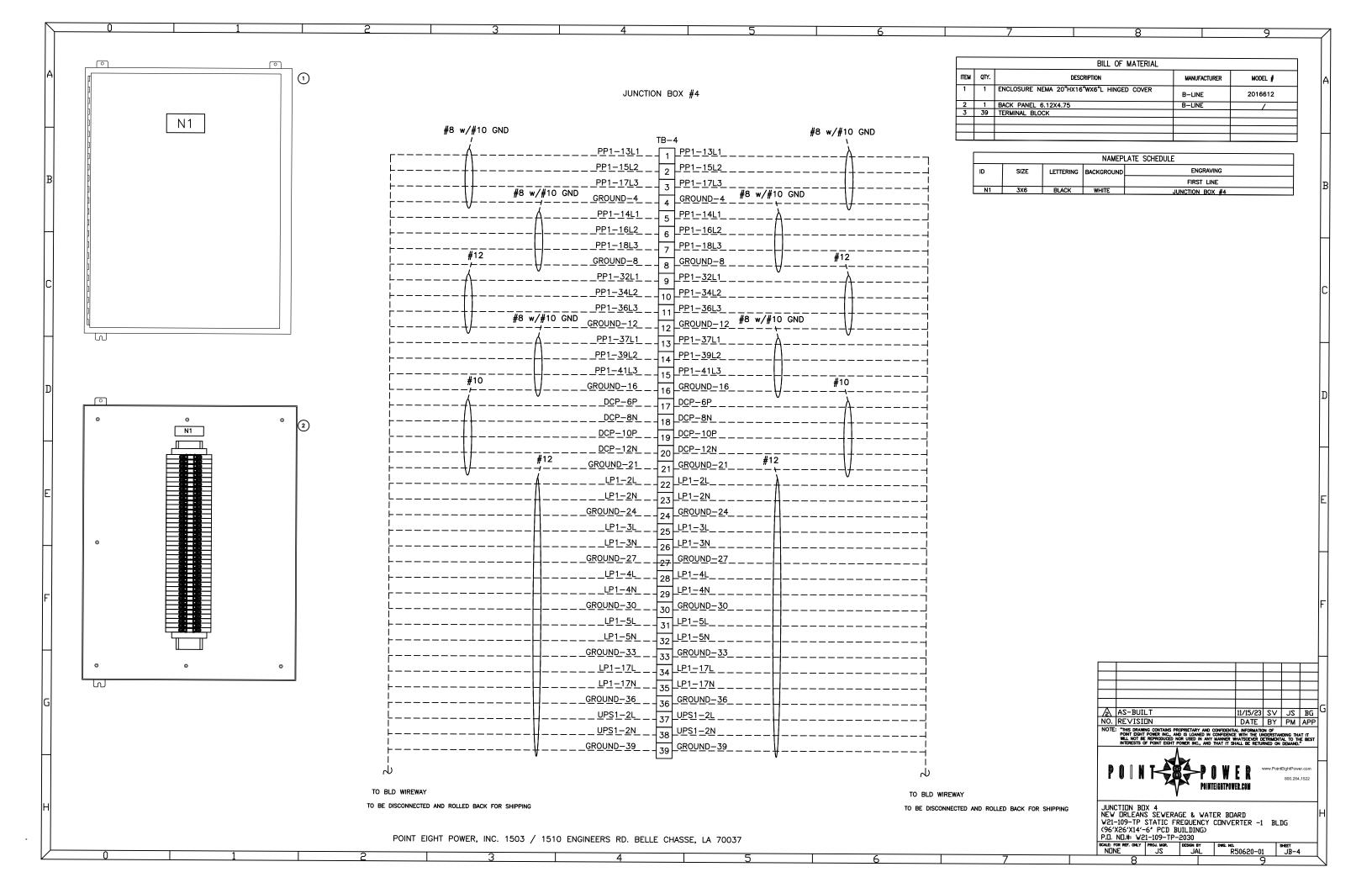


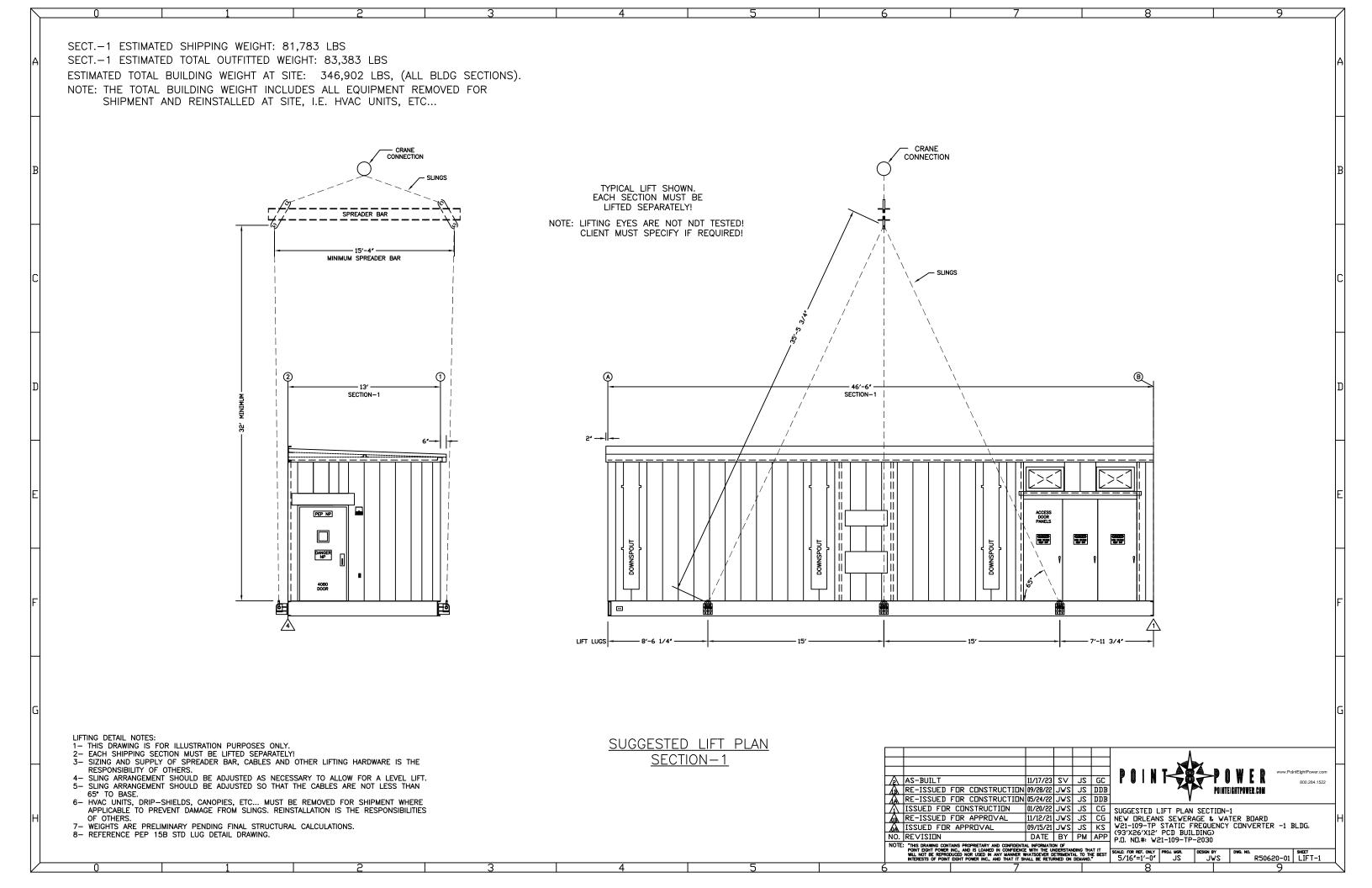


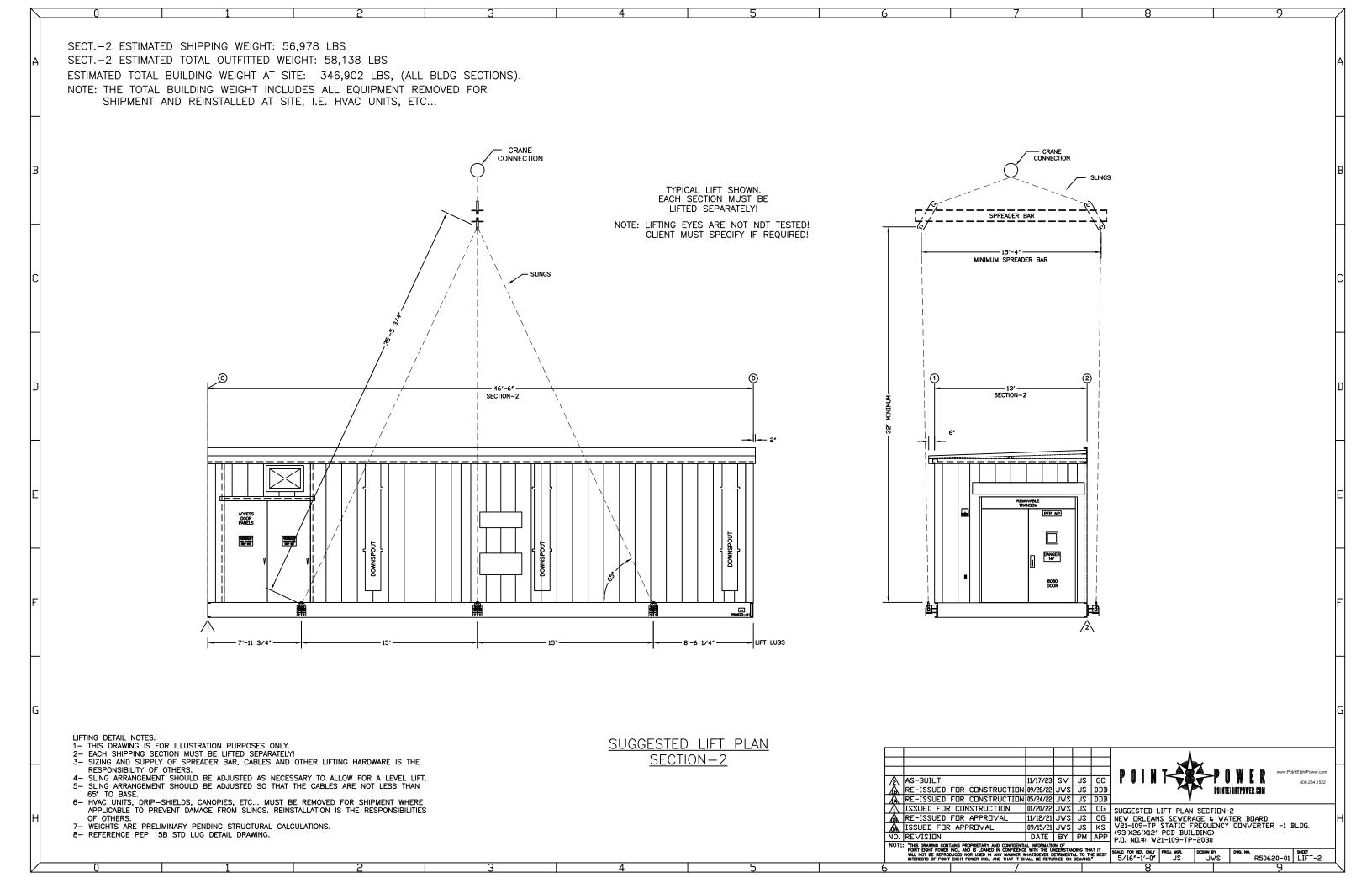


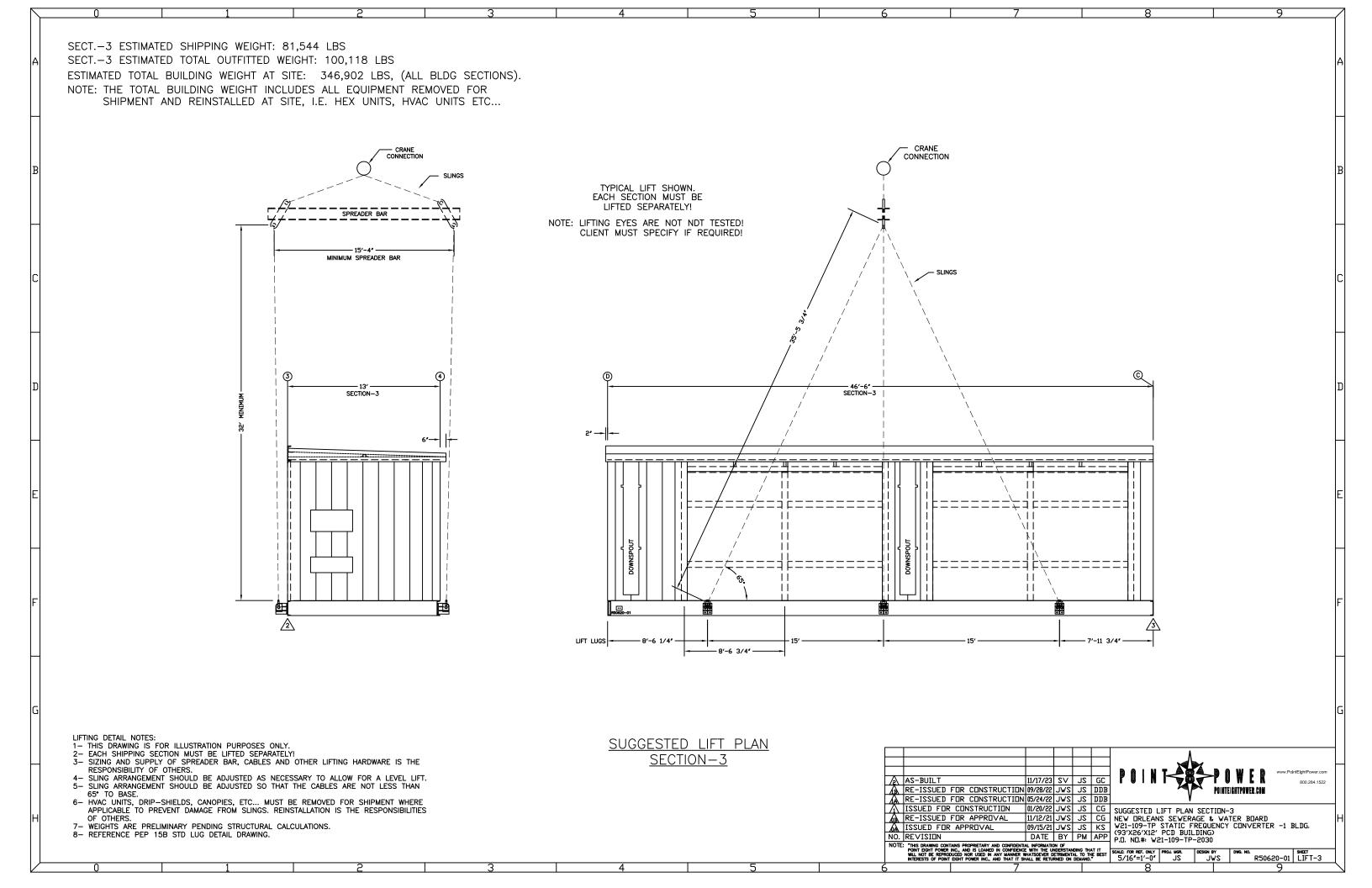


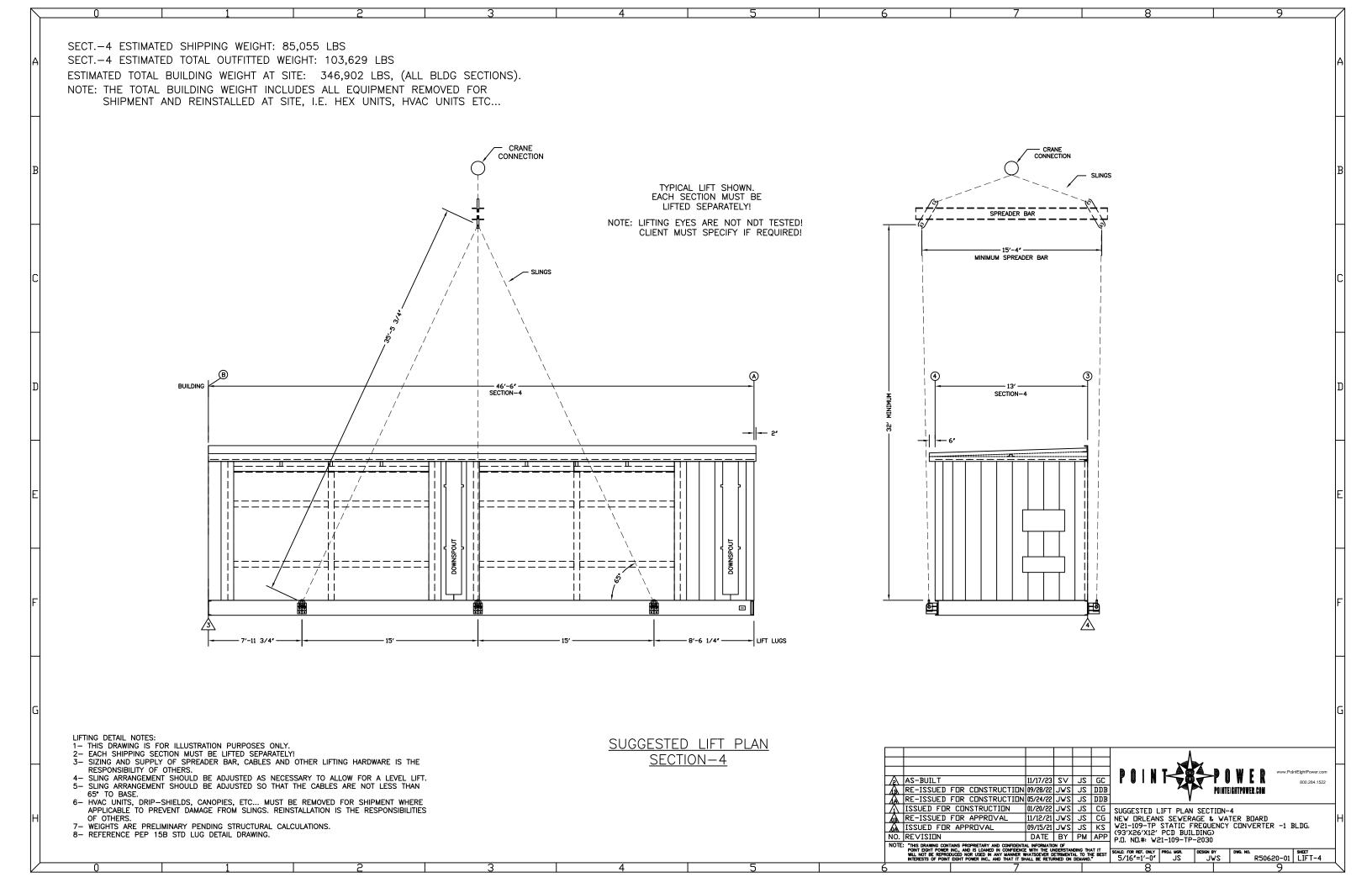


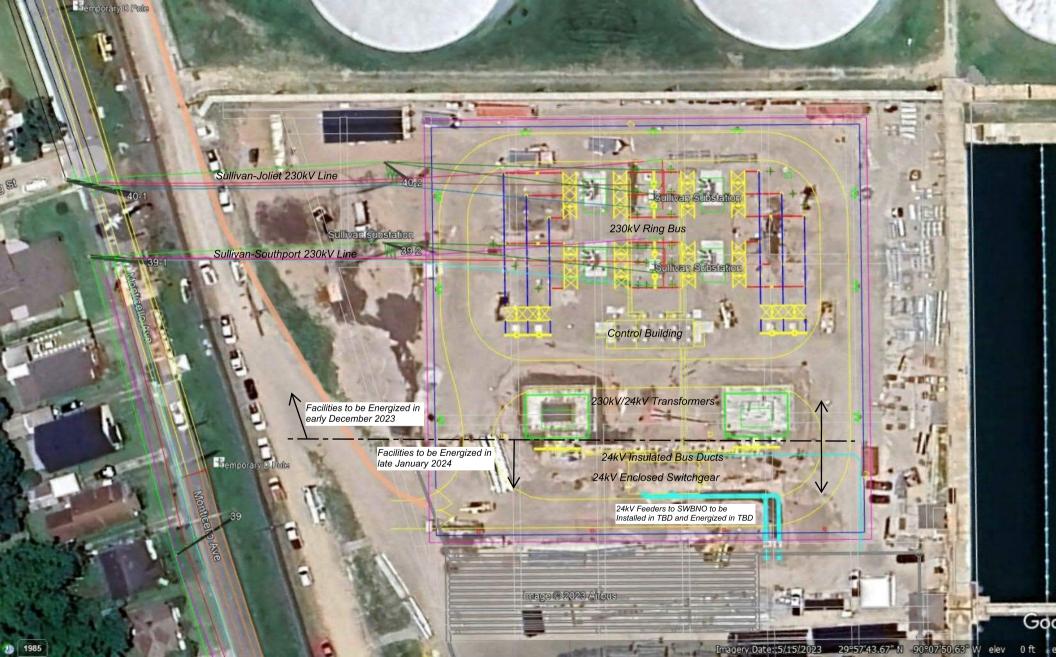


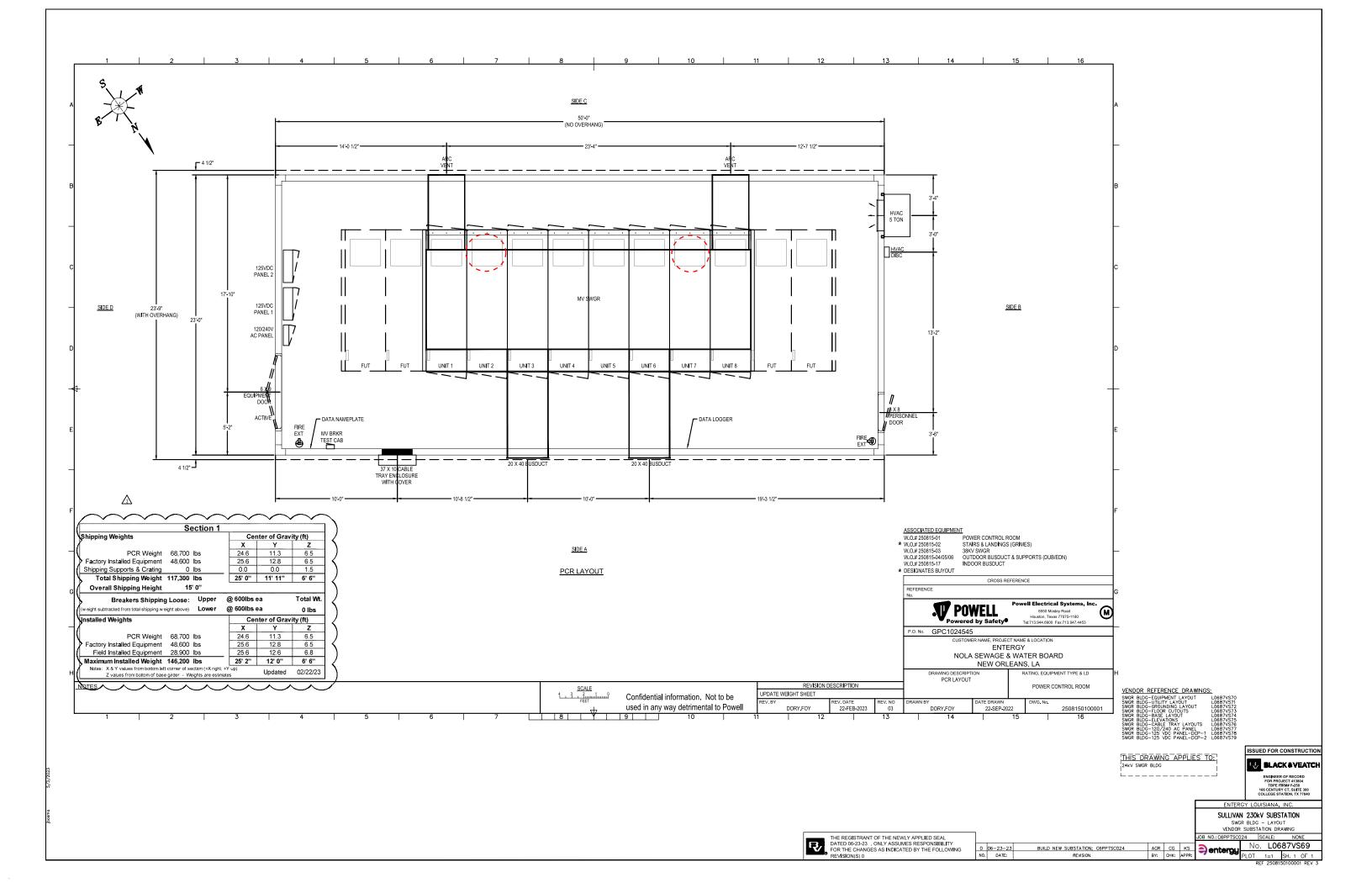


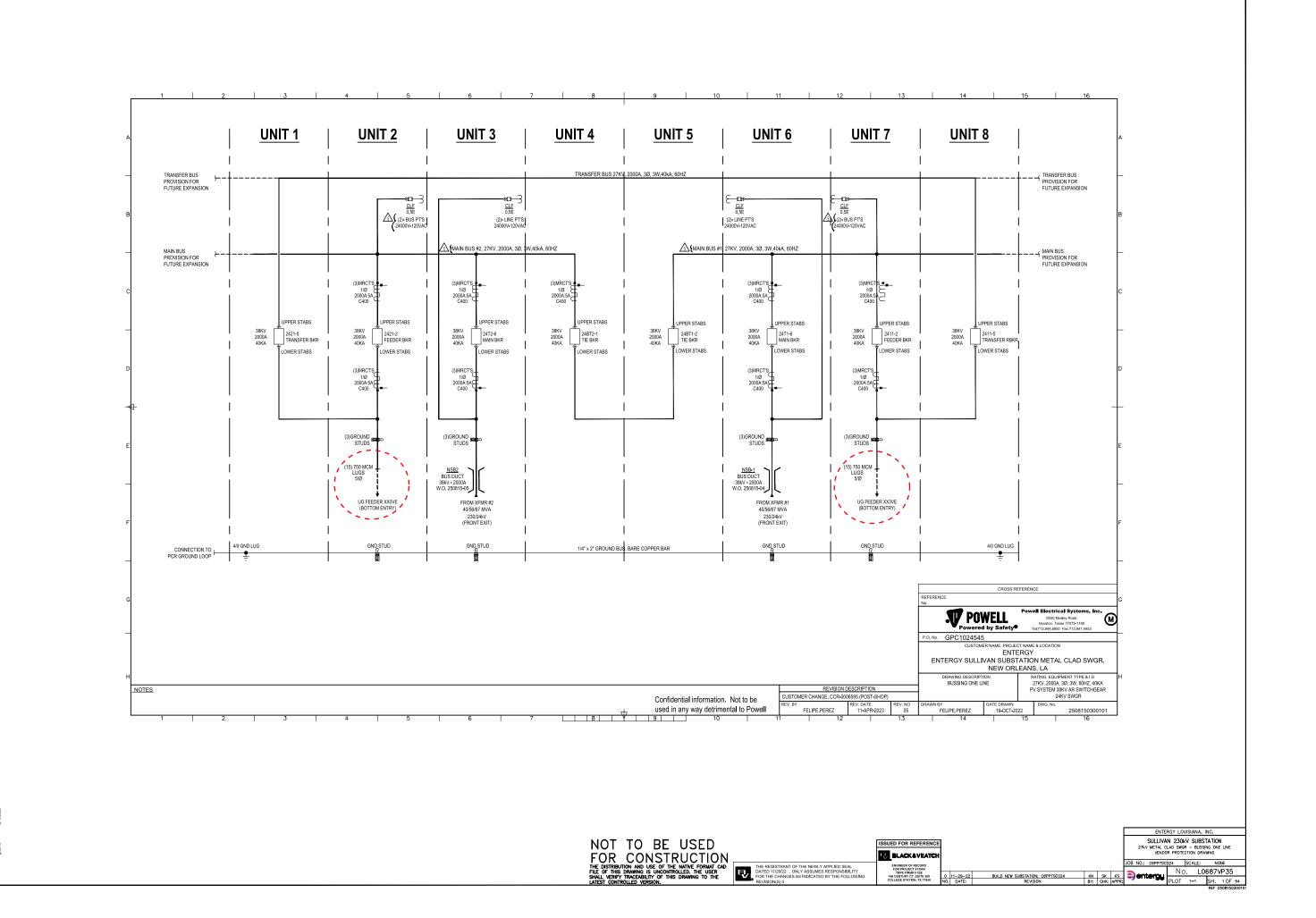


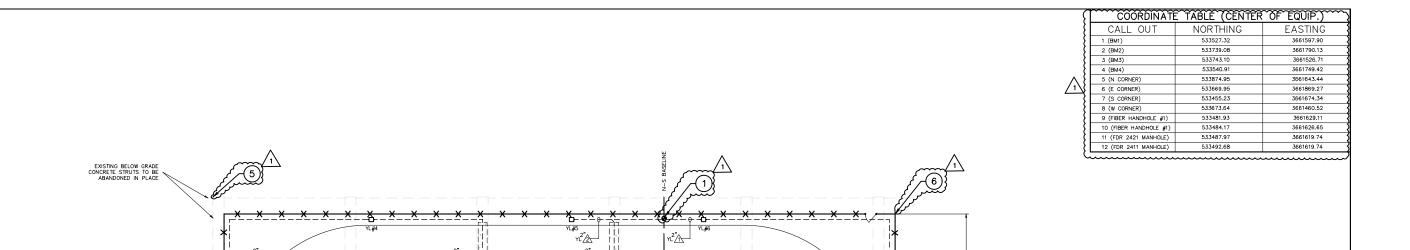












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FIBER 2

FIBER 2

## CONSTRUCTION NOTES:

1. FIELD TO INSTALL ALL TRANSITIONS FROM BELOW GRADE SCH 40 PVC TO ABOVE GRADE FLEX AS CLOSE AS POSSIBLE TO FINAL GRADE (OR TOP OF FOUNDATION). 2. FIELD TO INSTALL LARGE RADIUS 45' AND 90' ELBOW CONNECTORS ALONG FEEDER CONDUIT RUNS TO FACILITATE CABLE PULLING.

## LEGEND:

<del></del>	PERIMETER FENCE
	PVC SCH. 40 CONDUIT
	30"x15" PEDESTRIAN RATED TRENCH
	30"x16" HS20 DRIVE RATED TRENCH
<u> </u>	3" CONCRETE ENCASEMENT
	3" CONCRETE ENCASEMENT - REINFORCED
	6" CONCRETE ENCASEMENT - REINFORCED (DUCT BANK)
•	TRAFFIC BOLLARD - ENTERGY STD SEFD02A0
<b>A</b>	CHANTITY OF NOTED CONDUIT

## NOTES:

- INSTALL (1) NYLON PULL STRING PER EACH CONDUIT RUN. NEATLY COIL 3'-0" LONG OF PULL WIRE AT BOTH ENDS OF CONDUIT. CONDUIT ENDS SHALL BE REAMED AFTER CUTTING.
- CONDUIT SHALL BE CONCRETE ENCASED UNDER ROADWAYS AS INDICATED PER ENTERGY STANDARD SLO205, AND STANDARD DRAWINGS SMCD01A0-SMCD04A0.
- MINIMUM CONDUIT BURIAL DEPTH IS 18" BELOW FINISHED GRADE TO TOP OF CONDUIT (PRIOR TO INSTALLATION OF 6" CRUSHED ROCK).
- IN-GROUND CONDUITS SHALL BE STUBBED UP 6" ABOVE FINISHED GRADE (TOP OF 6" CRUSHED ROCK).
- 5. FOR CONDUIT DETAILS SEE STANDARD DRAWING SMCDD1A0-SMCD04A0, SMFD09A0. ALL PVC CONDUIT SHALL BE PURCHASED AND INSTALLED PER ENTERGY
- STANDARD NUMBER SL0205.
- ALL SPARE CONDUITS TO BE CAPPED (NOT GLUED).
- 8. NEW CONDUIT ROUTINGS ARE SHOWN DIAGRAMMATICALLY, IF CONDITIONS DICTATE, CONTRACTOR MAY CHANGE ROUTING WITH ENGINEERS APPROVAL
- ADSS FIBER CABLE TO BE RUN INSIDE 1.5" HDPE ORANGE INNER DUCT WHEN RUN IN CONDUIT, CABLE TRENCH SECTIONS AND IN CABLE TRAYS INSIDE THE CONTROL ENCLOSURE.
- 10. SEE DETAIL 1, DWG. LO687C01 FOR REINFORCED UNDERGROUND FEEDER DUCT BANK DETAIL.
- SEE DETAIL 2, DWG. L0687C01 FOR ADSS REINFORCED CONDUIT ENCASEMENT DETAIL.
- SEE DETAIL 3, DWG. L0687C01 FOR TYPICAL REINFORCED CONDUIT ENCASEMENT DETAIL.
- 13. SEE DETAIL 4, DWG. LO687C01 FOR MANHOLE CONDUIT TERMINATION ARRANGEMENT DETAIL. REFERENCE DRAWINGS:

KEFEKENCE DRAWINGS:	
ELECTRICAL ARRANGEMENT	L0687
PRECAST CABLE TRENCH LAYOUT	
REINFORCED DUCT BANK CONDUIT DETAILS	
FOUNDATION PLAN	L0687
PILING PLAN	L0687
STANDARD DRAWING, PVC CONDUIT DETAILS 1-5	SMCDO
STANDARD DRAWING, PVC CONDUIT, PULL-BOX, TROUGH & DUCTBANK	SMCDO
STANDARD DRAWING, TYPICAL FIBER INSTALLATIONS	SMCDO
STANDARD DRAWING, TYPICAL CABLE TROUGH CONDUIT DETAILS	SMCDC
·	



ISSUED FOR CONSTRUCTION BLACK & VEATCH

SULLIVAN 230kV SUBSTATION

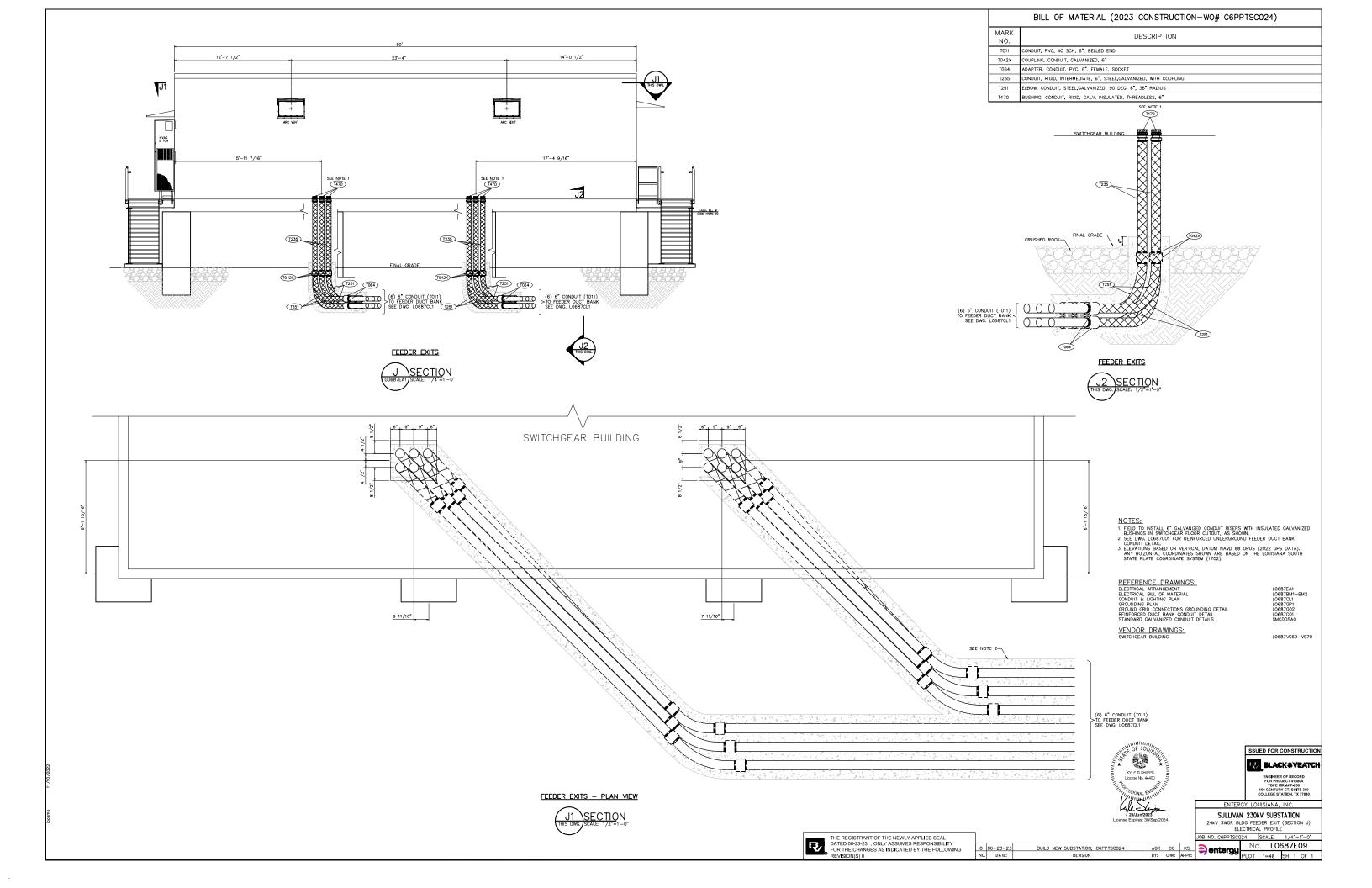
1 05-26-23 CONDUIT & INFORMATION UPDATES; C6PPTSC024 AGR IS KS BUILD NEW SUBSTATION; C6PPTSC024
REVISION

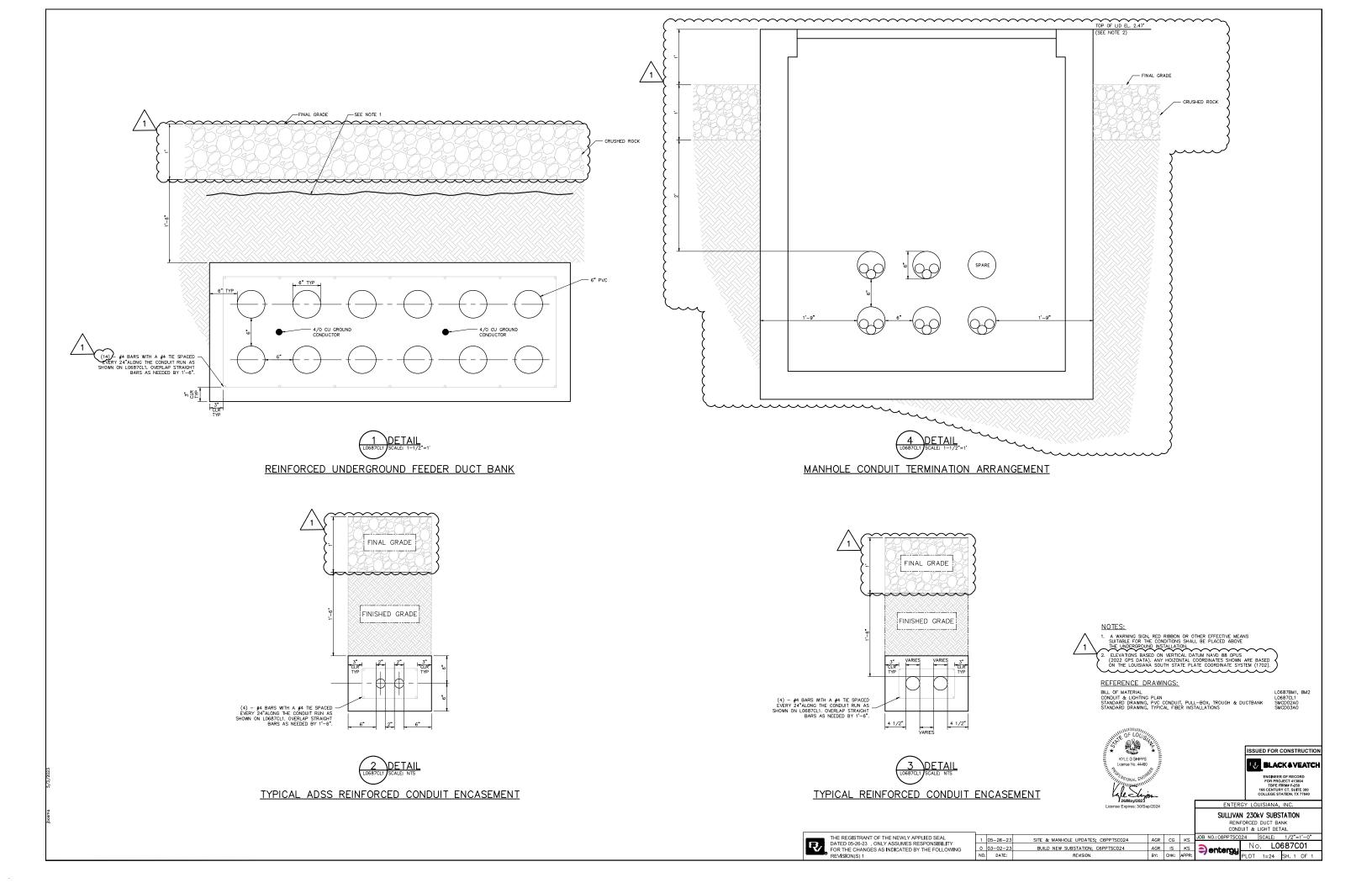
No. **L0687CL1** AGR IS KS OF THE PRINCE SHAPE: NO. L068/CL1

PLOT 1=240 SH. 1 OF 1

THE REGISTRANT OF THE NEWLY APPLIED SEAL DATED 05-26-23 , ONLY ASSUMES RESPONSIBILITY OF THE CHANGES AS INDICATED BY THE FOLLOWING REVISION(S) 1

0 03-02-23 NO. DATE:























The above revisions shall be incorporated in and take precedence over any conflicting part of the original proposal documents. This addendum is hereby officially made a part of the referenced proposal.
Receipt of this addendum shall be acknowledged by inserting its number and date in the space provided in the Form of Proposal.
This addendum consists of one hundred and twenty nine (129) pages.
*** END OF ADDENDUM ***