
City of Lima, Ohio
River Structure Three-Phase Power, Contract 58

ADDENDUM 1

August 19, 2024

Planholders on the City of Lima, Ohio; River Structure Three-Phase Power, Contract 56, are hereby notified of the following amendments to the Contract Documents. This Addendum is hereby made a part of the Contract Documents.

SPECIFICATIONS

Page C-111-1, Advertisement for Bids

In the fourth line of the first paragraph, delete “August 28, 2024” and substitute “September 4, 2024.”

Section C-410 Bid Form for Construction Contracts

Delete this Section in its entirety, and replace it with that attached to this Addendum.

Section 01021 Allowances

Delete this Section in its entirety, and replace it with that attached to this Addendum.

DRAWINGS

Sheet No. E-1.1, 38 of 48

Delete Sheet E-1.1, 38 of 48 in its entirety, and substitute the new sheet attached to this Addendum.

Sheet No. E-2.1, 39 of 48

Delete Sheet E-2.1, 39 of 48 in its entirety, and substitute the new sheet attached to this Addendum.

Sheet No. E-3.1, 40 of 48

Delete Sheet E-3.1, 40 of 48 in its entirety, and substitute the new sheet attached to this Addendum.

Sheet No. E-4.1, 41 of 48

Delete Sheet E-4.1, 41 of 48 in its entirety, and substitute the new sheet attached to this Addendum.

Sheet No. E-5.1, 42 of 48

Delete Sheet E-5.1, 42 of 48 in its entirety, and substitute the new sheet attached to this Addendum.

Attachments:	Section C-410 Bid Form for Construction Contract Section 01021 Allowances Sheet Nos. E-1.1; E-2.1; E-3.1; E-4.1; E-5.1
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RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED ON PAGE C-410-1 OF THE BID.

BID FORM

City of Lima, Ohio

River Structure Three-Phase Power, Contract 58

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Lima Municipal Center
50 Town Square
Lima, Ohio 45801

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2)

reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder’s safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER’S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;

2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the price(s) included on C-410-4 and C-410-5. Bidder shall fill in all blanks on the Bid Form.
- A. The name or make of any piece of equipment or material of construction specified in the Contract Documents and identified on the following Base Bid List shall be utilized in determining the base bid price.
 - B. Where two or more Equipment or Product Manufacturers are named, or the words “Or Equal” are listed in the Contract Documents and not included in the Base Bid List, Bidders may utilize any of the named or follow the “Or Equal” process outlined in the Contract Documents.
 - C. The Bidder shall identify their selected Equipment or Product Manufacturer on the Base Bid List as follows:

Base Bid List	
Specification Section	Manufacturers Select One by Circling
11334	Grande

- D. The Owner will have the right to select the Equipment or Product Manufacturer in the Base Bid List if Bidder fails to make a selection where required.
- 5.02 Bidder shall provide pricing for the Mandatory Alternates below.
- A. Where required, Bidder shall make a selection for the “Add” or “Deduct” by circling one, indicating that the price is to be Added to the Base Bid or Deducted from the Base Bid. If the Bidder fails to make a selection the default will be a Deduction.
 - B. A Mandatory Alternate is required for each Equipment or Product Manufacturer listed.

Mandatory Alternate			
Specification Section	Manufacturers Shall not be the same as Base Bid Provide pricing for Mandatory Alternate for all listed manufacturers	Circle One Assumed to be a deduct unless one is circled	Dollar Amount
11335	GNA – Collett	Add / Deduct	
11335	GNA – Heindel	Add / Deduct	
11335	GNA – McDonel	Add / Deduct	
11335	GNA – Central	Add / Deduct	
11335	GNA – Lovers	Add / Deduct	

ARTICLE 6 – TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete within 365 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 400 calendar days after the date when the Contract Times commence to run.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security;
- B. Evidence of authority to do business in the state of the Project; and
- C. Required Bidder Qualification Statement with supporting data; and

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

UNIT PRICE BID

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor’s overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

Item No.	Description	Estimated Amount	Unit	Unit Cost in Numbers		Unit Price in Words	Total Estimated Cost of Item	
1	River Structures Improvements	1	LS					
	Alternate Bid Items							
2	Collett Fine Screen	1	LS					
3	Heindel Fine Screen	1	LS					
4	McDonel Fine Screen	1	LS					
5	Central Fine Screen	1	LS					
6	Lovers Fine Screen	1	LS					
7	SCADA Integration and Programming Allowance	1	LS	20,000	00			
				25,000	00			
	Allowances							
8	Electrical Line Extension Allowance	1	LS	100,000	00			
9	Gas Service Allowance	1	LS	15,000	00			
Total Estimated Construction Cost Base Bid, including Allowance (Not including Alternates):								

(Addendum 1, Issued August 19, 2024)

002-8158.001
08/2024

Addendum 1 – Issued for Bid
Lima, OH
River Structure Three-Phase Power, Contract 58

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:
[Signature] _____

[Printed name] _____
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:
[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices: _____

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's License No.: _____
(where applicable)

PERSONAL PROPERTY TAX AFFIDAVIT

STATE OF OHIO)
)ss.
COUNTY OF _____)

_____, being first duly sworn, deposes and says as follows: answering whichever is applicable by placing an "X" before items 1 or 2.

- 1. () We are not charged with any delinquent personal property taxes on the general tax list of personal property in _____ County, Ohio.
- 2. () We are charged with delinquent personal property taxes on the general tax list of _____ County, Ohio including unpaid penalties and interest in the amount of \$_____.

Bidder

By: _____

Title: _____

Sworn and subscribed before me this _____ day of _____ 20 ____.

Notary Public in and for

_____ State

My Commission Expires:

_____ 20____

**SECTION 01021
ALLOWANCES**

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes the allowances which are to be furnished by the Contractor per Paragraph GC-13.02 of the General Conditions.
- B. The Contractor shall include in the Contract Price all allowances stated in the Contract Documents. These allowances shall cover the net cost of the materials and equipment delivered and unloaded at the Site, and all applicable taxes.
- C. The Contractor's handling costs on the Site, labor installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Price and not in the allowance.
- D. The Contractor shall cause the Work covered by these allowances to be performed for such amounts and by such persons as the Engineer may direct, but he will not be required to employ persons against whom he makes a reasonable objection.
- E. If the cost, when determined, is more than or less than the allowance, the Contract Price shall be adjusted accordingly by Change Order.

1.02 SUBMITTALS

- A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:
 - 1. Shop Drawings for Review:
 - a. The Contractor shall prepare and submit proposals for the Owner to select the items included in allowance.
 - 2. Information for the Record:
 - a. Operation and maintenance manuals as may be required for items included in allowance.
 - b. Invoices and delivery slips, for items provided under the allowance, shall be submitted to the resident project representative or Engineer.

1.03 PRODUCT HANDLING

- A. The Contractor shall provide all labor, material, and equipment to insure the safe delivery, handling, and storage of goods until acceptance by Owner and Engineer.

1.04 GUARANTEE

- A. The Contractor shall provide manufacturer's warranties to the Owner for all goods provided.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.01 COORDINATION

- A. The Contractor shall advise Owner and Engineer of, and include in the schedule, the timing of the selection, Shop Drawing review and procurement of the goods or services required in the allowance.
- B. The Contractor shall be responsible for the coordination, of all allowance item(s) provided, with the remainder of the contract work.

3.02 ERECTION, INSTALLATION, AND APPLICATION

- A. The Contractor shall assemble, install, or apply all goods as may be required to complete the requirements of the allowance.

3.03 PROTECTION

- A. The Contractor shall examine all goods on delivery. All damaged or defective goods shall be returned to the manufacturer for replacement.

PART 4 SPECIAL PROVISIONS

4.01 LIST OF ALLOWANCES

	Allowance
A. SCADA Integration and Programming	\$ 20,000.00
	\$ 25,000.00
B. Electrical Line Extension Allowance	\$100,000.00
C. Gas Service Allowance	\$ 15,000.00

(Addendum 1, Issued August 19, 2024)

4.02 DEFINITION OF ALLOWANCE

- A. SCADA Integration and Programming:
 - 1. The SCADA Integration and Programming includes the services performed under Specification Section 16916.
- B. Electrical Line Extension Allowance: **(Addendum 1, Issued August 19, 2024)**
 - 1. Included under the electrical line extension allowance, are the services performed by AEP to extend the three-phase power to the river structures.
 - 2. Also included under this allowance, are any permit fees paid by the Contractor to AEP.
 - 3. Electrical Work after the meter is to be included in Item 1 of the Bid.
 - 4. The allowance is for costs paid directly to AEP. Other costs to complete the Work shall be included under Item 1 of the Bid.

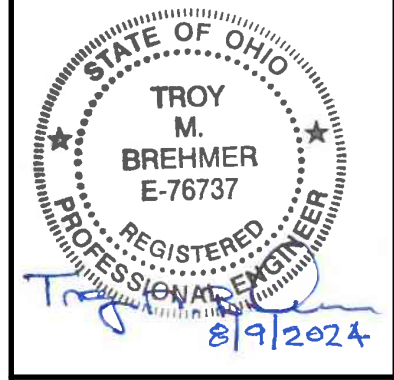
C. Gas Service Allowance:

1. Included under the gas service allowance, are the services performed by Enbridge Gas to replace the gas service, including the meter, piping before the meter and meter setting.
2. Permit fees paid by the Contractor to Enbridge Gas are included under this allowance.
3. Gas piping after the meter setting is to be included under Item 1 of the Bid.
4. The allowance is for costs paid directly to Enbridge Gas. Other costs to complete the Work shall be included under Item 1 of the Bid.

(Addendum 1, Issued August 19, 2024)

END OF SECTION

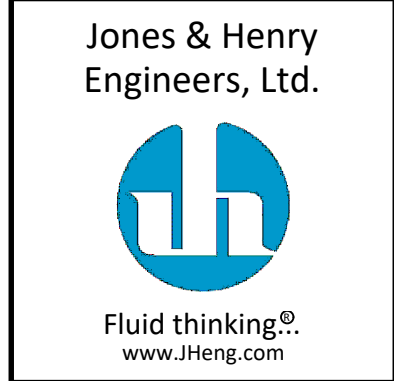
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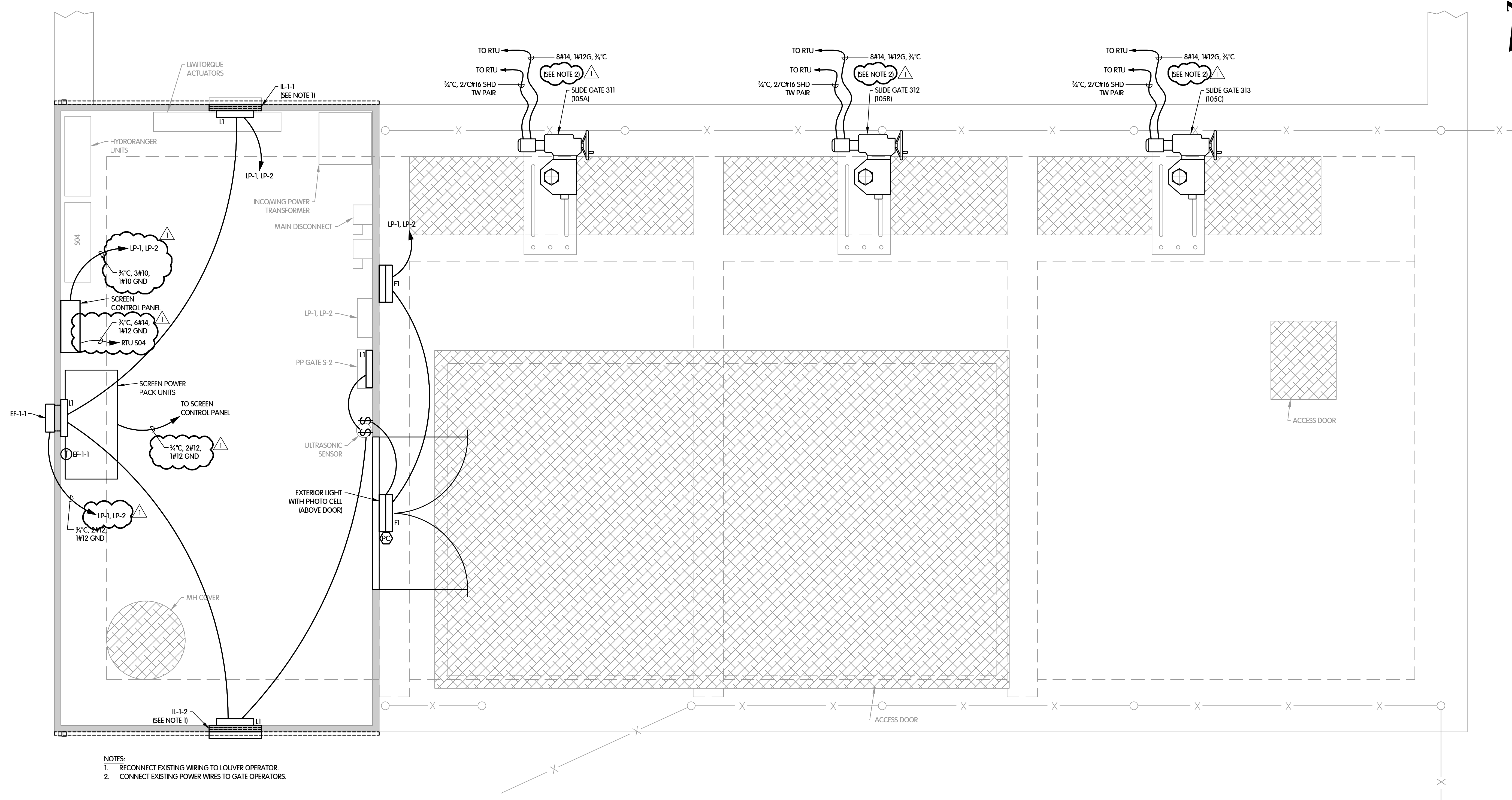
**COLLETT ST. CONTROL STRUCTURE
ELECTRICAL
PLAN AND SCHEDULE**

CITY OF LIMA, OHIO
RIVER STRUCTURE - THREE-PHASE POWER - CONTRACT 58

DESIGNED BY: TMB
DRAWN BY: RGW
CHECKED BY: []
DATE: 8/19/24
REVISIONS AFTER ISSUED FOR BID: 1
ADDENDUM 1



JOB NO. 2-8158.001
SCALE 1/2"=1'-0"
THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE
DESIGNED: TMB DRAWN: RGW CHECKED: []
STATUS: ISSUED FOR BID
DATE: AUGUST 2024
SHEET NO. E-1.1
38 OF 48



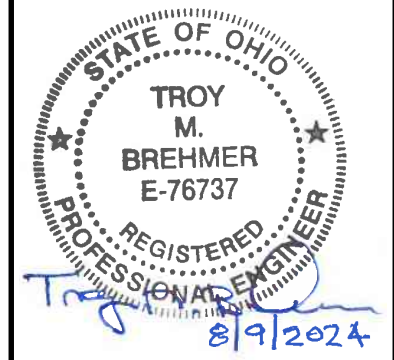
- NOTES:**
1. RECONNECT EXISTING WIRING TO LOUVER OPERATOR.
 2. CONNECT EXISTING POWER WIRES TO GATE OPERATORS.

COLLETT ST. CONTROL STRUCTURE PLAN
1/2"=1'-0"

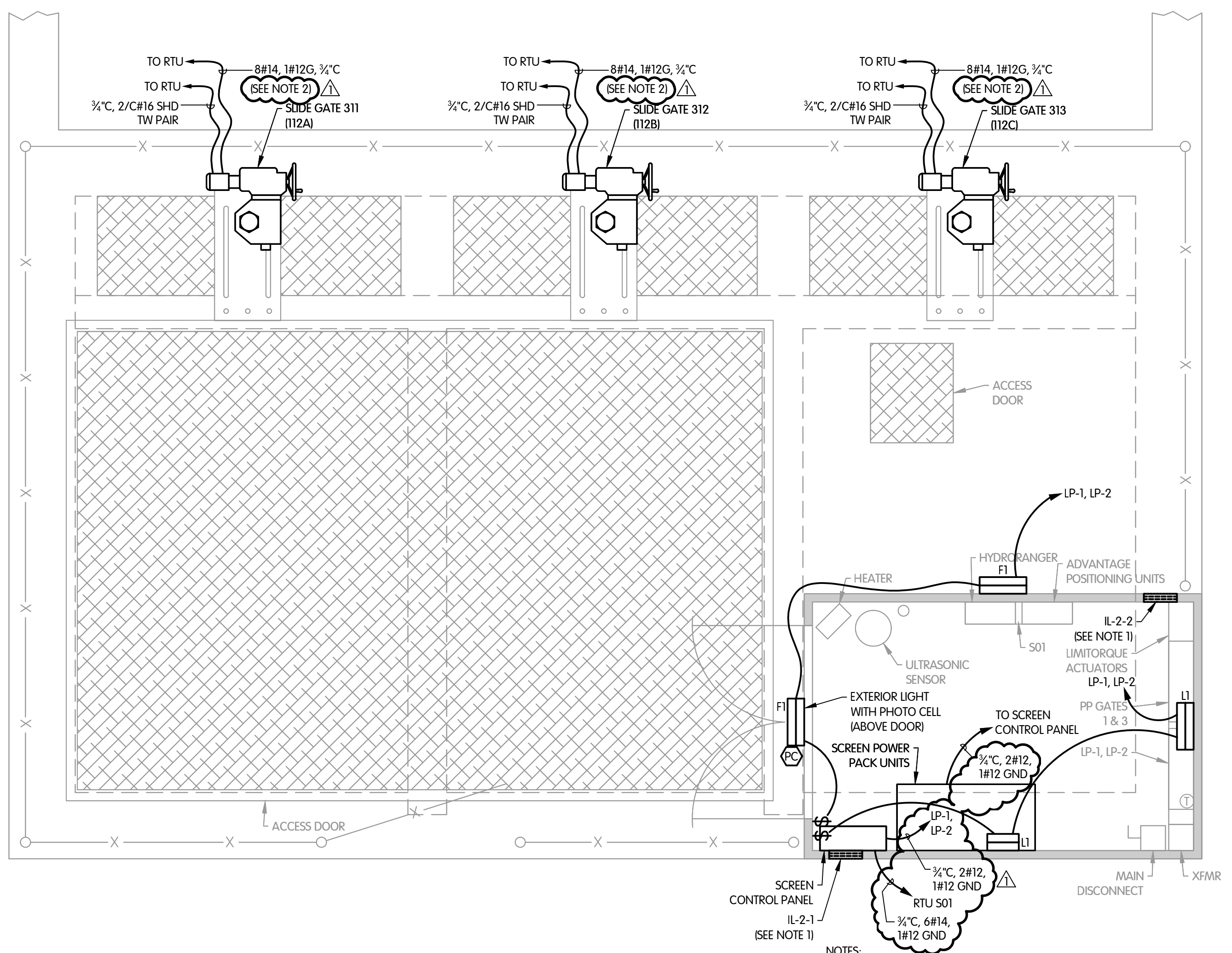
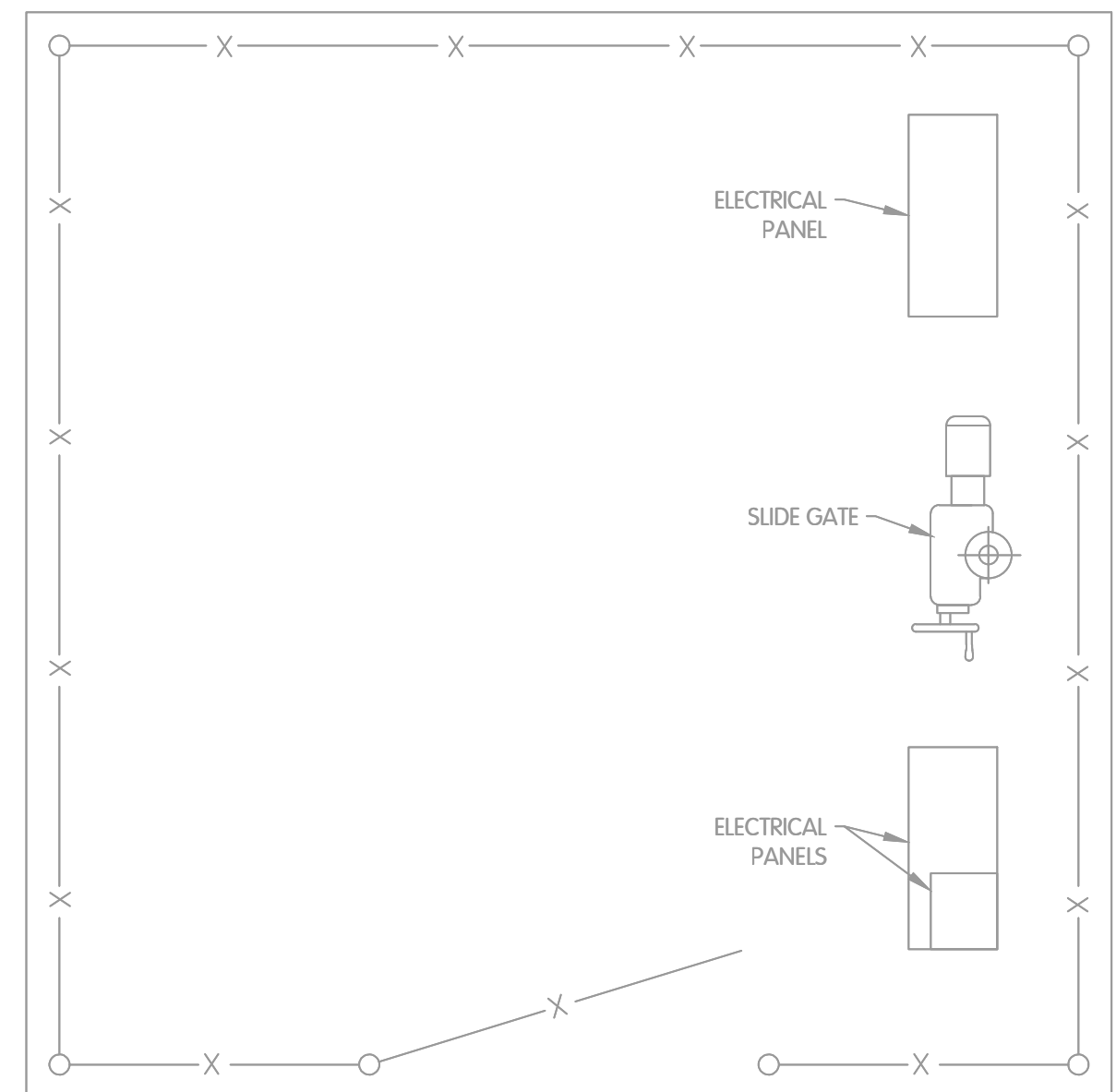
SHEET KEY NOTES:
Ⓐ CONTRACTOR SHALL INSTALL NEW WIRES IN A 3/4" C TO FEED THE LIGHT FIXTURES.

Lighting Panel-LP-1, LP-2									
PANELBOARD DESIGNATION / TAG: "LP-1, LP-2"		LOCATION: Collett Structure		Options:		Options:			
ELECTRICAL CHARACTERISTICS: 120/240v - 1ph - 3w		FEEDER SIZE: Feeding		SUB-FEED LUGS		MULTIPLE SECTIONS			
PANELBOARD CONSTRUCTION: CIRCUIT BREAKER		FED FROM: 480V PANEL THROUGH XFMR		SURFACE MOUNTING		INTERNAL SPD			
AMP MAIN LUGS: 42k		A.I.C. (FULLY RATED):		FEED-THRU LUGS		BOLT-ON BREAKERS			
100 AMP MAIN BREAKER/SWITCH		100 % NEUTRAL (SOLID)		NEMA 1 ENCLOSURE		SERVICE ENTRANCE RATED UP TO 500 kcmil MAIN TERMINAL LUGS			
24 AVAILABLE CIRCUIT SPACES		TOP INCOMING FEED		MISC.		100% RATING			
Ⓣ After the circuit no. indicates handle locking device.									
NO.	LOAD DESCRIPTION	VOLT AMPS	POLE	WIRE SIZE	CIRCUIT	VOLT AMPS		LOAD DESCRIPTION	NO.
1	HNESCREENS CONTROL PANEL	1632	2	20	12	A	B	INT. LIGHTING	4
3	CONTROL STRUCTURE PANEL S04	500	1	20	20	1	350	SPARE	6
5	HYDROMANAGER	500	1	20	20	1	0	UNIT HEATER	8
7	UNIT HEATER	500	2	20	20	2	500	UNIT HEATER	10
9	UNIT HEATER	500	2	20	20	2	500	UNIT HEATER	12
11	EXT. LIGHTING	70	1	20	12	1	500	EXHAUST FAN EF-4-1	14
13	EXT. LIGHTING	70	1	20	12	1	500	SPACE	16
15	SPACE	0	1	20	20	1	500	SPACE	18
17	SPACE	0	1	20	20	1	500	SPACE	20
SUB TOTAL VA		2,702	2,632			A	B	SUB TOTAL VA	
PHASE TOTALS		A	B	Circuit wire size(s) indicated are minimum allowable. Refer to wire sizing Table(s) and one-line diagram(s) on plan(s) additional information.		362		CONNECTED AMPS (Balance)	
TOTAL PHASE VA		4,702	3,982					PHASE DEMAND AMPS (Balance)	
TOTAL PHASE AMPS		39.2	33.2					TOTAL DEMAND KVA	
TOTAL CONNECTED KVA		8.684							

TOL-8158001-E05-E-1.1 COLLETT PLAN
8/19/2024 10:19 AM - RWORLEY
8/19/2024 11:31 AM



HEINDEL ST. CONTROL STRUCTURE ELECTRICAL PLAN
 CITY OF LIMA, OHIO
 RIVER STRUCTURE - THREE-PHASE POWER - CONTRACT 58



- NOTES:
- RECONNECT EXISTING WIRING TO LOUVER OPERATOR.
 - CONNECT EXISTING POWER WIRES TO GATE OPERATORS.

HEINDEL ST. CONTROL STRUCTURE PLAN
1/2"=1'-0"

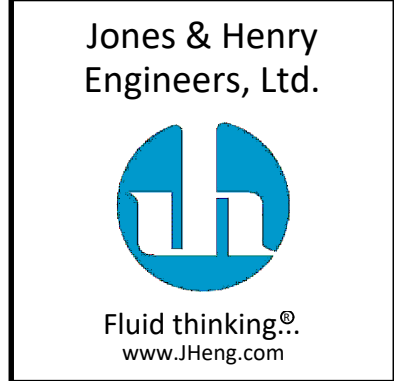
Lighting Panel-LP-1, LP-2											
PANELBOARD DESIGNATION / TAG:		"LP-1, LP-2"		LOCATION:		Collett Structure					
ELECTRICAL CHARACTERISTICS:		120/240v, 1ph, 3w		FEEDER SIZE:		Existing					
PANELBOARD CONSTRUCTION:		CIRCUIT BREAKER		FED FROM:		480V PANEL THROUGH XFMR					
AMP MAIN LUGS		42k A.I.C. (FULLY RATED)		SURFACE MOUNTING		SUB-FEED LUGS					
AMP MAIN BREAKER/SWITCH		100 % NEUTRAL (SOLID)		NEMA 1 ENCLOSURE		INTERNAL SPD					
AVAILABLE CIRCUIT SPACES		TOP INCOMING FEED		MISC.		BOLT-ON BREAKERS					
						UP TO 500 kcmil MAIN TERMINAL LUGS					
						100% RATING					
Options: SUB-FEED LUGS MULTIPLE SECTIONS											
Options: SUB-FEED BREAKER INTERNAL SPD											
Options: FEED-THRU LUGS BREAKERS											
Options: SERVICE ENTRANCE RATED UP TO 500 kcmil MAIN TERMINAL LUGS											
Options: 100% RATING											
*L: After the circuit no. indicates handle locking device.											
CIRCUIT	LOAD DESCRIPTION	VOLT AMPS		POLE	AMP	WIRE SIZE	CIRCUIT		LOAD DESCRIPTION	CIRCUIT	
		A	B				1	2			A
1	LIT CONTROL PANEL	500		1	20		10	12	20	500	2
2	CONTROL STRUCTURE PANEL S04		500	1	20						4
3	EXT. LIGHT FIXTURES	20		1	20	#12				1160	6
4	SPARE	0		1	20						8
5	SPARE	0		1	20						10
6	SPARE	0		1	20						12
7	SPARE	0		1	20						14
8	SPARE	0		1	20						16
9	SPARE	0		1	20						18
SUB TOTAL VA		570	500							2,160	1,500
PHASE TOTALS		A	B	Circuit wire size(s) indicated are							
TOTAL PHASE VA		2,790	2,000	minimum allowable. Refer to wire		19.7		CONNECTED AMPS (Balanced)			
TOTAL PHASE AMPS		22.8	16.7	sizing Table(s) and one-line diagram(s)				PHASE DEMAND AMPS (Balanced)			
TOTAL CONNECTED KVA		4.73		on plan(s) additional information				TOTAL DEMAND KVA			

LIGHT FIXTURE SCHEDULE (TYPICAL FOR ALL STRUCTURES)						
TYPE	DESCRIPTION	CATALOG	MANUFACTURER	LOCATION	LUMENS	WATTAGE
R	DSXW LED WITH (2) 10 LEDs, TYPE T25 OPTIC, 4000K WITH HOUSE-SIDE SHELDS	DSXW LED 20C 530 40K T25	LITHONIA LIGHTING	EXTERIOR	3377	35
I	TWH LED, ALO PERFORMANCE PACKAGE, 4000K CCT, TYPE 3 MEDIUM	TWH LED ALO 40K T3M	LITHONIA LIGHTING	INTERIOR	3819	78

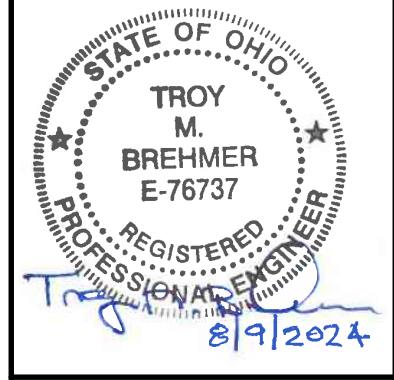
KEY NOTE:
 (A) CONTRACTOR SHALL INSTALL NEW WIRES IN A 3/2" TO FEED THE LIGHT FIXTURES.

TOL-8158001-EG-2-E-2.1 HEINDEL PLAN
 8/19/2024 10:35 AM - RWORLEY
 8/19/2024 11:31 AM

TMB BY
 REVISIONS AFTER ISSUED FOR BID
 #/M/D/24 DATE
 1 NO.



JOB NO. 2-8158.001
 SCALE 3/8"=1'-0"
 THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE
 DESIGNED TMB DRAWN RGW CHECKED
 STATUS: ISSUED FOR BID
 DATE: AUGUST 2024
 SHEET NO. E-2.1
 39 OF 48



MCDONEL ST. CONTROL STRUCTURE
ELECTRICAL
PLAN, ONELINE AND SCHEDULES

CITY OF LIMA, OHIO
RIVER STRUCTURE - THREE-PHASE POWER - CONTRACT 58

REVISIONS AFTER ISSUED FOR BID

NO. DATE BY

1 8/19/24 JTB

2 8/19/24 JTB

3 8/19/24 JTB

4 8/19/24 JTB

5 8/19/24 JTB

6 8/19/24 JTB

7 8/19/24 JTB

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15 8/19/24 JTB

16 8/19/24 JTB

17 8/19/24 JTB

18 8/19/24 JTB

19 8/19/24 JTB

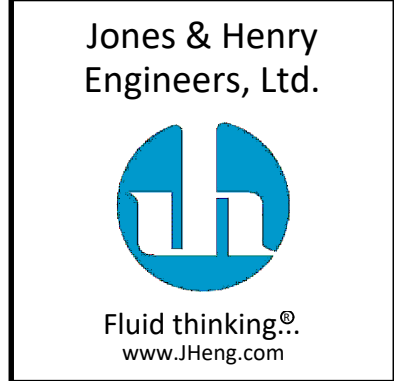
20 8/19/24 JTB

21 8/19/24 JTB

22 8/19/24 JTB

23 8/19/24 JTB

24 8/19/24 JTB



JOB NO. 2-8158.001

SCALE AS NOTED

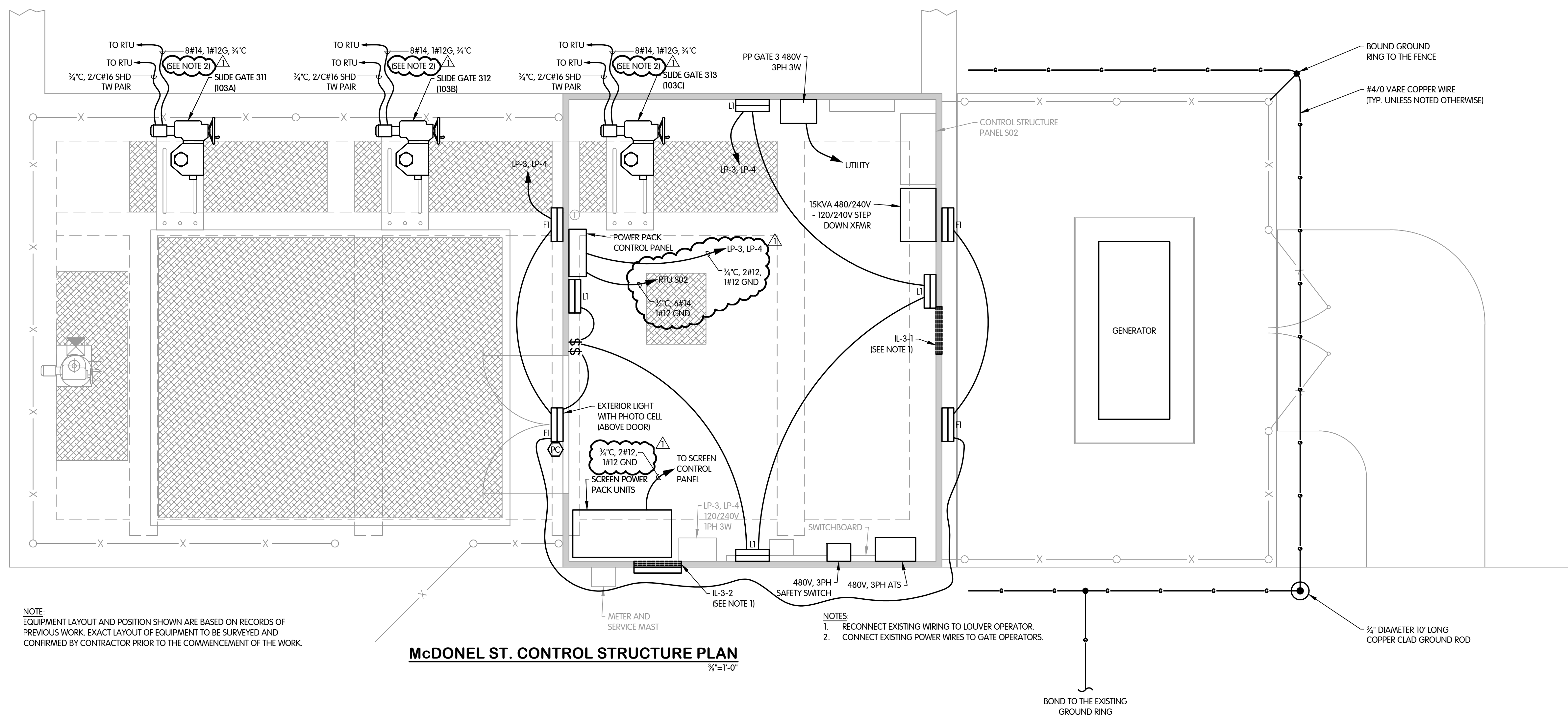
DESIGNED TMB DRAWN RGW CHECKED

STATUS ISSUED FOR BID

DATE AUGUST 2024

SHEET NO. E-3.1

40 OF 48



NOTE:
EQUIPMENT LAYOUT AND POSITION SHOWN ARE BASED ON RECORDS OF PREVIOUS WORK. EXACT LAYOUT OF EQUIPMENT TO BE SURVEYED AND CONFIRMED BY CONTRACTOR PRIOR TO THE COMMENCEMENT OF THE WORK.

McDONEL ST. CONTROL STRUCTURE PLAN
3/8\"/>

NOTES:
1. RECONNECT EXISTING WIRING TO LOUVER OPERATOR.
2. CONNECT EXISTING POWER WIRES TO GATE OPERATORS.

- SHEET KEY NOTES:**
- (A) PROVIDE NEW WIRE AND CONDUIT AS NEEDED TO THE RELOCATED EXISTING EXHAUST FAN.
 - (B) CONTRACTOR SHALL INSTALL NEW WIRES IN A 3/4\"/>
 - (C) REPLACE BREAKER WITH 50A PER NEC TABLE 450.3 B.
 - (D) PROVIDED BY AEP OHIO, REFER TO AEP GUIDE FOR ELECTRIC SERVICE AND METER INSTALLATIONS.

Lighting Panel- LP-3, LP-4

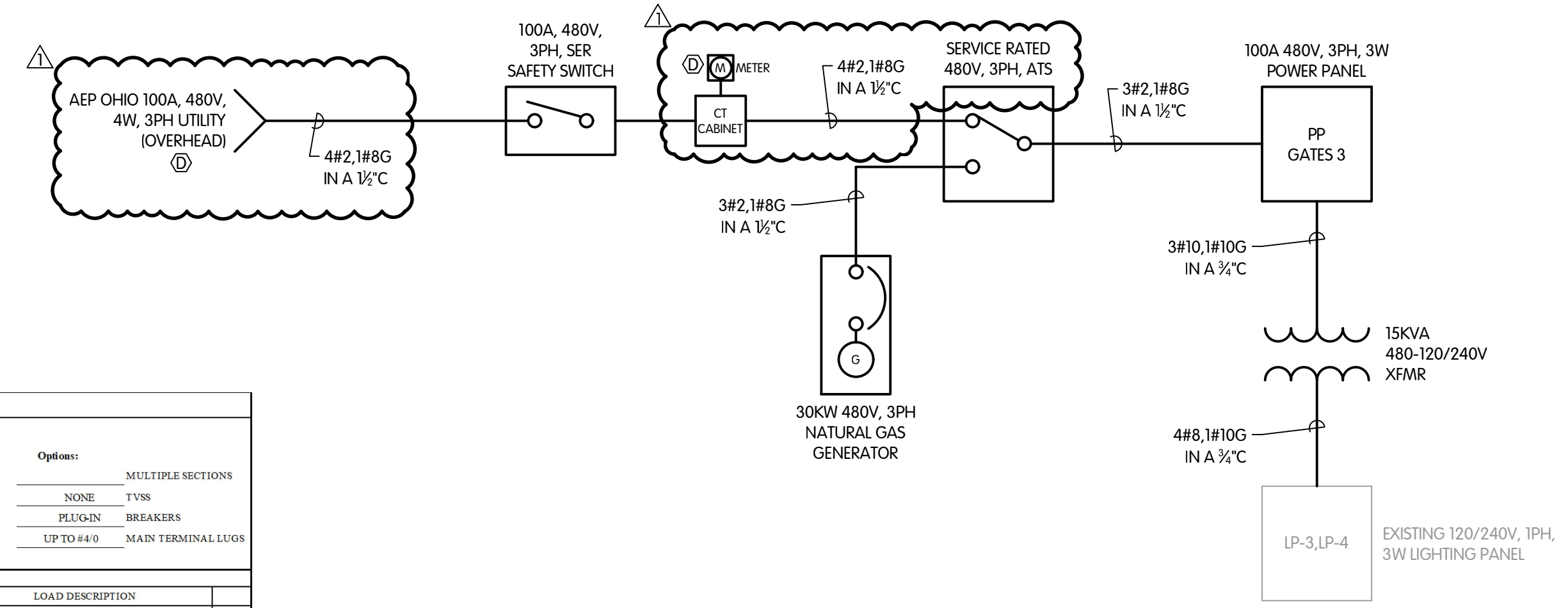
LOAD DESCRIPTION	VOLT AMPS		CIRCUIT	WIRE SIZE	CIRCUIT	VOLT AMPS		LOAD DESCRIPTION
	A	B				A	B	
1 SCREEN CONTROL PANEL	1900	1900	20	12	20	2	2	SCREEN CONTROL PANEL
2 SPACE								EXT. LIGHT FIXTURES
3 UNIT HEATER	500	500	2	20	#12	20	1	UNIT HEATER
4 HYDRORANGERS	500	500	1	20	#12	20	1	HYDRORANGERS
5 SPACE								SPACE
6 SPACE								SPACE
7 SPACE								SPACE
8 SPACE								SPACE
9 SPACE								SPACE
10 SUB TOTAL VA	2,900	2,900				2,900	1,500	
PHASE TOTALS	A	B	Circuit wire size(s) indicated are minimum allowable. Refer to wire sizing Table(s) and one-line diagram(s) on plans for additional information.					CONNECTED AMPS (Balanced)
TOTAL PHASE VA	4,960	3,000						33.2
TOTAL PHASE AMPS	41.3	25.0						PHASE DEMAND AMPS (Balanced)
TOTAL CONNECTED KVA	7.96							TOTAL DEMAND KVA

EXISTING LIGHTING PANEL LP-3, LP-4

PANEL BOARD PP GATES-3

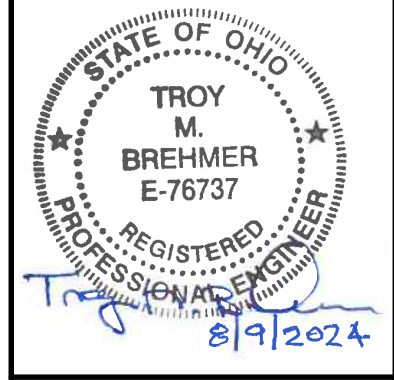
LOAD DESCRIPTION	VOLT AMPS			CIRCUIT	WIRE SIZE	CIRCUIT	VOLT AMPS			LOAD DESCRIPTION
	A	B	C				A	B	C	
1 EXISTING GATE 311 (1-SEP)	832	832		3	25	EthH	EthH	25	3	EXISTING GATE 311 (1-SEP)
2 EXISTING GATE 312 (1-SEP)	832	832	832	3	25	EthH	EthH	25	3	EXISTING GATE 312 (1-SEP)
3 NEW 15KVA XFMR	3400	3400		3	25	#10		30	3	SPARE
4 SPACE				3					3	SPACE
5 SUB TOTAL VA	5,064	5,064	1,664					3,052	3,052	3,052
PHASE TOTALS	A	B	C	Circuit wire size(s) indicated are minimum allowable. Refer to wire sizing Table(s) and one-line diagram(s) on plans for additional information.						CONNECTED AMPS (Balanced)
TOTAL PHASE VA	8,116	8,116	4,716					25.2		PHASE DEMAND AMPS (Balanced)
TOTAL PHASE AMPS	29.3	29.3	17.0							TOTAL DEMAND AMPS
TOTAL CONNECTED KVA	20.98									TOTAL DEMAND KVA

POWER PANEL PP GATES 3



McDONEL ST. CONTROL STRUCTURE EXISTING ONELINE

TOL-8158001-E3-E-3.1 MCDONEL PLAN
8/19/2024 11:00 AM - RWORLEY
8/19/2024 11:31 AM



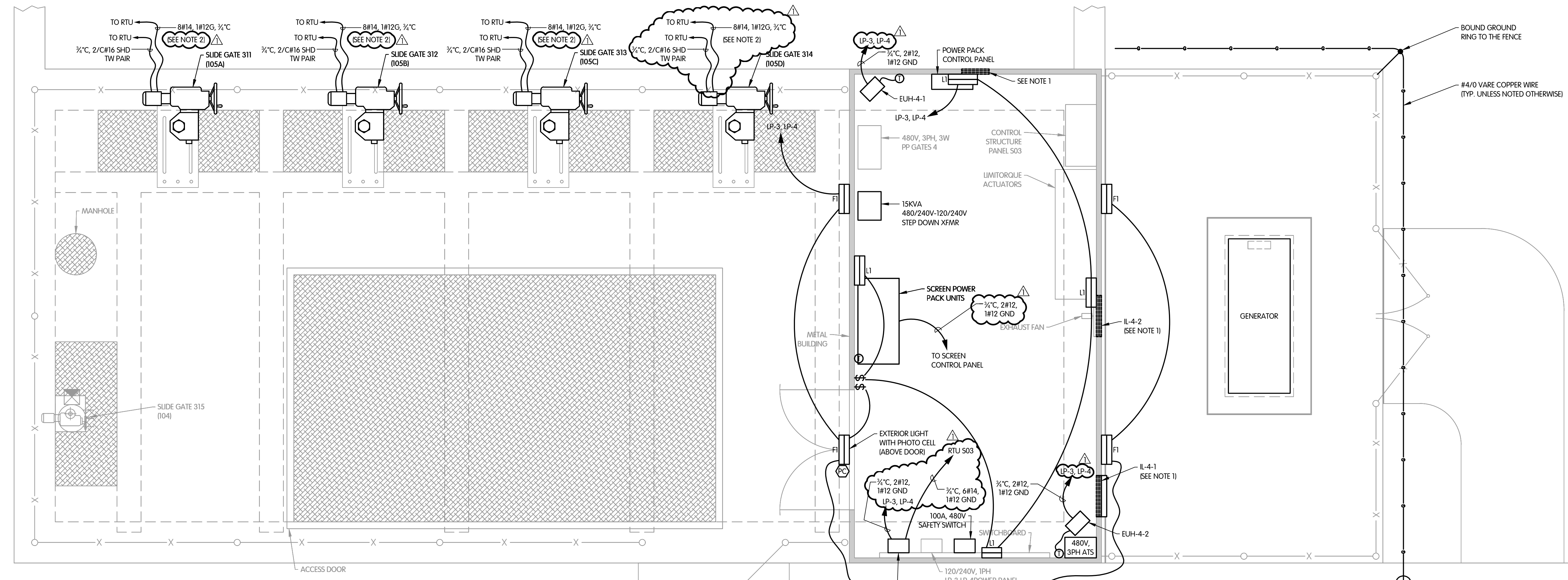
CENTRAL AVE. CONTROL STRUCTURE ELECTRICAL PLAN, ONELINE AND SCHEDULES

RIVER STRUCTURE - THREE-PHASE POWER - CONTRACT 58

REVISED AFTER ISSUED FOR BID

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JOB NO. 2-8158-001 SCALE 3/8"=1'-0" THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE



- NOTES: 1. RECONNECT EXISTING WIRING TO LOUVER OPERATOR. 2. CONNECT EXISTING POWER WIRES TO GATE OPERATORS.

CENTRAL AVE. CONTROL STRUCTURE PLAN 3/8"=1'-0"

- SHEET KEY NOTES: (A) CONTRACTOR SHALL INSTALL NEW WIRES IN A 1/2" C TO FEED THE LIGHT FIXTURES. (B) REPLACE BREAKER WITH 50A PER NEC TABLE 450.3 B. (C) PROVIDED BY AEP OHIO, REFER TO AEP GUIDE FOR ELECTRIC SERVICE AND METER INSTALLATIONS.

Table: Existing Lighting Panel LP-3, LP-4. Includes electrical characteristics, load descriptions, and summary data.

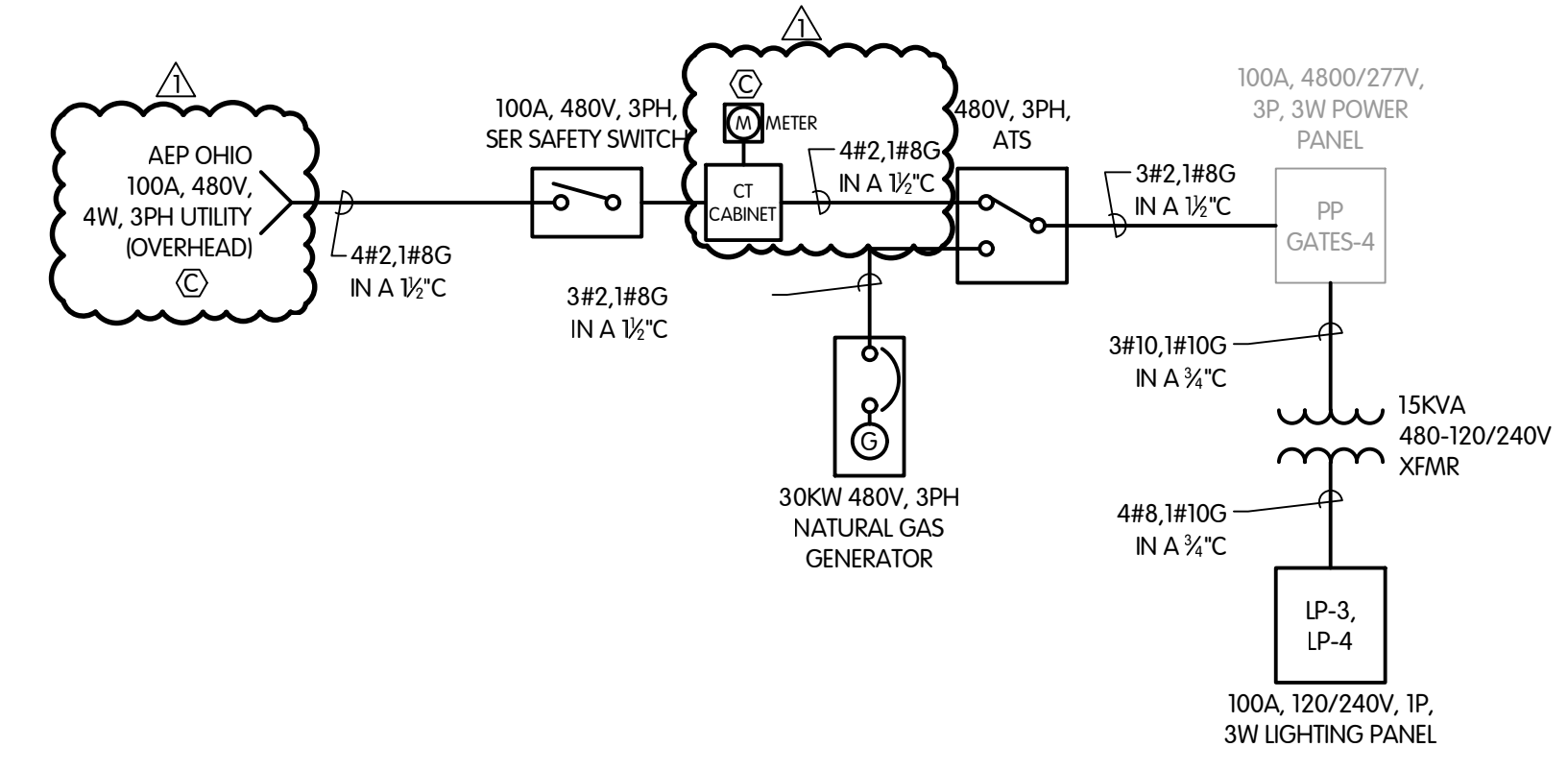
EXISTING LIGHTING PANEL LP-3, LP-4

Table: Existing Power Panel PP GATES 4. Includes electrical characteristics, load descriptions, and summary data.

EXISTING POWER PANEL PP GATES 4

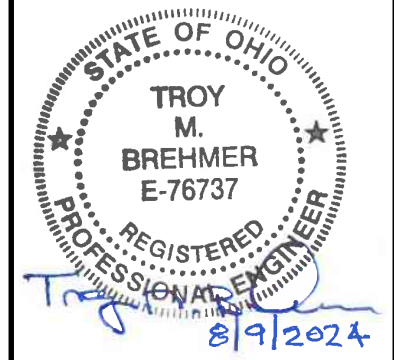


EXISTING POWER PANEL

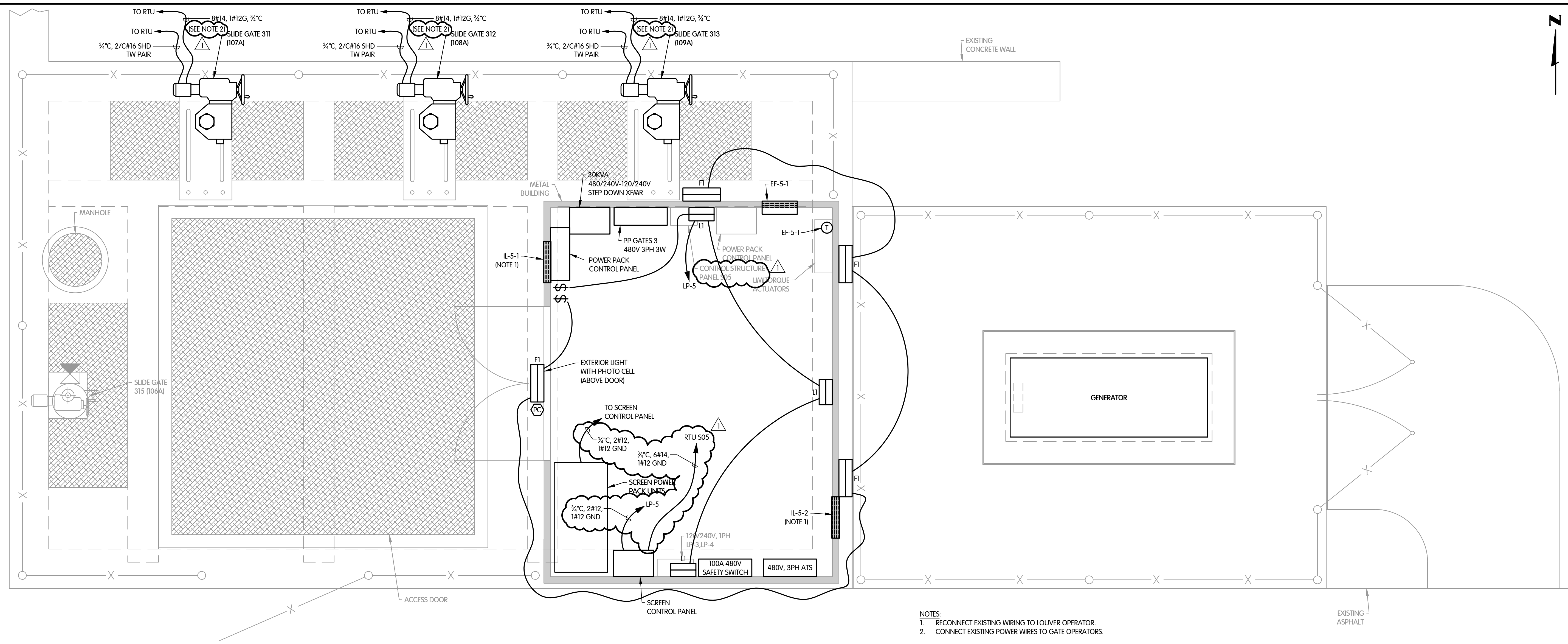


CENTRAL AVE. CONTROL STRUCTURE EXISTING ONELINE

TOL-8158001-E-4-1 CENTRAL PLAN 8/9/2024 11:03 AM - RWORLEY 8/9/2024 11:31 AM



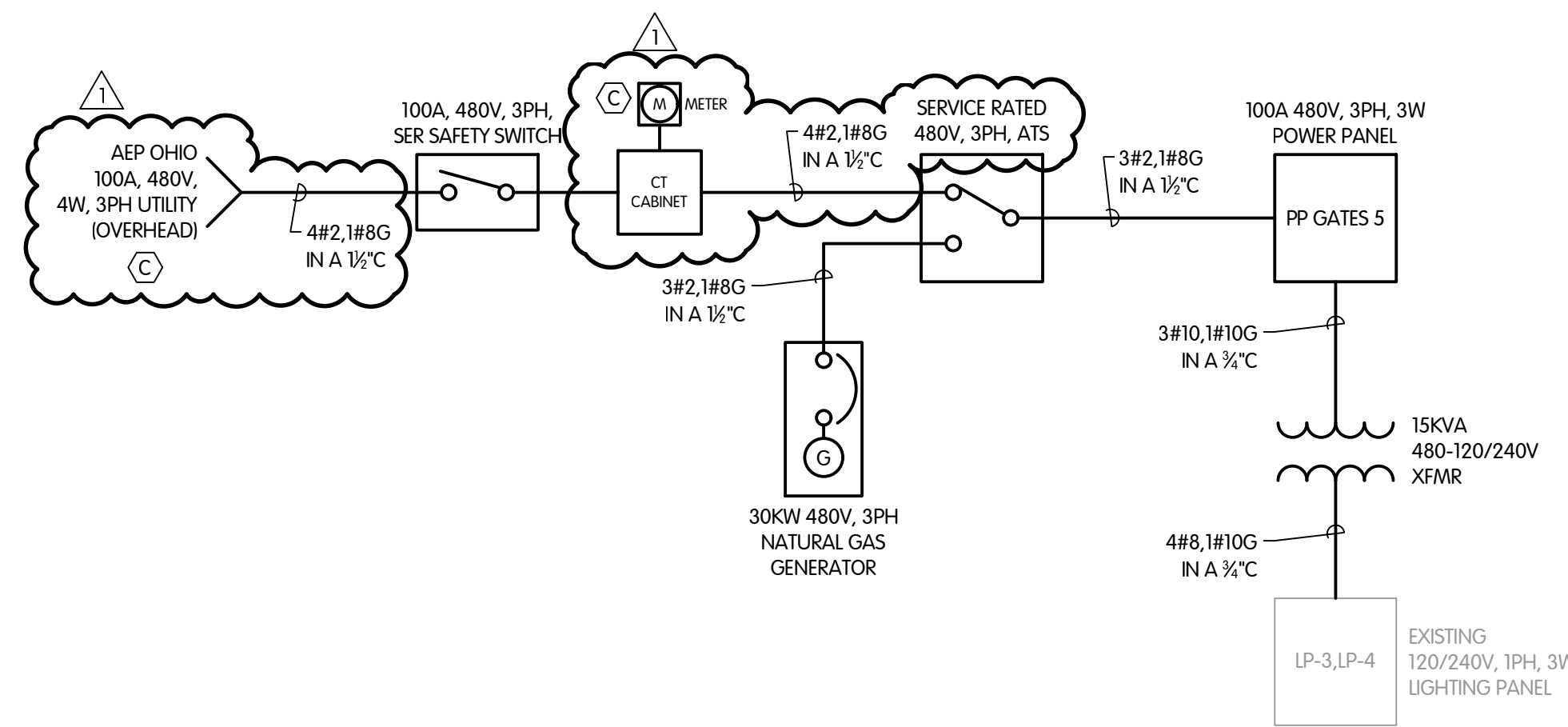
LOVERS LANE CONTROL STRUCTURE ELECTRICAL PLAN, ONELINE AND SCHEDULES
 RIVER STRUCTURE - THREE-PHASE POWER - CONTRACT 58
 CITY OF LIMA, OHIO



LOVERS LANE CONTROL STRUCTURE PLAN
 1/2"=1'-0"

- NOTES:**
 1. RECONNECT EXISTING WIRING TO LOUVER OPERATOR.
 2. CONNECT EXISTING POWER WIRES TO GATE OPERATORS.

- SHEET KEY NOTES:**
- (A) CONTRACTOR SHALL INSTALL NEW WIRES IN A 3/4" C TO FEED THE LIGHT FIXTURES.
 - (B) REPLACE BREAKER WITH 50A PER NEC TABLE 450.3 B.
 - (C) PROVIDED BY AEP OHIO, REFER TO AEP GUIDE FOR ELECTRIC SERVICE AND METER INSTALLATIONS.



LOVERS LANE CONTROL STRUCTURE EXISTING ONELINE

PANEL BOARD PP GATES-5												
PANELBOARD DESIGNATION / TAG	PP GATES-5			LOCATION	Lovers Lane Control Structure							
ELECTRICAL CHARACTERISTICS	277-480 - 3P3 - 3Ø			FEDER SIZE	Existing							
PANELBOARD CONSTRUCTION	CIRCUIT BREAKER			FED FROM	UTILITY							
AMP MAIN LUGS	25 A1-C (FULLY RATED)			SURFACE MOUNTING	MISC							
100 AMP MAIN BREAKER SWITCH	100 % NEUTRAL (SOLID)			ENCLOSURE	NEMA 1							
AVAILABLE CIRCUIT SPACES	BOTTOM INCOMING FEED			MISC								
After the circuit an indicator handle locking device.												
LOAD DESCRIPTION	VOLT AMPS			POLE	AMP	CIRCUIT			WIRE SIZE			
	A	B	C		AMP	POLE	A	B	C			
1	EXISTING GATE 311 (1-50P)	832	832	3	25	3	812	812	812			
3	EXISTING GATE 311 (1-50P)	832	832	3	25	3	812	812	812			
5	EXISTING GATE 311 (1-50P)	832	832	3	25	3	812	812	812			
7	EXISTING GATE 312 (1-50P)	832	832	3	25	3	812	812	812			
9	EXISTING GATE 312 (1-50P)	832	832	3	25	3	812	812	812			
11	EXISTING GATE 312 (1-50P)	832	832	3	25	3	812	812	812			
13	NEW 15KVA XFMR	3250	3250	3	25	3	#10					
15	NEW 15KVA XFMR	3250	3250	3	25	3	#10					
17	SPACE											
19	SPACE											
21	SPACE											
23	SPACE											
SUB TOTAL VA			4914	4914	1664		3,052	3,052	3,052	SUB TOTAL VA		
PHASE TOTALS			A	B	C	Circuit wire sizes indicated are minimum allowable. Refer to wire using Table(s) and one-line diagrams on plan(s) additional information.						
TOTAL PHASE VA			7,966	7,966	4,716	34.8						
TOTAL PHASE AMPS			28.8	28.8	17.9	PHASE DEMAND AMPS (Balanced)						
TOTAL CONNECTED KVA			30.648							TOTAL DEMAND KVA		

POWER PANEL PP GATES 5

Lighting Panel LP-5												
PANELBOARD DESIGNATION / TAG	LP-5			LOCATION	Lovers Lane Structure							
ELECTRICAL CHARACTERISTICS	120/240 - 1Ø1 - 3Ø			FEDER SIZE	480V PANEL THROUGH XFMR							
PANELBOARD CONSTRUCTION	CIRCUIT BREAKER			FED FROM	480V PANEL THROUGH XFMR							
AMP MAIN LUGS	25 A1-C (FULLY RATED)			SURFACE MOUNTING	MISC							
30 AMP MAIN BREAKER SWITCH	100 % NEUTRAL (SOLID)			ENCLOSURE	NEMA 1							
AVAILABLE CIRCUIT SPACES	TOP INCOMING FEED			MISC								
After the circuit an indicator handle locking device.												
LOAD DESCRIPTION	VOLT AMPS			POLE	AMP	CIRCUIT			WIRE SIZE			
	A	B	C		AMP	POLE	A	B	C			
1	SPARE	0	0	2	30	2	0	0	0			
2	SPARE	0	0	2	30	2	0	0	0			
3	SPARE	0	0	2	30	2	0	0	0			
4	UNIT HEATER	500	500	2	30	2	500	500	500			
5	UNIT HEATER	500	500	2	30	2	500	500	500			
6	UNIT HEATER	500	500	2	30	2	500	500	500			
7	UNIT HEATER	500	500	2	30	2	500	500	500			
8	UNIT HEATER	500	500	2	30	2	500	500	500			
9	UNIT HEATER	500	500	2	30	2	500	500	500			
10	UNIT HEATER	500	500	2	30	2	500	500	500			
11	UNIT HEATER	500	500	2	30	2	500	500	500			
12	UNIT HEATER	500	500	2	30	2	500	500	500			
13	UNIT HEATER	500	500	2	30	2	500	500	500			
14	UNIT HEATER	500	500	2	30	2	500	500	500			
15	UNIT HEATER	500	500	2	30	2	500	500	500			
16	UNIT HEATER	500	500	2	30	2	500	500	500			
17	OUTSIDE LIGHTS	120	120	2	15	2	400	400	400			
18	OUTSIDE LIGHTS	120	120	2	15	2	400	400	400			
19	OUTSIDE LIGHTS	120	120	2	15	2	400	400	400			
20	OUTSIDE LIGHTS	120	120	2	15	2	400	400	400			
21	OUTSIDE LIGHTS	120	120	2	15	2	400	400	400			
22	OUTSIDE LIGHTS	120	120	2	15	2	400	400	400			
23	OUTSIDE LIGHTS	120	120	2	15	2	400	400	400			
SUB TOTAL VA			800		15	2	1,400	1,400	1,400	SUB TOTAL VA		
PHASE TOTALS			A	B	Circuit wire sizes indicated are minimum allowable. Refer to wire using Table(s) and one-line diagrams on plan(s) additional information.							
TOTAL PHASE VA			2,560	2,560	19.9							
TOTAL PHASE AMPS			21.2	21.2	PHASE DEMAND AMPS (Balanced)							
TOTAL CONNECTED KVA			4.78							TOTAL DEMAND KVA		

EXISTING LIGHTING PANEL LP-5

TOL-8158001-EG-5-1 LOVERS PLAN
 8/19/2024 11:29 AM - RWORLEY
 8/19/2024 11:32 AM

REVISIONS AFTER ISSUED FOR BID
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JOB NO. 2-8158.001
 SCALE 1/2"=1'-0"
 THIS LINE SCALES IF WHEN PLOTTED TO NOTED SCALE
 DESIGNED TMB DRAWN RGW CHECKED
 STATUS ISSUED FOR BID
 DATE AUGUST 2024
 SHEET NO. E-5.1
 42 OF 48