

ALLEGHENY COUNTY SANITARY AUTHORITY

June 28, 2021

CONTRACT NO. 1739 G & E

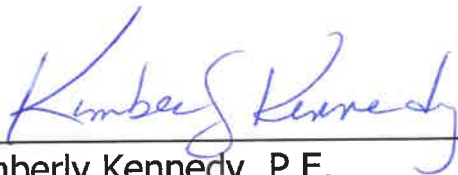
ELECTRICAL DISTRIBUTION SYSTEM UPGRADE

ADDENDUM NO. 1

All bidders bidding Contract No. 1739 G & E shall read and take note of this Addendum No. 1. The Contract Documents for **Contract No. 1739 G & E – Electrical Distribution System Upgrade** are hereby revised and/or clarified as stated below.

Acknowledgement of Contract No. 1739 G & E Addendum No. 1

The Acknowledgement attached to Addendum No. 1 is to be signed and returned immediately via email to Kathleen P. Uniatowski at contract.clerks@alcosan.org and acknowledged with Bidder's Proposal.



Kimberly Kennedy, P.E.
Director – Engineering and Construction

ACKNOWLEDGEMENT OF
CONTRACT NO. 1739 G & E
ELECTRICAL DISTRIBUTION SYSTEM UPGRADE

ADDENDUM NUMBER 1

FIRM NAME: _____

SIGNATURE: _____

TITLE: _____

DATE: _____

JUNE 28, 2021

CONTRACT NO. 1739 G & E

ELECTRICAL DISTRIBUTION SYSTEM UPGRADE

ADDENDUM NO. 1

A. Contract Documents – Volume 1

Article 2.15.A.: Revise to "Lead or Chromium Based Paint:

1. For the purpose of this project, demolition items assumed to be contaminated with lead or Chromium based paint shall include but not be limited to:
 - a. Substation 600, 23kV steel structure.
 - b. Bldg 410, 3rd floor steel (painted blue).
 - c. Bldg 410, 2nd and 3rd floor piping.
 - d. Painted conduits in all work areas.
2. Contractor shall adhere to all applicable federal, state and local laws and policies related to the handling, transportation and disposal / disposition of the materials listed in Article 2.15.A.1 above.
3. Costs associated with the testing, handling, transportation and disposal / disposition of the materials listed in Article 2.15.A.1 shall be paid by the Contractor and are included in the bid pricing."

Article 2.15.B.: Revise to "Asbestos:

1. For the purpose of this project, the following shall be assumed to be contaminated with asbestos containing materials:
 - e. Bldg 410, Substation 7 switchgear circuit breaker arc chutes
 - f. Bldg 500, Benchboard internal control wiring.
 - g. Substation 600, 23kV structure corrugated insulating panels.
 - h. Substation 600, 4.16kV switchgear circuit breaker arc chutes.
 - i. Bldg 810, Switchgear 3 circuit breaker arc chutes.
 - j. Bldg 900, Substation 12 switchgear circuit breaker arc chutes
2. Contractor shall adhere to all applicable federal, state and local laws and policies related to the handling, transportation and disposal / disposition of the materials listed in Article 2.15.B.1 above.

3. Costs associated with the testing, handling, transportation and disposal / disposition of the materials listed in Article 2.15.B.1 shall be paid by the Contractor and are included in the bid pricing.”

Article 4, Contract Time Calendar Days, REPLACE, on page 4-3G, 1260 days with 600 days, and replace, on page 4-2E, 1260 days with 600 days, 1260 days with 540 days (in the table), 1305 days with 600 days (in the table)

B. Contract Specifications – Volume 2

1. SUMMARY OF WORK (Section 01 11 00)
 - a) Page 01 11 00 – 8, Paragraph 1.13: Revise all wording to coordinate with Article 2.15.A, B and C including Addendum No. 1 revisions.
2. JOB CONDITIONS (Section 01 11 20)
 - a) Page 01 11 20 – 3, Paragraph 3.3: Electrical (E) contract shall be responsible for Reference Points and Surveys for the installation of the Electrical Manholes and Duct-Banks.
3. MULTIPLE CONTRACT CONSTRUCTION SEQUENCING (Section 01 31 16)
 - a) Page 01 31 16 – 3, PART 4, Underground Duct and Manhole Systems (High Priority), General Construction Item 1: Change dates “10/1/2021” to “11/5/2021” and “11/1/2021” to “11/26/2021”. Add after each bullet item a. through f. “(Cannot schedule start of work prior to 9/30/2021 to coordinate with Contract 1729 work.)”.
 - b) Page 01 31 16 – 4, PART 4, Underground Duct and Manhole Systems (High Priority), Electrical Construction Item 1: Change dates “11/1/2021” to “11/26/2021”. Add after each bullet item a. through f. “(Cannot schedule start of work prior to 9/30/2021 to coordinate with Contract 1729 work.)”.
4. COMMUNICATIONS OPTICAL FIBER BACKBONE CABLING (Section 271323)
 - a) General: Delete all references to “Single-Mode” fiber and “Type LC” connectors. There is no single-mode fiber and no Type LC connectors required on this project. All fiber is multi-mode and all connectors are Type ST.
 - b) Page 271323-5, Paragraph 2.4.G.: Delete paragraphs 1 through 4 and add “Existing to be reused”. All patch panels, adapter panels,

jacks and jack assemblies are existing to remain. All patch cables shall be furnish by the Owner as necessary.

- c) Page 271323-8, Paragraph 3.6: General clarification of testing agency and/or manufacturer's field service. Testing and inspections may be performed by an employee(s) of the installing contractor if the employee(s) meet the quality assurance requirements of Section 271323, Paragraph 1.7 QUALITY ASSURANCE.

C. Contract Drawings

1. 650-C-03
 - a) Add note to proposed driveway and parking area "Surface shall be 4" compacted 2A gravel."
2. 650-C-05
 - a) Delete "90% Submission Preliminary Drawings Not For Construction" note in lower right corner of drawing.
3. 650-S-01
 - a) Plan 2/650-S-01: Change section detail tag "2/650-SD-02" to "2/650-S-02".
4. 650-S-02
 - a) Plan 2/650-S-02: Delete sump pump piping shown in section and also note at the bottom of the section that reads "The contractor shall provide piping for sump pump pit thru discharge line, and provide the sump pump". Sump pump and piping will be provided by the Owner. Provide a 2 1/2" core or sleeve thru vault wall to exterior where shown for Owner's use.
5. 000-ESP-02
 - a) Change referenced drawing number in note "Existing Elevated Cable Tray Bldg. 410 see Drawing 410-ET-01" to "410-ET-02". Note located in lower right of corner
6. 000-ES-01 General Site Conduit Routing Schedules
 - a) Change conduit numbers from F-106001-106012 to F-107001-107012.
 - b) Change conduit numbers from C-106001-106006 to C-107001-107006.
7. 000-ESP-09 Ductbank Sections

- a) Section 1; Change conduit numbers from F-106001-106012 to F-107001-107012.
- b) Section 2; Change conduit numbers from C-106001 & 106002 to C-107001-107002.
- c) Section 5; Change conduit numbers from C-106003 & 106004 to C-107003 & 107004.
- d) Section 6; Change conduit numbers from C-106005 & 106006 to C-107005 & 107006.

8. 500-ET-01

- a) Conduit Routing Schedule: Change 650-ET-05 to 650-ES-01 in 4 places under Fill Description.
- b) New Work Ground Floor Plan 3, Existing 13.8kV Substation Benchboard: Add note "Replace nameplates for spare breakers A4T and B4T. Nameplate description to be "XFM007-650" and "XFM008-650". Type to match existing.

9. 501-ET-01

- a) New Work Plan Notes 1: Delete reference to providing 800A frame circuit breakers in spaces F-2D and F-4D. Owner will furnish and install breakers in spare cells. EC to provide settings, test and connect 480V feeders. *(Note: This was addressed in the pre-bid meeting presentation and this revision also applies to that document.)*

10.510-ESL-01

- a) New Work One-Line Diagram: Delete reference to providing 800AF circuit breaker in cells F-2D and F-4D and instead change to 800AF breaker furnished and installed by Owner. Revise associated keyed note 2 accordingly.

11.650-ESL-01

- a) Installation Keyed Notes: Add to end of note "Replace nameplates for spare breakers A4T and B4T. Nameplate description to be "XFM007-650" and "XFM008-650". Type to match existing.

12.650-ESL-02

- a) One-Line Diagram - New 5kV Switchgear: Change bus short circuit rating from "500MVA" to "40kA".

13.650-ES-01 13.8KV-4.16KV Substation – Conduit and Cable Schedules

- a) Low-Voltage Power and Control Cable Schedule (Substation); Delete entire row of second/duplicate cable number C-008006-650.

14.000-FDM-01

- a) Bldg 400: Existing fiber from BLdg 802 terminates in DPU 035-400 in Area Operator Console No. 3 on 2nd floor. Delete DPU 032-400.

15.000-FDM-02

- a) Revisions to Bldg 400, 401, 404, and 200 fiber. Replace entire drawing with attached drawing.

16. 000-FS-01

- a) Bldg 400: Existing fiber from BLdg 802 terminates in DPU 035-400 in Area Operator Console No. 3 on 2nd floor. Delete DPU 032-400.

17.000-FS-02

- a) Revisions to Bldg 400, 401, 404, and 200 fiber. Replace entire drawing with attached drawing.

E. Questions

1. **QUESTION:** Is there an estimated cost for this project?

RESPONSE: Estimated total cost of construction is about \$8M.

2. **QUESTION:** Which Contract G or E, is responsible for civil controls as required in Specification Section 01 11 20 Job Conditions 3.3 Reference Points and Surveys as required for the installation of the Electrical Manholes and Duct-Banks.

RESPONSE: E (Electrical) contract shall be responsible for Reference Points and Surveys for the installation of the Electrical Manholes, Handholes, and Duct-Banks. See revisions to Section 01 11 20 included in this addendum for additional information.

3. **QUESTION:** Specification Section 271323-4 2.4 OPTICAL FIBER CABLE HARDWARE Section (C.) , (D.) and (E.) directs the Contractor to re-use the Cross Connect and Patch Panels, Patch Cords and ST Connectors. If the existing fiber optic cable, cross connects, patch panels and patch cords are 62.5 micron, it will not be compatible with the new 50 micron fiber optic cables as specified in Specification Section 271323-3 2.2. Should the existing Cross Connects, Patch Panels and Patch Cords be replaced to suite the requirements of the new 12 and 24 strand multi-mode fiber optic cable as required on the LAN FIBER AND TELEPHONE COPPER CABLE SCHEDULE as detailed on Drawing 000-FS-02?

RESPONSE: All connectors shall be Type ST. All patch panels and inserts are existing to remain. Any necessary patch cables shall be furnished by the Owner. See revisions to Section 271323 included in this addendum for additional information.

4. **QUESTION:** If the Cross Connects, Patch Panels and Patch Cords will require replacement due to the requirement to provide new 50 micron optical fibers, should all of the required connectors and patch panels be required to be Type LC?

RESPONSE: All connectors shall be Type ST. All patch panels and inserts are existing to remain. Any necessary patch cables shall be furnished by the Owner. See revisions to Section 271323 included in this addendum for additional information.

5. **QUESTION:** Drawing Reference 500-ET-01; The cable and conduit schedule fill description references a drawing 650-ET-05 that was not part of the bid package. Is this drawing available?

RESPONSE: See revisions to drawings included in this addendum.

6. **QUESTION:** Drawing Reference 708-ET-01; Is there an engineered or manufactured product for the 9 conductor 5kV 500 cable lashed to a messenger? The largest cable lasher we can find will lash 3 -1 conductor 500 to a messenger.

RESPONSE: Since this overhead cable run is a temporary installation that will be removed in the future by others, lashing using heavy-duty nylon cable ties will be acceptable in lieu of machine lashing. Any solution shall provide a secure attachment for the cables to the messenger.

7. **QUESTION:** Drawing Reference 501-ET-01; Please provide more info/photographs of existing conditions of the abandoned pipe trench and existing USS004-501.

RESPONSE: Schedule a site visit to determine existing conditions.

8. **QUESTION:** Drawing 650-C-03 indicates a proposed gravel parking area. Please indicate thickness and size/gradation of the gravel to be used.

RESPONSE: 4" of compacted 2A gravel.

9. **QUESTION:** Cable and conduit schedules for switchgear in substation building 650 need revised. Drawing 650-ET-02 shows conduits F-106001 and F-106002 as new 13.8Kv circuits feeding new transformers from existing SWG004-650 and SWG005-650. Drawings 000-ES-01 and 000-ESP-09 show the same conduit numbers feeding F-SWG003A-810, via duct banks.

RESPONSE: See revisions to drawings included in this addendum.

10. **QUESTION:** Embedded conduit templates shown on drawing 650-ET-04 need to be revised as per one-line line diagrams and conduit routing schedule drawing 000-ES-01.

RESPONSE: See revisions to drawings included in this addendum.

11. **QUESTION:** There is two C-008006-650 listed on the low voltage power and control cable schedules, shown on drawing 650-ES-01.

RESPONSE: See revisions to drawings included in this addendum.

12. **QUESTION:** Please specify what type of cable tray is required in substation building 650; Ladder, ventilated trough or channel tray?

RESPONSE: All cable trays shall be aluminum ladder type (without cover) per specification.

13. **QUESTION:** Is the G contract handling all duct banks excavation/concrete/ Pavement cutting/pads for the new gear? Not to be carried in the electrical price?

RESPONSE: Refer to the guidance identified in Section 01 11 10.

14. **QUESTION:** Reference Specification 27 13 13 - COMMUNICATION COPPER BACKBONE CABLING; Specification Section 271313 does not specify a method of termination of the copper communications cable. Are the copper backbone cables to be terminated on 110 blocks, 66 blocks or patch panels?

RESPONSE: All copper communications cable terminations on existing 66 blocks.

15. **QUESTION:** Reference Specification 01 11 00 - BUILDING MODIFICATIONS; If required, is the E Contractor responsible to remove the building sheeting on the ERF Building 410 and the Store Front on the Compressor Building 810 or is the G Contractor responsible for this scope of work?

RESPONSE: Removal and reinstallation by Electrical (E) contractor.

16. **QUESTION:** Referencing drawing 15, detail 2 – 3rd FLOOR DEMOLITION ENLARGED PLAN, there is a cross section detail 4 that is indicated with no reference drawing included. Please provide drawing/detail.

RESPONSE: Detail is shown in lower right corner of drawing.

17. **QUESTION:** Referencing drawing 16, detail 1, please verify this area does not require an acoustical ceiling.

RESPONSE: Provide acoustical tile ceiling per Specification 097713-2.3.E.

18. **QUESTION:** Referencing drawing 17, please provide details of the existing wall and window system, including dimensions, section views, and anchorage details.

RESPONSE: Contractor to schedule site visit as necessary prior to bid and field verify existing conditions.

19. **QUESTION:** Referencing drawing 19, the DOOR & FRAME TYPE detail depicts a new aluminum frame between the new double mandoor and an existing window. Please verify if we are simply to remove an entire window and install new aluminum framing, or if the location of the new aluminum frame is located in the middle of an existing window, and therefore a new window would need to be installed.

RESPONSE: Contractor to schedule site visit as necessary prior to bid and field verify existing conditions. Modify as necessary to accommodate new work.

20. **QUESTION:** Referencing drawing 22, Detail 2 has a referenced cut 2/650-SD-02. We cannot locate this drawing, please provide. Referencing drawing 22, Detail 7 has a referenced cut 2/650-SD-01. We cannot locate this drawing, please provide.

RESPONSE: Drawing reference should be 2/650-S-02. See revision to drawing included in this addendum.

21. **QUESTION:** Referencing drawing 23, the note at the bottom of Section 2 states "The contractor shall provide piping for sump pump pit through discharge line, and provide the sump pump." Please provide details (make, model, manufacturer) of the sump pump. Please verify any required valving,

floats, controls, etc. Please indicate the material for the sump pump discharge line.

RESPONSE: Remove reference to sump pump and discharge piping. Pump and piping will be by the Owner. Provide a 2 ½" sleeve (or core) from vault to exterior for Owner's discharge piping.

22. **QUESTION:** Referencing detail 3/650-S-05, we are unable to install the pulling eyes without utilizing custom formwork. To provide the Owner a cost savings, would it be permissible to substitute the U-shaped eye for a single round eyebolt, installed with either an epoxy adhesive or threaded inserts?

RESPONSE: A U-shaped bolt with epoxy adhesive would be an acceptable alternative.

23. **QUESTION:** Referencing drawing 28, there is a note that indicates we are to re-energize the steam line. Please indicate what steps (i.e. cleaning, etc) need to be taken prior to re-energizing that line.

RESPONSE: ALCOSAN steam mechanics and other O&M personnel will work with the contractor for shutdown and reactivation of all steam and other mechanical systems associated with demolition activities.

24. **QUESTION:** Please indicate any safety precautions and/or requirements involved with working in and around the existing active substation. This would include any specific training, fire retardant clothing, procedures, hydro-excavation around perimeters of foundations, etc that might be required by ALCOSAN or Duquesne Light.

RESPONSE: The existing Substation 600 will be fully de-energized and decommissioned prior to any general construction demolition activities therefore no special electrical safety requirements are required from ALCOSAN or Duquesne Light Company.

Attachments:

Specifications:

1. (No Items)

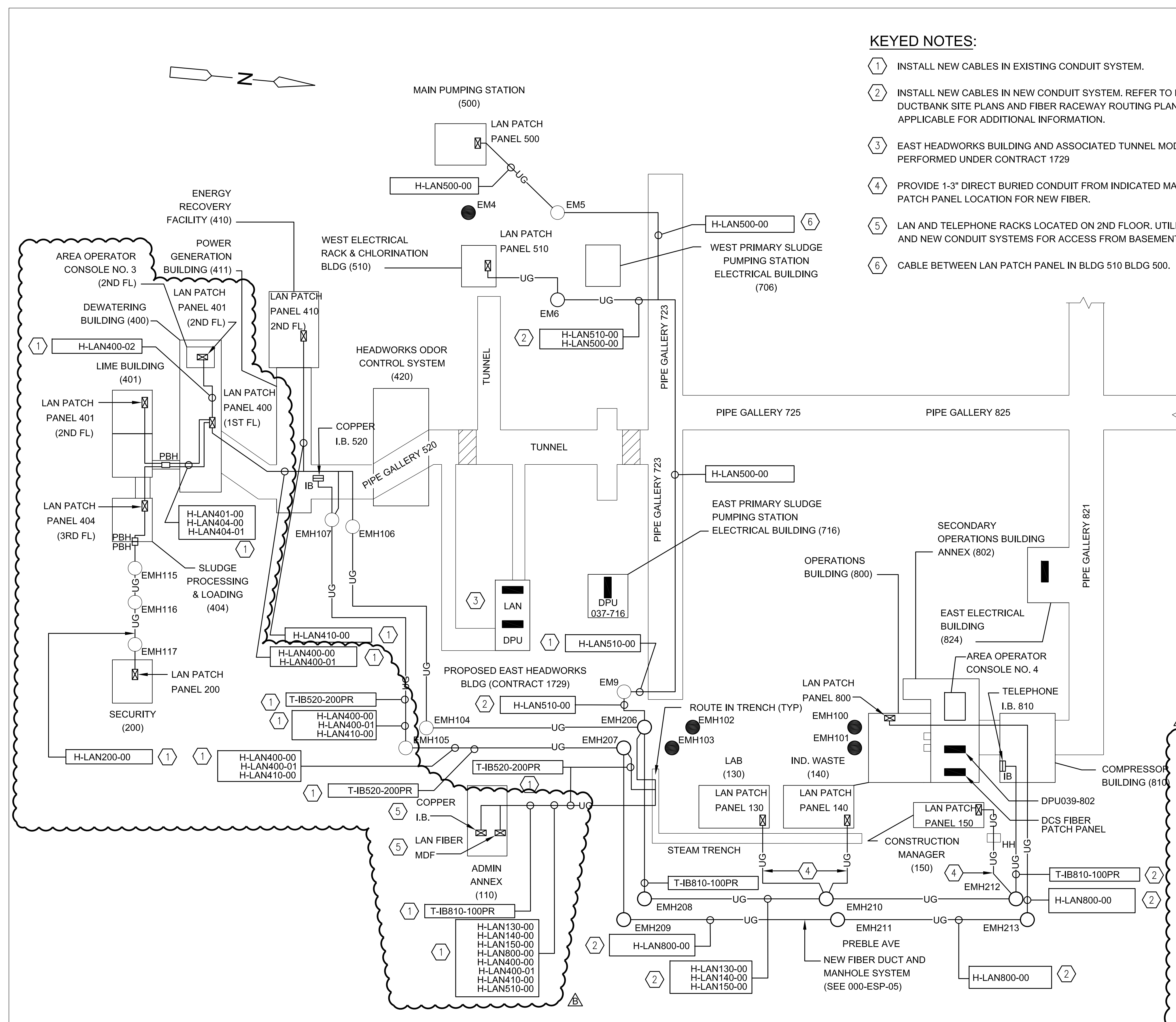
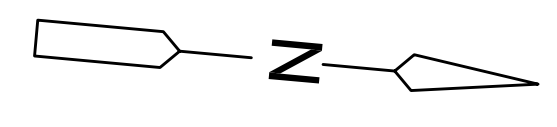
Drawings

1. 000-FDM-02 Revision B dated 6/28/2021
2. 000-FS-02 Revision B dated 6/28/2021

Other:

1. Pre-bid meeting agenda, minutes, & sign-in sheets
2. Pre-bid meeting presentation.
3. ESK-1

*** * * * END OF ADDENDUM NO. 1 * * * ***



KEYED NOTES:

- 1 INSTALL NEW CABLES IN EXISTING CONDUIT SYSTEM.
- 2 INSTALL NEW CABLES IN NEW CONDUIT SYSTEM. REFER TO ELECTRICAL DUCTBANK SITE PLANS AND FIBER RACEWAY ROUTING PLANS AS APPLICABLE FOR ADDITIONAL INFORMATION.
- 3 EAST HEADWORKS BUILDING AND ASSOCIATED TUNNEL MODIFICATIONS PERFORMED UNDER CONTRACT 1729
- 4 PROVIDE 1-3" DIRECT BURIED CONDUIT FROM INDICATED MANHOLE TO PATCH PANEL LOCATION FOR NEW FIBER.
- 5 LAN AND TELEPHONE RACKS LOCATED ON 2ND FLOOR. UTILIZE EXISTING AND NEW CONDUIT SYSTEMS FOR ACCESS FROM BASEMENT.
- 6 CABLE BETWEEN LAN PATCH PANEL IN BLDG 510 BLDG 500.

GENERAL NOTES:

- 1. ALL LOCAL AREA NETWORK (LAN) FIBER AND TELEPHONE COPPER CABLING INDICATED ON DRAWING SHALL BE PROVIDED. TERMINATE ALL STRANDS AND CONDUCTORS AT EACH END. UTILIZE EXISTING FIBER PATCH PANELS AND INTERCONNECT BOXES (I.B.). EXISTING RACEWAYS SHALL REMAIN AND REUSED FOR REPLACEMENT FIBER WHERE INDICATED.
- 2. THE LAN AND TELEPHONE CABLING IS CRITICAL INFRASTRUCTURE AND ESSENTIAL TO PLANT OPERATIONS. ALL CABLE OUTAGES SHALL BE KEPT TO A MINIMUM. ALL REPLACEMENT FIBER CABLES SHALL BE ROUGHED-IN AND READY FOR CONNECTION PRIOR TO THE REMOVAL OF THE EXISTING CABLING.
- 3. REFER TO SITE, GALLERY/TUNNEL, AND BUILDING PLANS FOR LOCATIONS OF RACEWAY SYSTEMS ASSOCIATED WITH THIS SCHEMATIC DIAGRAM. FIELD VERIFY ALL EXISTING ROUTINGS.
- 4. NEW FIBER PULLBOXES AND RACEWAY SYSTEMS NOT SHOWN UON. REFER TO ELECTRICAL SITE PLANS AND FIBER PLANS FOR ADDITIONAL INFORMATION.
- 5. LAN FIBER NOT INDICATED TO BE INSTALLED IN CONDUIT SHALL BE INSTALLED IN 1-1/4" ORANGE INNER DUCT LASHED TO EXISTING COMMUNICATION CONDUIT INFRASTRUCTURE.
- 6. ALL COOPER CABLE NOT TO BE INSTALLED IN CONDUIT SHALL BE INSTALLED EXPOSED AND LASHED TO EXISTING COMMUNICATION CONDUIT INFRASTRUCTURE.
- 7. MULTIPLE FIBER CABLES SHALL BE INSTALLED IN A SINGLE CONDUIT WHERE POSSIBLE TO MAXIMIZE CONDUIT USE. INSTALL IN ACCORDANCE WITH APPLICABLE INDUSTRY STANDARDS. ALL REDUNDANT FIBER CABLES SHALL BE INSTALLED IN SEPARATE CONDUITS AND SEPARATE DUCT AND MANHOLE SYSTEMS WHERE APPLICABLE. ALL PROPOSED ROUTINGS SHALL BE PRE-APPROVED BY THE OWNER.
- 8. ALL FIBER INSTALLED IN MANHOLES SHALL PROTECTED WITH INNER DUCT.

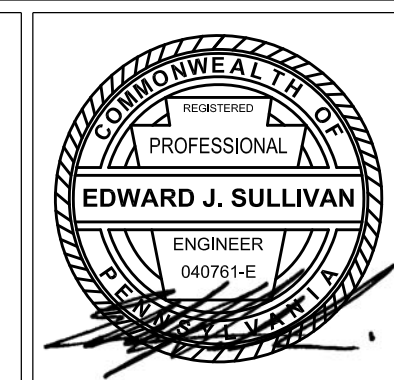
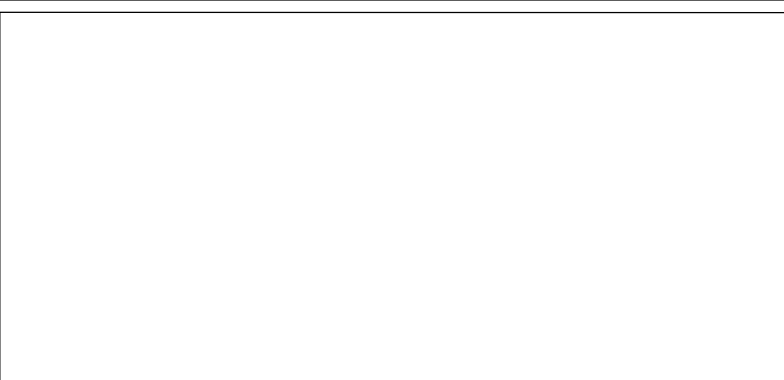
LEGEND:

	LAN FIBER CABLE TAG		EXISTING MANHOLE
	CABLE EXTENSION		NEW MANHOLE
	FIBER IDENTIFIER		EXISTING MANHOLE TO BE REMOVED UNDER SEPARATE/FUTURE CONTRACT
	LAN PATCH PANEL		EXISTING HANDHOLE
	TELEPHONE INTERCONNECT BOX		EXISTING DCS FIBER PULLBOX (PBH)
	NEW LAN FIBER / TELEPHONE COPPER INSTALLED IN UNDERGROUND DUCTBANK. (TYPICAL FOR EXTERIOR INSTALLATIONS)		
	NEW LAN FIBER / TELEPHONE COPPER INSTALLED IN CONDUIT RACEWAYS. (TYPICAL FOR TUNNEL AND BUILDING INSTALLATIONS)		

LAN FIBER AND TELEPHONE COPPER CABLE SCHEDULE				
CABLE NO.	CABLE TYPE	ROUTING FROM	ROUTING TO	REMARKS
H-LAN130-00	12 STRAND MM FIBER	BLDG 110 / LAN MDF	BLDG 130 FOPP	
H-LAN140-00	12 STRAND MM FIBER	BLDG 110 / LAN MDF	BLDG 140 FOPP	
H-LAN150-00	12 STRAND MM FIBER	BLDG 110 / LAN MDF	BLDG 150 FOPP	
H-LAN800-00	24 STRAND MM FIBER	BLDG 110 / LAN MDF	BLDG 800 FOPP	
H-LAN400-00	24 STRAND MM FIBER	BLDG 110 / LAN MDF	BLDG 400 FOPP (1ST FL)	
H-LAN400-01	12 STRAND MM FIBER	BLDG 110 / LAN MDF	BLDG 400 FOPP (1ST FL)	
H-LAN400-02	12 STRAND MM FIBER	BLDG 400 FOPP (1ST FL)	BLDG 410 FOPP (2ND FL)	
H-LAN401-00	12 STRAND MM FIBER	BLDG 400 FOPP (1ST FL)	BLDG 401 FOPP (2ND FL)	
H-LAN404-00	24 STRAND MM FIBER	BLDG 400 FOPP (1ST FL)	BLDG 404 FOPP (3RD FL)	
H-LAN404-00	12 STRAND MM FIBER	BLDG 400 FOPP (1ST FL)	BLDG 404 FOPP (3RD FL)	
H-LAN404-00	24 STRAND MM FIBER	BLDG 404 FOPP (3RD FL)	BLDG 200 FOPP	
H-LAN510-00	24 STRAND MM FIBER	BLDG 110 / LAN MDF	BLDG 510 FOPP	
H-LAN410-00	24 STRAND MM FIBER	BLDG 110 / LAN MDF	BLDG 410 FOPP	
H-LAN500-00	24 STRAND MM FIBER	BLDG 510 FOPP	BLDG 500 FOPP	
T-IB520-00	200 PR COPPER	BLDG 110 / TEL MIB	TUNNEL 520 / 411 IB	
T-IB810-00	100 PR COPPER	BLDG 110 / TEL MIB	BLDG 810 IB	

Designed by: E. SULLIVAN
 Drawn by: RY / JJC
 Checked by: ES

REV No.	DATE	DESCRIPTION	APPV
A	05/25/21	ISSUED FOR BIDS	
B	06/28/21	ADDENDUM NO. 1	



ARLETTA SCOTT WILLIAMS
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ALLEGHENY COUNTY SANITARY AUTHORITY
 WASTEWATER TREATMENT PLANT
 ELECTRICAL DISTRIBUTION SYSTEM UPGRADE
 000-FS-02
**LAN FIBER / TELEPHONE SYSTEMS
 INSTALLATIONS SCHEMATIC ROUTING PLAN**

Contract: 1739
 CAD File Name: 000FS02
 Date: 05 / 25 / 2021
 Sheet: 103 OF 108

CONTRACTS 1739 G and E
ELECTRICAL DISTRIBUTION SYSTEM UPGRADE
PRE-BID MEETING AGENDA

THURSDAY June 3, 2021 @ 10:00 AM
VIRTUAL MICROSOFT TEAMS MEETING

SHAH HAQUE – ALCOSAN PROJECT MANAGER
BRAD ZOOK – CONSTRUCTION MANAGER

INTRODUCTION

- a. Attendees joining via email will be noted in attendee list. Any call-in attendees that wish to be added to the list should send email to CM following meeting.
- b. Opening comments from Construction Manager.
- c. Contractors must purchase bid documents from ALCOSAN to submit bids and receive addendum information.
- d. Encourage a target goal of WBE/MBE participation. (10% to 25% of contract value).
- e. Presentation of Contract Scope by QUAD3.

BID DOCUMENTS

1. Legal Notice

- a. Bid security 10% of bid price by certified check or bid bond.
- b. All bids to be submitted to Alcosan Engineering Department clerks (2nd floor of the O&M Building) on or before bid opening date and time. If the bid package is sent to ALCOSAN by land courier (UPS, FedEx, etc.), allow enough time for delivery to the clerks.
- c. Bid opening on Tuesday July 13th, 2021 at **11:00 AM** sharp!
- d. Anticipation of award at the **July 22nd, 2021** ALCOSAN Board meeting.
- e. All questions about contract documents shall be submitted to Brad Zook email to Bradley.Zook@mbakerintl.com in writing. Any questions by phone or in-person are considered informal and without legal or binding effect on the contract or to the Owner.
- f. The last day for questions is Close of Business **July 12th, 2021**. Responses will be distributed as addenda, as soon as possible, as deemed applicable.
- g. Pre-bid meeting is not mandatory for bidders.

2. Bidding Documents [Article One]

- a. Bid Form - fill in TOTAL BASE BID on page 1-4. This is sum of Lump Sum Work (8.1) and Extended Amount for Unit Price Work (8.2). There are no alternates bid. All bids submitted with all bid forms complete and signed by authorized representative of the Company. Only the bid forms need to be submitted (Article 1 → pages 1-1 through 1-21 (G or E) and Solicitation and Commitment Statement pages 1 of 4 through 4 of 4), not the entire book.
- b. Acknowledge all Addenda received and made part of the Bid Documents page 1-2. (Art. 2.16)
- c. Provide a contact for your company in the space designated on page 1-5 for receipt of any communications necessary for the bid evaluation.
- d. Bid Bond - Certified check or Bid Bond. (Art. 2.19)
- e. MBE/WBE lower-tier subcontractor participation counts towards 10%-25% (2.25)
- f. Project Labor Agreement (2.33) Primes to sign and submit **Letter of Assent** with bid. Subs sign before working on project.

3. Information for Bidders [Article Two]

- a. Submission of Bids (2.04); Sealed Bid to be submitted to ALCOSAN Engineering Department on or before bid opening date and late bids (anything received after 11:00 AM) will be treated as “non-responsive” and returned to the Bidder unopened.
- b. Award Contract Execution and Notice to Proceed (2.07); Intend to award Contract 1739 at the July 22nd, 2021 Board Meeting. Contract execution typically requires 6 weeks to process paperwork (including bonds and certificates of insurance). Anticipate a Notice to Proceed to be issued in end August 2021.
- c. Bidders to Investigate (2.13); Bidders may coordinate site visits through the Construction Manager Resident Engineer Brad Zook at 412-269-6461 (Office) or Bradley.Zook@mbakerintl.com.
- d. Tax Exemptions (2.18) See Article 3.21 and Exhibit D.
- e. Bid Security / Contract Execution (2.20)
- f. Alterations of Bids and Documents (2.22)
- g. Qualifications and Experience of Bidders (2.24)
- h. MBE & WBE Participation (2.25)
- i. Project Labor Agreement and Letter of Assent (Prime and Subs) (2.33)

4. Contract Provisions [Article Three]

- a. Project Coordination (3.7 & 3.27)
- b. Retainage; (3.35): 10% to start. Reduced to 5% at 50% completion.
- c. Bonds (3.55); Performance Bond and Labor and Material Payment Bond to be provided prior to the execution of the Contract Agreement by Owner in the amount (100%) of the Contract Sum. Also, Maintenance Bond (100% of Contract sum) required upon final acceptance of the completed work.
- d. Compliance with Health (COVID-19), Safety, and Environmental Laws (3.72); requires a project-specific written safety program, tailored specifically for the work on this Contract 1739 to be submitted to the Construction Manager prior to performing any work on-site.
- e. Working hours (3.74); Normally for an 8-hour period between 7:00 AM to 5:00 PM, Monday through Friday. Work performed after hours, during ALCOSAN holidays and weekends shall be overseen by the Construction Manager, ALCOSAN and FDC staff as required, at the sole expense of the Contractor.
- f. Pennsylvania Prevailing Wage Rates (3.75); Minimum wage rates as set forth by the PA Prevailing Wage Act. (See Article 7 Volume 1 of 3)
- g. Compliance to the Buy American (3.76)
- h. Compliance to the PA Steel Products Procurement Act/Trade Practices Act (3.77/3.78)

5. Contract Agreement [Article Four]

- a. Contract Milestones:

Construction Milestone	Contract Time Calendar Days	Notes
Substantial Completion of Contracts	540 days	From Notice to Proceed
Final Completion of Contracts	600 days	From Notice to Proceed

- b. Liquidated Damages

Construction Milestone	Liquidated Damages / Calendar Day
Substantial Completion of Contract	\$2,000/calendar day
Final Completion of Contract	\$1,000 /calendar day

6. **Bonds, Certificates and Statements [Article Five]**
 - a. Performance Bond (At beginning of contract)
 - b. Labor and Material Payment Bond (At beginning of contract)
 - c. Contractor's Certificate of Satisfaction (At completion of contract)
 - d. Maintenance Bond (At completion of contract)
7. **Project Specifications [Article 6]**
 - a. Summary of Work 01 11 00 – Summarized by the FDC
8. **Prevailing Minimum Wage Determination [Article 7]**
9. **Contract Drawings**
 - a. 108 Drawings
10. **Open Discussion / Questions / Site Tour Requests-submit**

◆ ◆ ◆ ◆ END OF AGENDA ◆ ◆ ◆ ◆

CONTRACTS 1739 G and E
ELECTRICAL DISTRIBUTION SYSTEM UPGRADE
PRE-BID MEETING AGENDA/MINUTES

THURSDAY June 3, 2021 @ 10:00 AM
VIRTUAL MICROSOFT TEAMS MEETING

SHAH HAQUE – ALCOSAN PROJECT MANAGER
BRAD ZOOK – CONSTRUCTION MANAGER

INTRODUCTION

- a. Attendees joining via email will be noted in attendee list. Any call-in attendees that wish to be added to the list should send email to CM following meeting.
- b. Opening comments from Construction Manager.
- c. Contractors must purchase bid documents from ALCOSAN to submit bids and receive addendum information.
- d. Encourage a target goal of WBE/MBE participation. (10% to 25% of contract value).
- e. Presentation of Contract Scope by QUAD3.

BID DOCUMENTS

1. Legal Notice

- a. Bid security 10% of bid price by certified check or bid bond.
- b. All bids to be submitted to Alcosan Engineering Department clerks (2nd floor of the O&M Building) on or before bid opening date and time. If the bid package is sent to ALCOSAN by land courier (UPS, FedEx, etc.), allow enough time for delivery to the clerks.
- c. Bid opening on **Tuesday July 13th, 2021 at 11:00 AM sharp!**
- d. Anticipation of award at the **July 22nd, 2021** ALCOSAN Board meeting.
- e. All questions about contract documents shall be submitted to Brad Zook email to Bradley.Zook@mbakerintl.com in writing. Any questions by phone or in-person are considered informal and without legal or binding effect on the contract or to the Owner.
- f. The last day for questions is Close of Business **July 2nd, 2021**. Responses will be distributed as addenda, as soon as possible, as deemed applicable.
- g. Pre-bid meeting is not mandatory for bidders.

2. Bidding Documents [Article One]

- a. Bid Form - fill in TOTAL BASE BID on page 1-4. This is sum of Lump Sum Work (8.1) and Extended Amount for Unit Price Work (8.2). There are no alternates bid. All bids submitted with all bid forms complete and signed by authorized representative of the Company. Only the bid forms need to be submitted (Article 1 → pages 1-1 through 1-21 (G or E) and Solicitation and Commitment Statement pages 1 of 4 through 4 of 4), not the entire book.
- b. Acknowledge all Addenda received and made part of the Bid Documents page 1-2. (Art. 2.16)
- c. Provide a contact for your company in the space designated on page 1-5 for receipt of any communications necessary for the bid evaluation.
- d. Bid Bond - Certified check or Bid Bond. (Art. 2.19)
- e. MBE/WBE lower-tier subcontractor participation counts towards 10%-25% (2.25)
- f. Project Labor Agreement (2.33) Primes to sign and submit **Letter of Assent** with bid. Subs sign before working on project.

3. Information for Bidders [Article Two]

- a. Submission of Bids (2.04); Sealed Bid to be submitted to ALCOSAN Engineering Department on or before bid opening date and late bids (anything received after 11:00 AM) will be treated as “non-responsive” and returned to the Bidder unopened.
- b. Award Contract Execution and Notice to Proceed (2.07); Intend to award Contract 1739 at the July 22nd, 2021 Board Meeting. Contract execution typically requires 6 weeks to process paperwork (including bonds and certificates of insurance). Anticipate a Notice to Proceed to be issued in end August 2021.
- c. Bidders to Investigate (2.13); Bidders may coordinate site visits through the Construction Manager Resident Engineer Brad Zook at 412-269-6461 (Office) or Bradley.Zook@mbakerintl.com.
- d. Tax Exemptions (2.18) See Article 3.21 and Exhibit D.
- e. Bid Security / Contract Execution (2.20)
- f. Alterations of Bids and Documents (2.22)
- g. Qualifications and Experience of Bidders (2.24)
- h. MBE & WBE Participation (2.25)
- i. Project Labor Agreement and Letter of Assent (Prime and Subs) (2.33)

4. Contract Provisions [Article Three]

- a. Project Coordination (3.7 & 3.27)
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- d. Maintenance Bond (At completion of contract)

7. Project Specifications [Article 6]

- a. Summary of Work 01 11 00 – Summarized by the FDC
- b. Multiple Contract Construction Sequencing 01 31 16 – High Priority work activities

8. Prevailing Minimum Wage Determination [Article 7]

9. Contract Drawings

- a. 108 Drawings

10. Open Discussion / Questions / Site Tour Requests-submit

◆ ◆ ◆ ◆ END OF AGENDA ◆ ◆ ◆ ◆

1739 Electrical Distribution System Upgrade

Pre-Bid Meeting Attendance

Thursday, June 3, 2021

Full Name			User Action	Timestamp
Kathleen P. Uniatowski			Joined	6/3/2021, 9:45:04 AM
ED (Guest)			Joined	6/3/2021, 9:50:54 AM
Chuck Berner			Joined	6/3/2021, 9:51:30 AM
Chuck Berner			Left	6/3/2021, 9:51:50 AM
Welch, Rick			Joined	6/3/2021, 9:53:46 AM
Zook, Bradley			Joined	6/3/2021, 9:54:08 AM
+1 412-794-8731			Joined	6/3/2021, 9:54:34 AM
Kyle Kuhlman (Guest)			Joined	6/3/2021, 9:55:34 AM
Shah Haque P.E.			Joined	6/3/2021, 9:56:09 AM
Brian Donovan	Sargent Electric	bdonovan@sargentelectric.com	Joined	6/3/2021, 9:56:23 AM
Phillip Rodgers			Joined	6/3/2021, 9:56:24 AM
Brian Landowski () (Guest)	Lanco Electric	rob.landowski@lanco-electric.com	Joined	6/3/2021, 9:57:15 AM
Steve Koutch	MetroTek Electrical Services Company	skoutch@metroelectrical.com	Joined	6/3/2021, 9:57:33 AM
Joe Marshall			Joined	6/3/2021, 9:57:49 AM
+1 724-944-3069			Joined	6/3/2021, 9:58:22 AM
Nick Zadd			Joined	6/3/2021, 9:58:27 AM
Jon Graham	Advanced Integration Group, Inc. (AIG)	jgraham@aigcontrols.com	Joined	6/3/2021, 9:58:51 AM
Jeff Argyros P.E.			Joined	6/3/2021, 9:59:07 AM
Craig (Guest)			Joined	6/3/2021, 9:59:09 AM
Kimberly Kennedy P.E.			Joined	6/3/2021, 9:59:20 AM
Jones, James	Michael Baker International, Inc.	James.Jones@mbakerintl.com	Joined	6/3/2021, 9:59:37 AM
+1 412-926-4931			Joined	6/3/2021, 9:59:39 AM
Raymond Meyer			Left	6/3/2021, 10:08:34 AM
Teorsky, Michael			Joined	6/3/2021, 10:00:10 AM
Hunter Lund (Guest)	Kirby Electric	hlund@kirbyelectricinc.com	Joined	6/3/2021, 10:02:00 AM
Keith Caldwell	T. P. Electric, Inc.	Kcaldwell@tpelectric.net	Joined	6/3/2021, 10:02:53 AM
+1 215-240-1884			Joined	6/3/2021, 10:03:01 AM
+1 412-742-4073			Joined	6/3/2021, 10:03:01 AM
Donna Chappel	Advanced Integration Group, Inc. (AIG)	dchappel@aigcontrols.com	Joined	6/3/2021, 10:03:30 AM
David Arbogast	Keystone Electrical Systems, Inc.	david@keystoneelectric.biz	Joined	6/3/2021, 10:04:37 AM
Michael Heim (Guest)			Joined	6/3/2021, 10:07:07 AM
Bob Chappel	Advanced Integration Group, Inc. (AIG)	bchappel@aigcontrols.com	Joined	6/3/2021, 10:08:06 AM
+1 412-604-2360	Thoroughbred Construction Group	mmaylin@thetcelectric.com	Joined	6/3/2021, 10:10:11 AM
Josh Reinert			Joined	6/3/2021, 10:11:41 AM
Tom Crawford (Guest)	Kokosing Industrial	tmc@kokosing.biz	Joined	6/3/2021, 10:12:59 AM
Jen Stanczak	Mare Solutions	jstanczak@mare-solutions.com		

Contract 1739

Electrical Distribution System Upgrade

Allegheny County Sanitary Authority, Wood Run WWTP



3 RIVERS PROUD



GENERAL OVERVIEW OF CONTRACTS

➤ General Construction

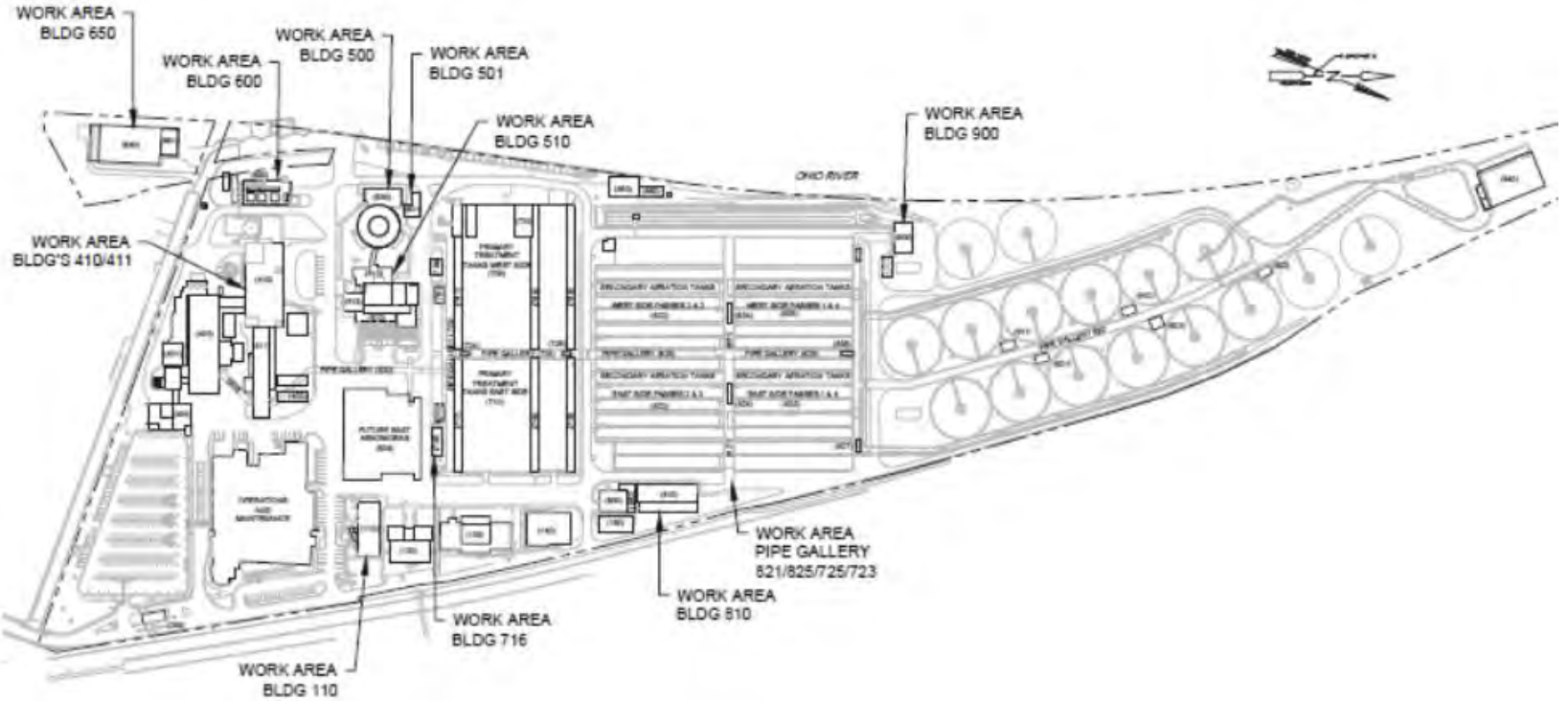
- Excavation, grading, trenching, backfill, surface restoration, etc.
- Structural and general construction
- Selective demolition and repairs
- HVAC and plumbing work

➤ Electrical Construction

- Lead prime contract
- Traditional electrical distribution work
- Duct and manhole systems
- Telecommunications work (fiber and copper systems)



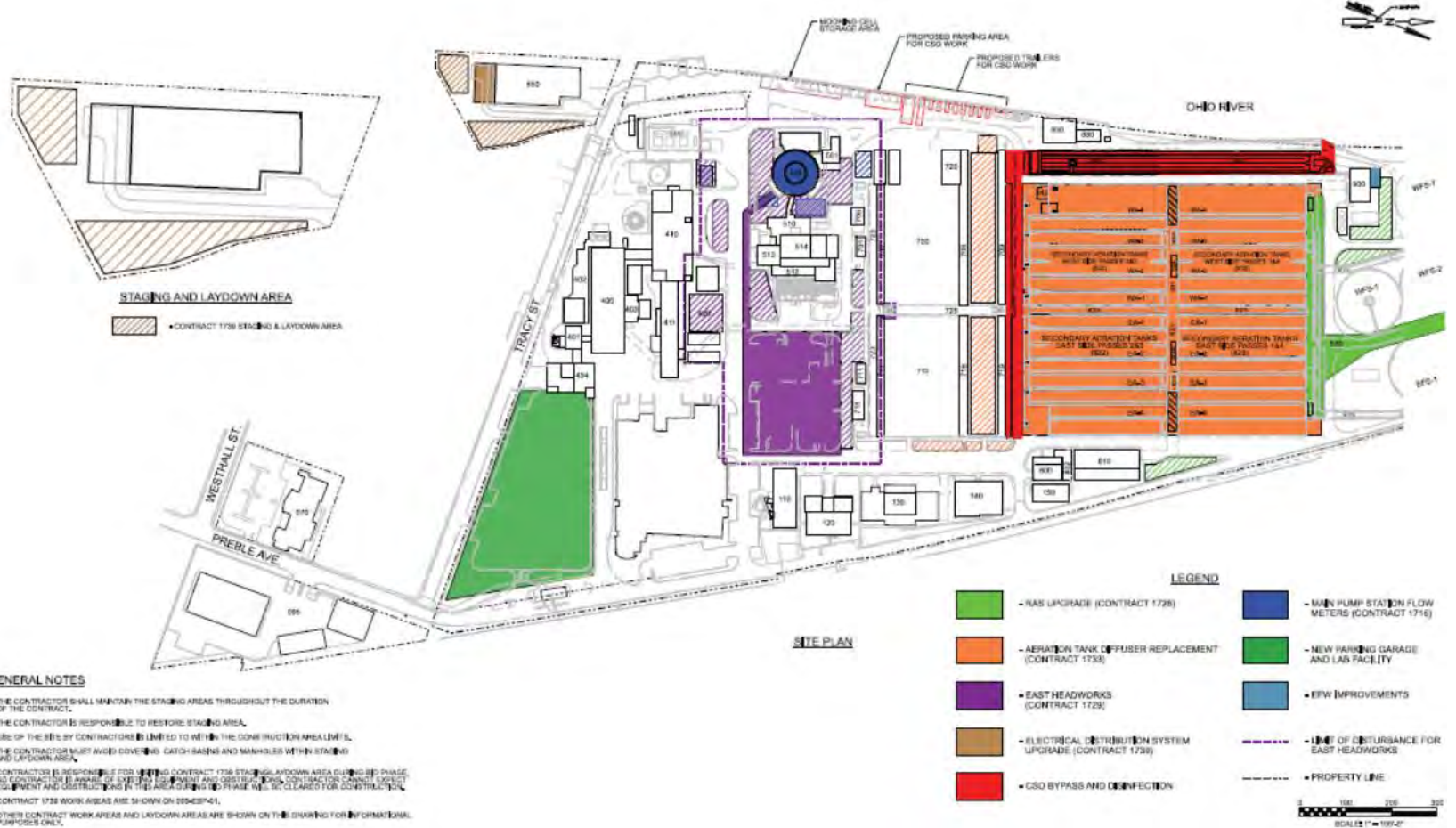
WORK AREAS



**3 RIVERS
PROUD**



SITE UTILIZATION PLAN



GENERAL NOTES

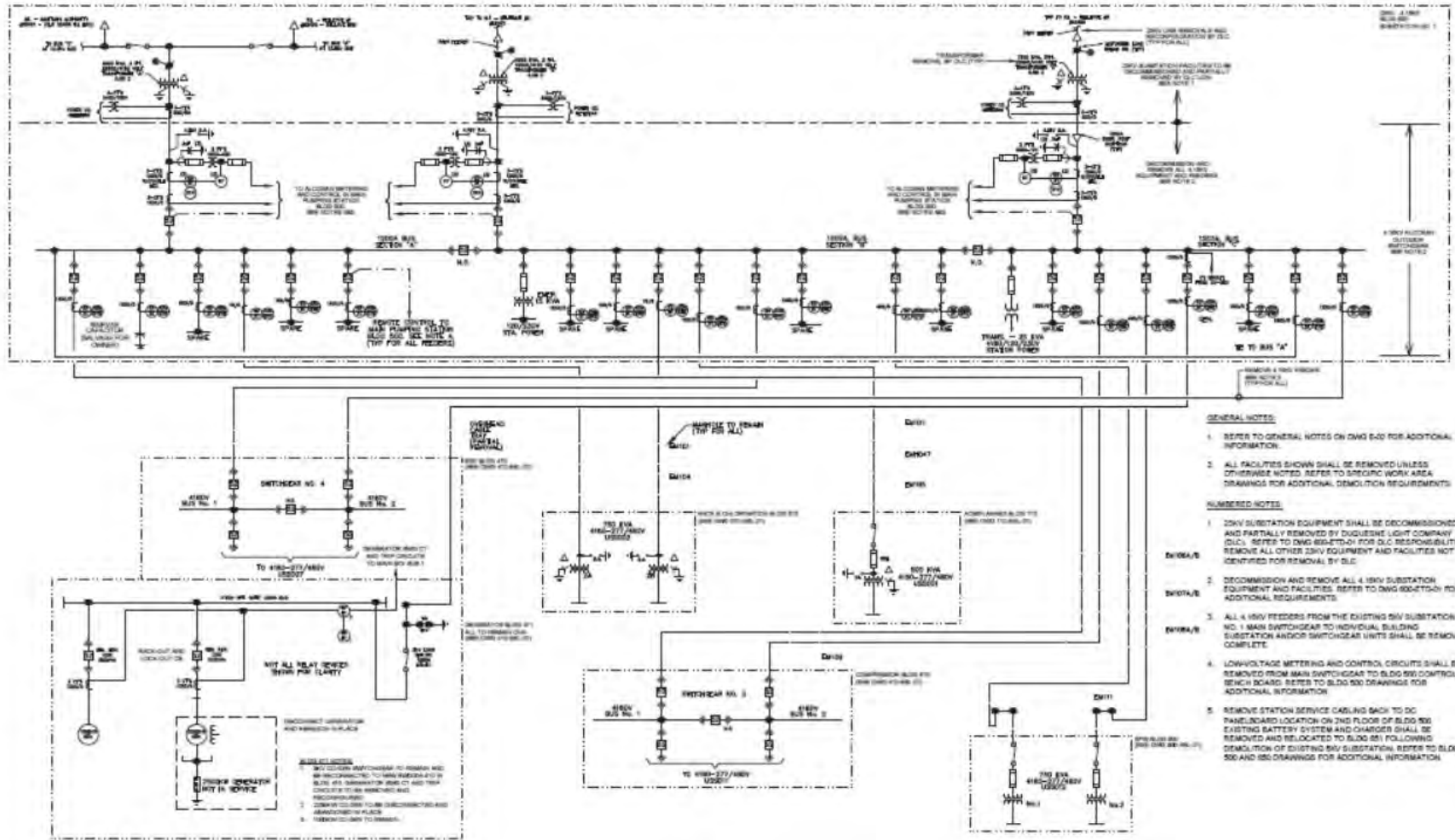
1. THE CONTRACTOR SHALL MAINTAIN THE STAGING AREAS THROUGHOUT THE DURATION OF THE CONTRACT.
2. THE CONTRACTOR IS RESPONSIBLE TO RESTORE STAGING AREA.
3. USE OF THE SITE BY CONTRACTORS IS LIMITED TO WITHIN THE CONSTRUCTION AREA LIMITS.
4. THE CONTRACTOR MUST AVOID COVERING CATCH BASINS AND MANHOLES WITHIN STAGING AND LAYDOWN AREA.
5. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CONTRACT 1738 STAGING/LAYDOWN AREA DURING PHASE 20. CONTRACTOR IS AWARE OF EXISTING EQUIPMENT AND OBSTRUCTIONS. CONTRACTOR CANNOT EXPECT CONTRACTOR AND DISTRIBUTION IN THE AREA DURING PHASE 19. SITE TO BE CLEARED FOR CONSTRUCTION.
6. CONTRACT 1738 WORK AREAS ARE SHOWN ON 1738-25-01.
7. OTHER CONTRACT WORK AREAS AND LAYDOWN AREAS ARE SHOWN ON THE DRAWING FOR INFORMATIONAL PURPOSES ONLY.



3 RIVERS PROUD



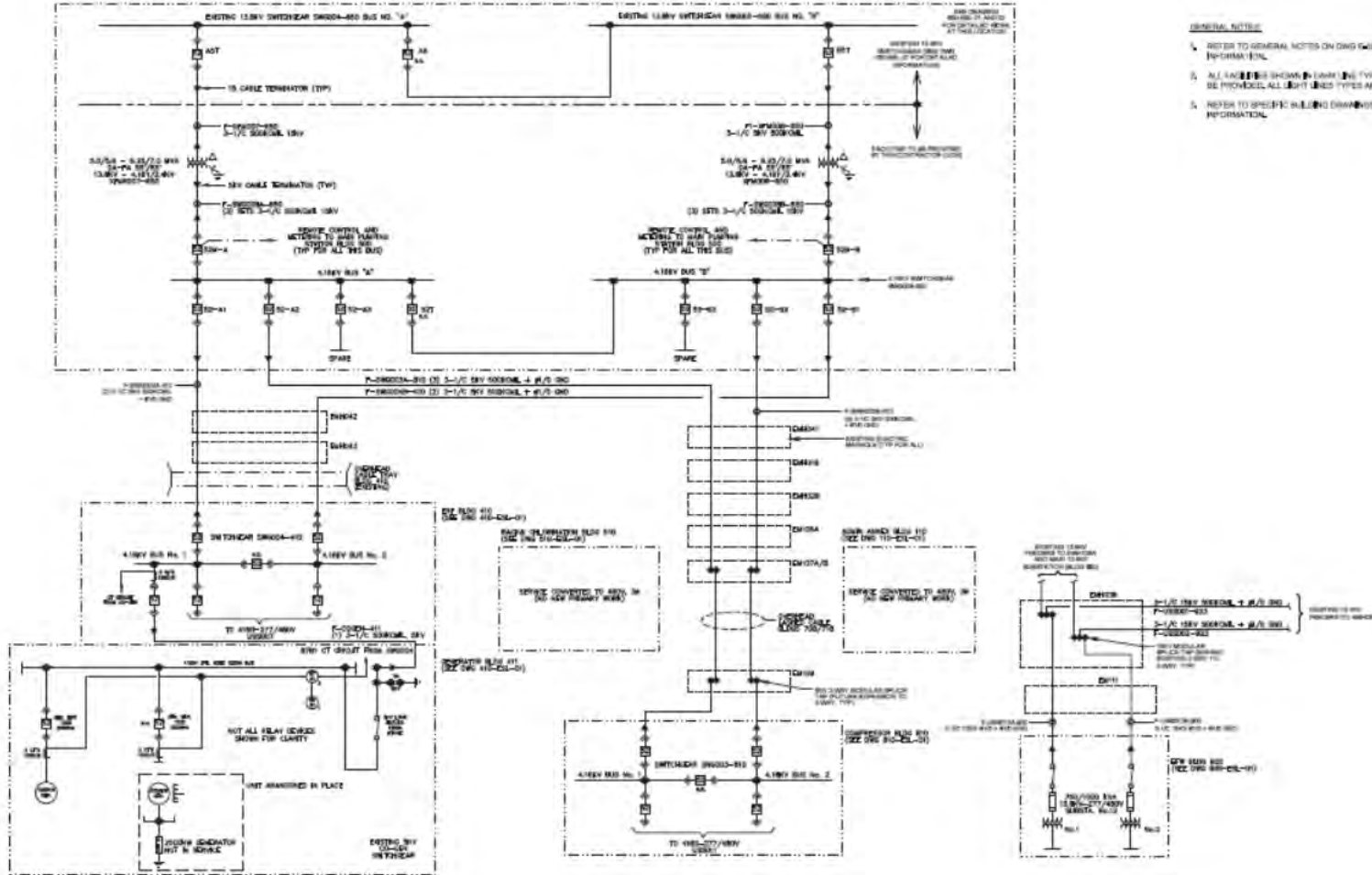
EXISTING 5kV SYSTEM ONE-LINE



3 RIVERS PROUD



NEW 5kV SYSTEM ONE-LINE



5KV SUBSTATION – 600 DEMOLISH 23KV – 4.16KV SUBSTATION

➤ Electrical Construction

- Coordinate with DLC for 23kV equipment demo
- Demo all switchgear and feeders
- Demo structure equipment (not in DLC scope)

➤ General Construction

- Demo DLC control house
- Demo steel structure and foundations
- Demo ductbanks within substation area



5kV SUBSTATION – BUILDING 650

NEW 13.8kV – 4.16kV OUTDOOR SUBSTATION

➤ Electrical Construction

- New 13.8kV - 4.16kV transformers
- New 4.16kV switchgear
- New 4.16kV feeders to Bldg's 410 and 810
- New 13.8kV switchgear relay upgrades for 87T
- New grounding, raceways and cables trays
- New remote metering and control cabling (to Bldg 500 benchboard)

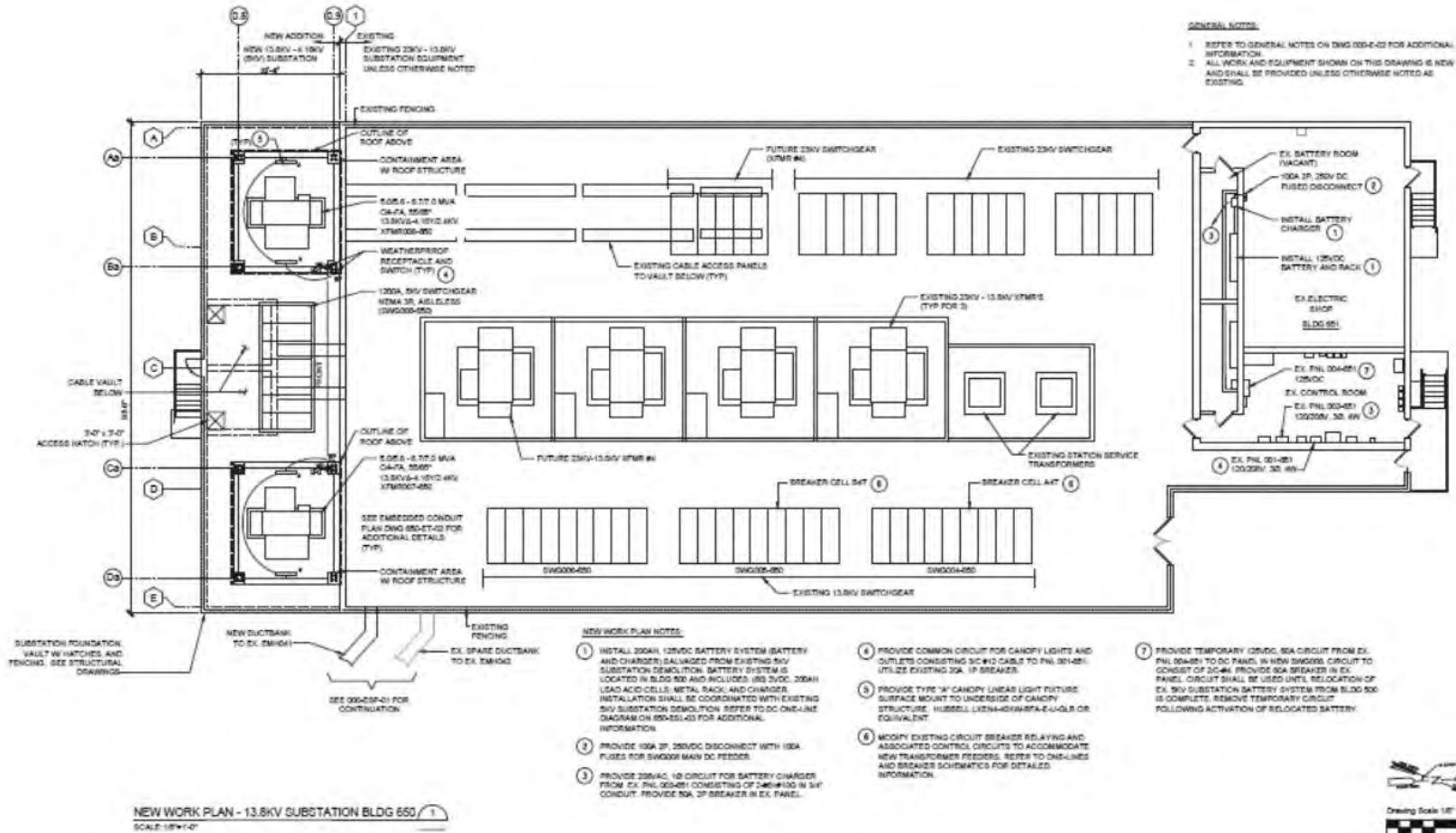
➤ General Construction

- Excavation and grading for foundations
- New foundations and canopies
- Fencing modifications



5KV SUBSTATION – BUILDING 650

NEW 13.8KV – 4.16KV OUTDOOR SUBSTATION



3 RIVERS PROUD



PUMP STATION - BUILDING 500

REPLACE 5kV SUBSTATION BENCHBOARD

- Demo existing 5kV substation benchboard
- New 5kV substation benchboard
- New metering and control circuits to new 5kV substation (650)
- Relocate existing 5kV battery system to new 5kV substation (650)
- No specified GC work



NEW DUCT AND MANHOLE SYSTEMS ELECTRIC AND COMMUNICATION (FIBER)

➤ Electrical Construction

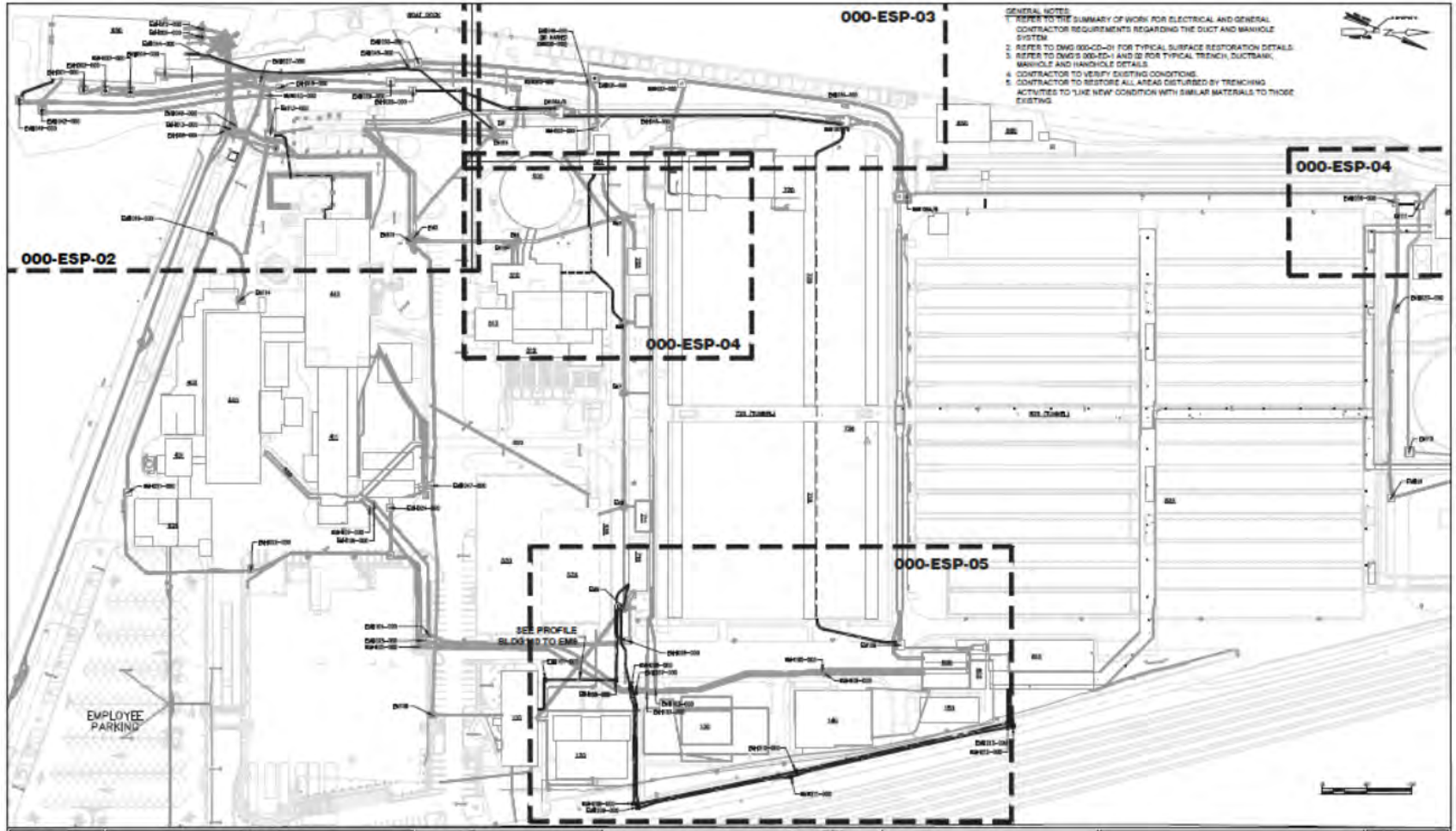
- Ductbanks and concrete encasement
- Routings and layouts
- Manholes with frames and covers
- Manhole connections
- Coordination of select work areas with Contract 1729

➤ General Construction

- Surface demolition, excavation, backfill and surface restoration for ductbanks and manholes



NEW DUCT AND MANHOLE SYSTEMS WORK AREAS



ADMIN ANNEX – BLDG 110

CONVERT FROM 4160V TO 480V SERVICE

- Remove 4160V feeder from 5kV Substation (600)
- Remove HVL switch and transformer
- New dual 480V feeders from USS005 (Bldg 716)
- New ATS
- Temporary power required
- No specified GC work



ELECTRIC SUBSTATION – BLDG 716

NEW DUAL 480V FEEDERS TO BLDG 110

- New 480V feeders from USS005 to Bldg 110
- Update breaker settings
- Coordinate with East Headworks Contract 1729
- No specified GC work



ERF – BUILDING 410

REPLACE SWITCHGEAR SWG004

➤ Electrical Construction

- New 4160V double-ended, full-voltage motor control center
- Existing Co-gen switchgear connection
- New 4160V feeders from new 5kV Sub (650)
- New 4.16kV motor feeders

➤ General Construction

- Demo existing switchgear room
- General demolition and patching
- New modular switchgear room



ERF – BUILDING 410

REPLACE UNIT SUBSTATION USS007

➤ Electrical Construction

- 1500/2000kVA, 4160V – 480V double-ended substation
- New location on 3rd floor
- New 4160V feeds from USS004
- Extend/Reconnect existing 480V feeders
- Extend/Reconnect existing control circuits

➤ General Construction

- Partial demo/reconstruction of existing room



GENERATOR – BUILDING 411 RECONNECTION TO SWG004

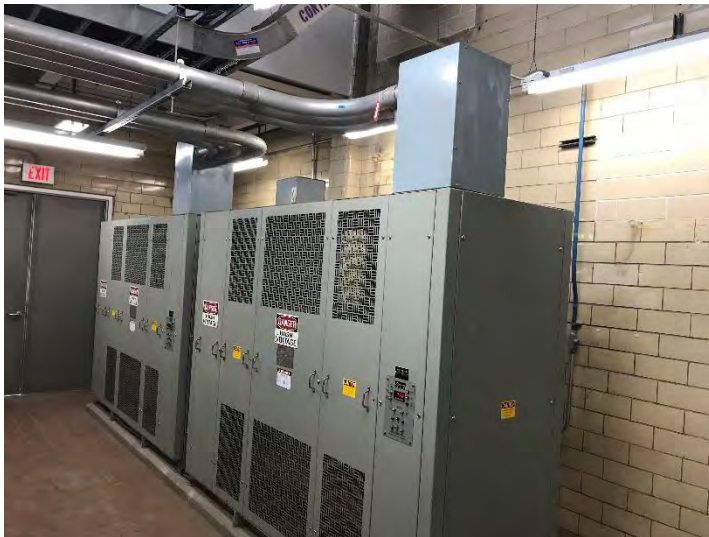
- Remove 4160V feeder from 5kV substation (600)
- New 4.16kV feeder to new SWG004
- Modify differential relaying
- No specified GC work



RACK & CHLORINATION – BUILDING 510

CONVERT FROM 4160V TO 480V SERVICE

- Remove 4160V feeders from 5kV Substation (600)
- Remove transformers
- New dual 480V feeders from USS004 (Bldg 501)
- No specified GC work



ELECTRIC/GENERATOR – BUILDING 501

NEW DUAL 480V FEEDERS TO BLDG 510

- New 480V feeders to MCC003 in Bldg 510
- New breaker settings for existing USS004 breakers*
- New 480V breakers to match existing (for Owner spares)*
- No specified GC work

*Revision from present scope



COMPRESSOR – BUILDING 810

REPLACE SWITCHGEAR SWG003

➤ Electrical Construction

- Demo existing double-ended autotransformer starter switchgear
- New reduced-voltage solid state starter switchgear
- New 4.16kV feeders for Substation 11 transformers and compressor motors
- Extend/Reconnect control circuits

➤ General Construction

- Temporary modifications to storefront window and/or interior wall for switchgear demo and installation access.



COMPRESSOR – BUILDING 810

REPLACE 480V MCC030 AND MCC031

- Replace MCC's in new location
- Extend/Reconnect 480V circuits
- Extend/Reconnect control circuits



SKIMMER DRIVE – BUILDINGS 708/718

AERIAL CABLE SYSTEM FOR BLDG 810 FEEDERS

- New overhead lashed cable system (4.16kV feed to Bldg 810)
- Support from existing odor control piping structure



EFW – BUILDING 900

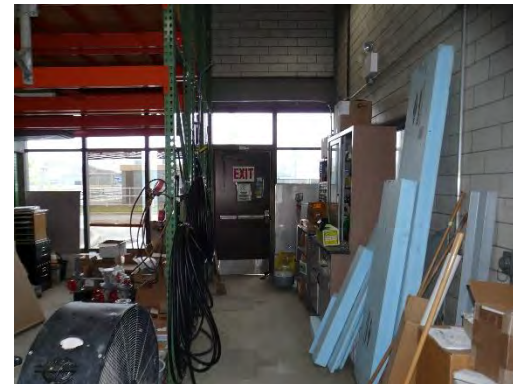
REPLACE UNIT SUBSTATION USS012

➤ Electrical Construction

- Replace double-ended USS012 in new location
- Convert from 4.16kV to 13.8kV service
- New 13.8kV feeder taps
- New 480V feeders to MCC038 and MCC039

➤ General Construction

- Modify storefront for new double door assembly
- Modify entry landing
- Door hardware upgrades
- New HVAC system
- Plumbing modifications (floor drains, etc.)



TELECOMMUNICATIONS UPGRADES NEW FIBER AND COPPER CABLING

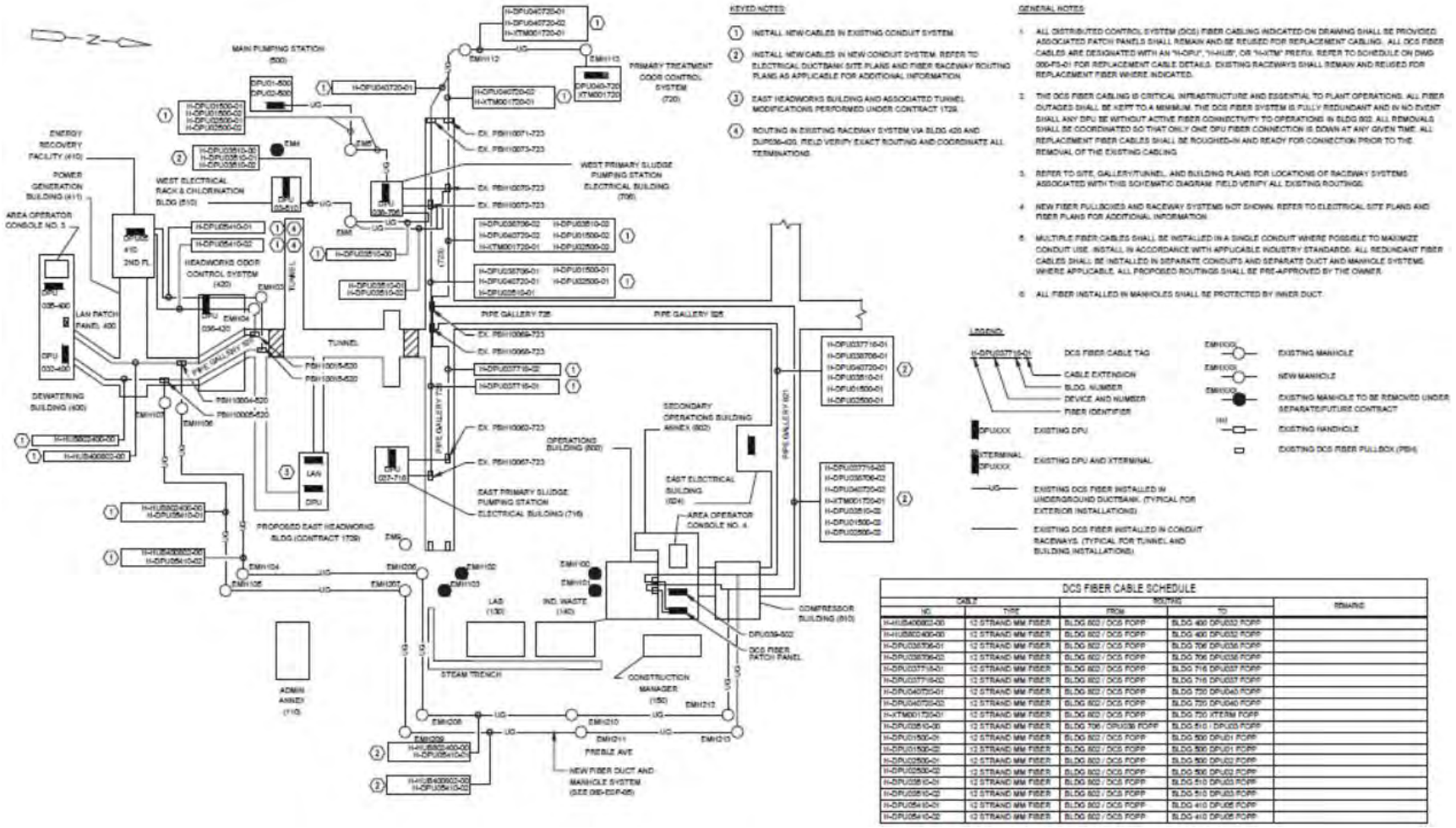
- New fiber conduit systems
- Replace DCS and LAN fiber
- Replace copper cables
- No specified GC work



**3 RIVERS
PROUD**



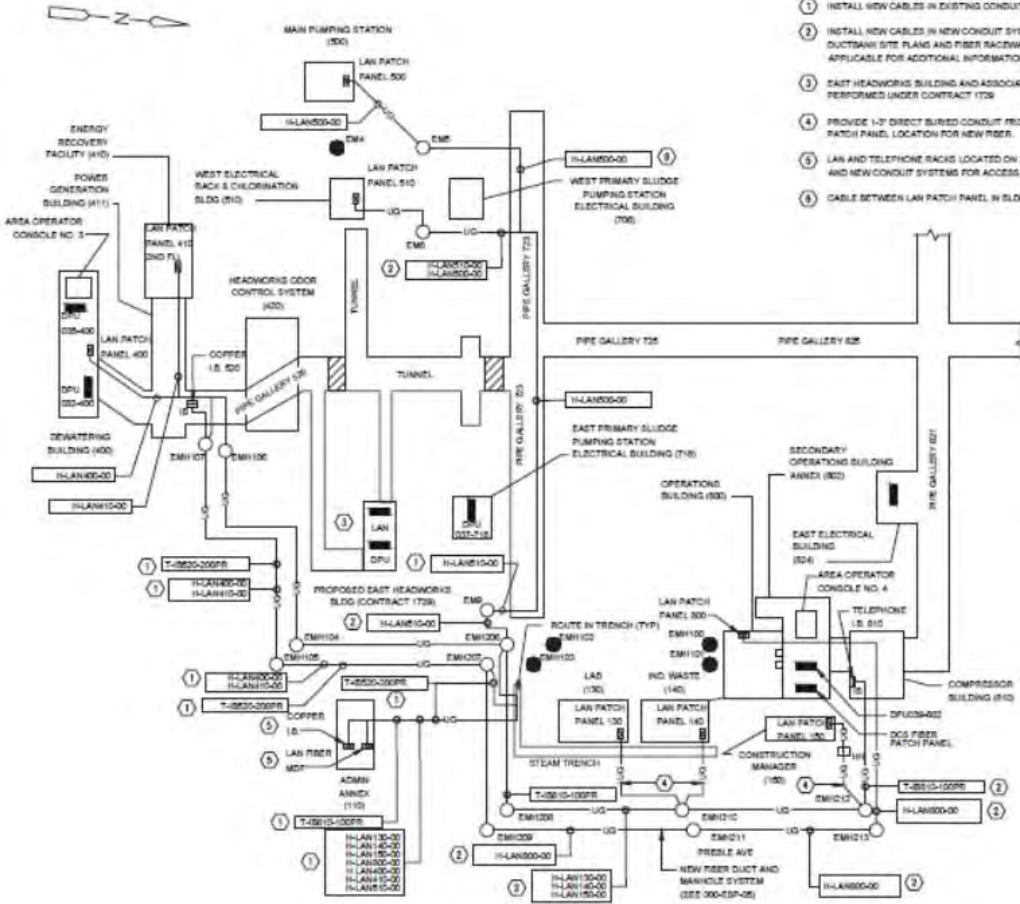
TELECOMMUNICATIONS UPGRADES DCS FIBER



**3 RIVERS
PROUD**



TELECOMMUNICATIONS UPGRADES LAN FIBER AND COPPER



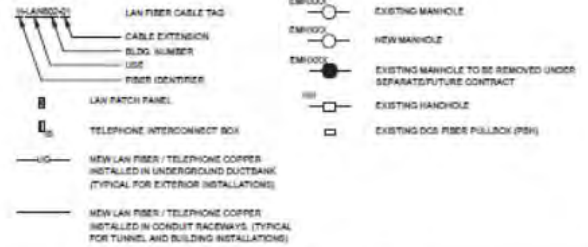
KEYED NOTES:

- 1 INSTALL NEW CABLES IN EXISTING CONDUIT SYSTEM
- 2 INSTALL NEW CABLES IN NEW CONDUIT SYSTEM. REFER TO ELECTRICAL DUCTBANK SITE PLANS AND FIBER RACEWAY ROUTING PLANS AS APPLICABLE FOR ADDITIONAL INFORMATION.
- 3 EAST HEADWORKS BUILDING AND ASSOCIATED TUNNEL MODIFICATIONS PERFORMED UNDER CONTRACT 179
- 4 PROVIDE 1-1/2" DIRECT BURIED CONDUIT FROM INDICATED MANHOLE TO PATCH PANEL. LOCATION FOR NEW FIBER.
- 5 LAN AND TELEPHONE RACKS LOCATED ON 2ND FLOOR. UTILIZE EXISTING AND NEW CONDUIT SYSTEMS FOR ACCESS FROM BASEMENT.
- 6 CABLE BETWEEN LAN PATCH PANEL IN BLDG 510 BLDG 506

GENERAL NOTES:

- 1 ALL LOCAL AREA NETWORK (LAN) FIBER AND TELEPHONE COPPER CABLING INDICATED ON DRAWING SHALL BE PROVIDED. TERMINATE ALL STRANDES AND CONDUCTORS AT EACH END. UTILIZE EXISTING FIBER PATCH PANELS AND INTERCONNECT BOXES (I.B.). EXISTING RACEWAYS SHALL REMAIN AND REUSED FOR REPLACEMENT FIBER WHERE INDICATED.
- 2 THE LAN AND TELEPHONE CABLING IS CRITICAL INFRASTRUCTURE AND ESSENTIAL TO PLANT OPERATIONS. ALL CABLE OUTAGES SHALL BE KEPT TO A MINIMUM. ALL REPLACEMENT FIBER CABLES SHALL BE ROUGHED-IN AND READY FOR CONNECTION PRIOR TO THE REMOVAL OF THE EXISTING CABLING.
- 3 REFER TO SITE, GALLERY/TUNNEL, AND BUILDING PLANS FOR LOCATIONS OF RACEWAY SYSTEMS ASSOCIATED WITH THIS SCHEMATIC DIAGRAM. FIELD VERIFY ALL EXISTING ROUTINGS.
- 4 NEW FIBER PULLBOXES AND RACEWAY SYSTEMS NOT SHOWN (UN). REFER TO ELECTRICAL SITE PLANS AND FIBER PLANS FOR ADDITIONAL INFORMATION.
- 5 LAN FIBER NOT INDICATED TO BE INSTALLED IN CONDUIT SHALL BE INSTALLED IN 1-1/2" ORANGE WIRE DUCT LASHED TO EXISTING COMMUNICATION CONDUIT INFRASTRUCTURE.
- 6 ALL COPPER CABLE NOT TO BE INSTALLED IN CONDUIT SHALL BE INSTALLED EXPOSED AND LASHED TO EXISTING COMMUNICATION CONDUIT INFRASTRUCTURE.
- 7 MULTIPLE FIBER CABLES SHALL BE INSTALLED IN A SINGLE CONDUIT WHERE POSSIBLE TO MAXIMIZE CONDUIT USE. INSTALL IN ACCORDANCE WITH APPLICABLE INDUSTRY STANDARDS. ALL REDUNDANT FIBER CABLES SHALL BE INSTALLED IN SEPARATE CONDUITS AND SEPARATE DUCT AND MANHOLE SYSTEMS WHERE APPLICABLE. ALL PROPOSED ROUTINGS SHALL BE PRE-APPROVED BY THE OWNER.
- 8 ALL FIBER INSTALLED IN MANHOLES SHALL BE PROTECTED WITH INER DUCT.

LEGEND:



ID	QTY	TYPE	FROM	TO	REMARKS
HLAN130-00	12	2 STRAND MM FIBER	BLDG 110 / LAN MDP	BLDG 130 PDR	
HLAN140-00	12	2 STRAND MM FIBER	BLDG 110 / LAN MDP	BLDG 140 PDR	
HLAN150-00	12	2 STRAND MM FIBER	BLDG 110 / LAN MDP	BLDG 150 PDR	
HLAN800-00	36	2 STRAND MM FIBER	BLDG 110 / LAN MDP	BLDG 800 PDR	
HLAN400-00	36	2 STRAND MM FIBER	BLDG 110 / LAN MDP	BLDG 400 PDR	
HLAN150-00	24	2 STRAND MM FIBER	BLDG 110 / LAN MDP	BLDG 510 PDR	
HLAN500-00	24	2 STRAND MM FIBER	BLDG 810 PDR	BLDG 500 PDR	
T-300-00	300	PR COPPER	BLDG 110 / TEL MB	TUNNEL 520 / 411 I.B.	
T-510-00	100	PR COPPER	BLDG 110 / TEL MB	BLDG 510 I.B.	

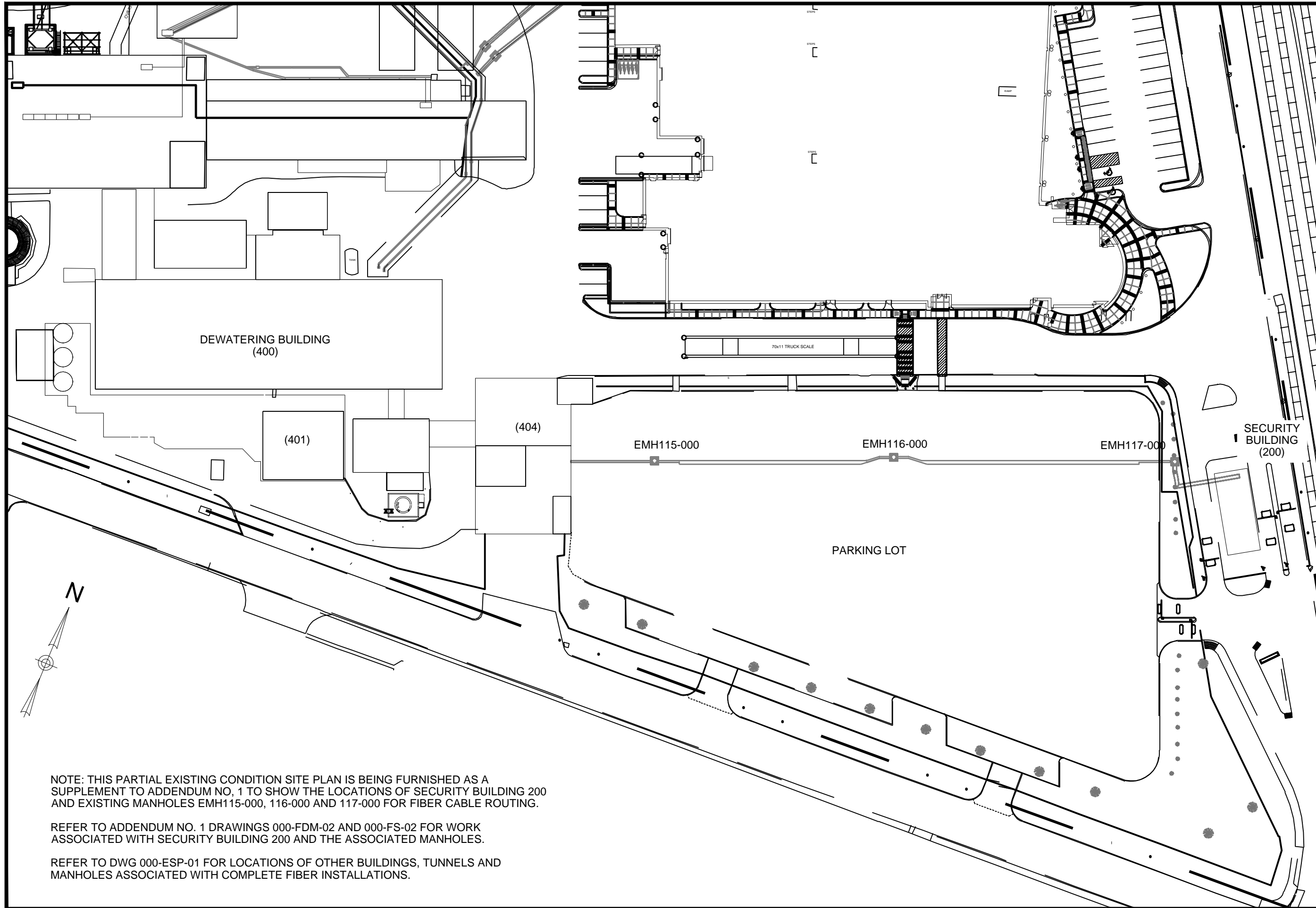


3 RIVERS PROUD



QUESTIONS





NOTE: THIS PARTIAL EXISTING CONDITION SITE PLAN IS BEING FURNISHED AS A SUPPLEMENT TO ADDENDUM NO. 1 TO SHOW THE LOCATIONS OF SECURITY BUILDING 200 AND EXISTING MANHOLES EMH115-000, 116-000 AND 117-000 FOR FIBER CABLE ROUTING.

REFER TO ADDENDUM NO. 1 DRAWINGS 000-FDM-02 AND 000-FS-02 FOR WORK ASSOCIATED WITH SECURITY BUILDING 200 AND THE ASSOCIATED MANHOLES.

REFER TO DWG 000-ESP-01 FOR LOCATIONS OF OTHER BUILDINGS, TUNNELS AND MANHOLES ASSOCIATED WITH COMPLETE FIBER INSTALLATIONS.

SCALE:	1" = 60'
DRAWN BY:	JJC
ARCH/ENG:	ES
DATE:	06/28/21
JOB NUMBER:	12944.01
DRAWING NO.	ESK-01

CONTRACT 1739-ADDENDUM NO. 1
 REFERENCE PARTIAL SITE PLAN FOR FIBER TO BLDG 200

**ALCOBAN WASTEWATER TREATMENT PLANT
 ELECTRICAL DISTRIBUTION SYSTEM UPGRADE**

3300 PREBLE AVE.
 PITTSBURGH, PA 15233

Quad3
 Architecture
 Engineering
 Environmental
 Services

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