Rockland County
Ed Day, Rockland County Executive

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Director of Purchasing

ADDENDUM # 4

RFB #: RFB-RC-SWR-2023-06
Screening Improvements Project

The information in this addendum supersedes any contradictory information set forth in the contract documents. Acknowledge receipt of this addendum in the space provided on the signature page of the bid proposal. Failure to do so, may subject the bidder to disqualification. This addendum forms a part of the contract documents.

Please see the below for Addendum #4.

SIGNED:

Paul J. Brennan

PAUL J. BRENNAN, FNIGP, NIGP-CPP, CPPO
DIRECTOR OF PURCHASING

ADDENDUM

8/28/24

ADDENDUM 04

To All Bidders:

This Addendum 04 is issued for the purpose of amending the requirements of the Contract Documents for the above-named project. Contractors submitting bids for the above-named project shall take note of the following changes, additions, deletions, clarifications, etc., in the Contract Documents, which shall become a part of and have precedence over anything contrarily shown or described in the Contract Documents, and all such shall be taken into consideration and be included in the Contractor's bid proposal.

(Please see attached pages.)

Plan holders wishing to submit bids should acknowledge receipt of this and all Addenda by listing the Addendum Numbers on the appropriate line of Item 7 of the Proposal.

Item 1. Addendum No. 01, Item No. 2, page 4, DELETE the response to Question No. 12 and REPLACE with the following:

Response: For this project, the Contractor is to maintain a one-year warranty after the Final Completion date.

Item 2. Responses to bidders' questions are provided in **Attachment No. 1**.

Item 3. Notice to Bidders, page NOTICE TO BIDDERS-1, first line of second paragraph, DELETE "**August 29, 2024**" and REPLACE with "**September 5, 2024**".

Item 4. Proposal, DELETE page P-3A (as issued through Addendum No. 01) in its entirety, and REPLACE with page P-3B, attached as **Attachment No. 2**.

Item 5. General Contract Conditions, Article 112 "ENUMERATION OF PLANS," DELETE the list of Contract Drawings and REPLACE with the following:

G-01	Contract Title Sheet
G-02	Index of Drawings
G-03	Legend, Symbols, and Abbreviations
G-04	Area Designation Tables
G-05	Overall Site Plan
C-01	Notes, Legend, and Abbreviations
C-02	Existing Conditions, Erosion Control, and Demolition Site Plan
C-03	Grading and Drainage Plan
C-04	Final Site Plan
C-05	Details – Sheet 1
C-06	Details – Sheet 2
DA-01	Architectural Removal Plans EL 70.50 and EL 88.50 and Elevation
A-01	Legend and Notes
A-02	Life Safety Plan and Code Analysis
A-03	First Floor Plan
A-04	Roof Plan
A-05	Elevations
A-06	Sections
A-07	Wall Sections and Details
A-08	Details
A-09	Roof Details and Finish Schedule
A-10	Door Schedule and Details
A-11	Window and Identifying Devices Schedule and Details
DS-01	Structural Removal Plan EL 52.50, EL 70.50, and Section
S-01	General Structural Notes – Sheet 1
S-02	General Structural Notes – Sheet 2
S-03	Plans EL 52.50 and 67.00 and Details
S-04	Plans EL 70.50 and 88.50
S-05	Sections – Sheet 1
S-06	Sections – Sheet 2
S-07	Sections – Sheet 3
S-08	Enlarged Stair Plan and Sections

S-09	Beam Details and Schedule
S-10	Concrete Repair Details and Notes
S-11	Details – Sheet 1
S-12	Details – Sheet 2
S-13	Details – Sheet 3
S-14	Details – Sheet 4
S-15	Details – Sheet 5
S-16	Special Inspection
DM-01	Mechanical Removal Plans EL 52.50 and EL 70.50
DM-02	Mechanical Removal Sections
M-01	Notes and Abbreviations
M-02	Process Flow Diagram
M-03	Hydraulic Profile
M-04	Plans
M-05	Sections – Sheet 1
M-06	Sections – Sheet 2
M-07	Details – Sheet 1
M-08	Details – Sheet 2
M-09	Details – Sheet 3
I-01	Symbols and Legend
I-02	Process and Instrumentation Diagram – Screens
I-03	Process and Instrumentation Diagram – Support Systems
I-04	Installation Details
DP-01	Plumbing Removal Plan EL 70.50
P-01	Notes and Legend
P-02	Riser Diagrams
P-03	Domestic Plan EL 70.50
P-04	Effluent Plan EL 70.50
P-05	Sanitary Plan EL 66.50
P-06	Storm Drain Plan EL 70.50
P-07	Roof Drain Plan EL 88.00
P-08	Section
P-09	Details
DH-01	HVAC Removal Plan EL 70.50
DH-02	HVAC Removal Plan EL 88.00
H-01	Legend and Notes
H-02	Airflow Diagram
H-03	Schedules
H-04	Plan EL 70.50
H-05	Plan EL 88.00
H-06	Sections
H-07	Details
DE-01	Electrical Removals First Floor Demolition Plan
DE-02	Electrical Removals Roof Demolition Plan
E-01	Legends and Notes
E-02	Site Plan
E-03	First Floor Lighting Plan
E-04	First Floor Power Plan

E-05	Roof Power Plan
E-06	Single Line Diagram
E-07	MCC Schedule and Elevation
E-08	Control Diagram
E-09	Miscellaneous Details I
E-10	Miscellaneous Details II

Item 6. Specification Section 01 11 00 – Summary of Work, DELETE paragraph 1.03.A.2 and REPLACE with the following:

2. Work shown on sheets 1 through 86 (inclusive) of the Drawings.

Item 7. Specification Section 01 20 00 – Measurement and Payment, DELETE Paragraph 1.03.B.9).4).a) and REPLACE with the following:

a) Under this Item, the Contractor shall be paid on a per square foot basis for all work required for Additional Construction Joint Repair.

Item 8. Specification Section 01 20 00 – Measurement and Payment, DELETE Paragraph 1.03.B.9).5).a) and REPLACE with the following:

b) The quantity for which payment will be made shall be the total number of square feet of construction joint repaired as specified and as measured in place by the Engineer.

Item 9. Specification Section 01 75 00 – Checkout and Startup Procedures, DELETE "licensed operator" in paragraph 3.01.C and REPLACE with "competent person".

Item 10. Specification Section 01 75 00 – Checkout and Startup Procedures, DELETE "licensed operator" in paragraph 3.04.B and REPLACE with "competent person".

Item 11. Specification Section 31 23 19 – Dewatering, DELETE specification in its entirety and REPLACE with revised Specification Section 31 23 19 – Dewatering attached as **Attachment No. 3**.

Item 12. Specification Section 40 63 43 – Programmable Logic Controllers (PLC), paragraph 2.01.A states: "Refer to Rockland County drawing 2105007-A1 for additional details of existing RTU-1 PLC." The most current drawings for the existing RTU-1 PLC are attached as **Attachment No. 4**.

Item 13. DELETE Appendix C in its entirety, including Cover Page, and REPLACE with Appendix C attached as **Attachment No. 5**.

Item 14. Drawing G-02, in the "TITLE" column associated with Drawing A-09, DELETE "ROOF DETAILS" and REVISE to "ROOF DETAILS AND FINISH SCHEDULE".

Item 15. DELETE the following drawing sheets in their entirety and REPLACE with drawings sheets attached as **Attachment No. 6**.

- A-03 First Floor Plan
- A-09 Roof Details and Finish Schedule

- A-10 Door Schedule and Details
- C-02 Existing Conditions, Erosion Control, and Demolition Site Plan
- C-03 Grading and Drainage Plan
- C-04 Final Site Plan
- C-06 Details – Sheet 2

Item 16. Drawing S-04, DELETE Note 2 and REPLACE with the following:

2. IN THE MECHANICAL SCREEN ROOM, DUMPSTER ROOM, AND ELECTRICAL ROOM, REMOVE COATINGS AND CORROSION FROM EXPOSED STEEL ROOF FRAMING TO CLEAN STEEL. RE-COAT IN ACCORDANCE WITH SPECIFICATION SECTION 09 90 00 – PAINTING.

Item 17. Drawing S-04, DELETE Note 8 and REPLACE with the following:

8. BOLT BOTTOM FLANGE OF W10X33 TO TOP FLANGE OF W10X49 WITH 2 - 5/8" Ø SST BOLTS, 4" MINIMUM BEAM TO BEAM BEARING.

Item 18. Drawing S-05, Section C, immediately after Note 3, ADD Note 4 as follows:

4. PROVIDE TWO 1/4" THICK STAINLESS-STEEL STIFFENERS WELDED TO W10X49 BELOW THE W10X33, ONE EACH SIDE OF WEB OF W10X49. TYPICAL FOR THREE (3) BEAMS.

Item 19. Drawing S-08, Section G, in " 8 EQ RISERS = 3'-4" ", DELETE "8 EQ RISERS" and REPLACE with "6 EQ RISERS".

Item 20. Drawing S-09, Title of Detail 4, DELETE "FALL PROTECTION WALL MOUNT INSTALLATION DETAIL" and REPLACE with "WALL MOUNTED EQUIPMENT AND FALL PROTECTION DAVIT CRANE INSTALLATION DETAIL."

Item 21. Drawing S-10, CONCRETE REPAIR QUANTITIES table, "CONTRACTION OR CONSTRUCTION JOINT REPAIR" column, DELETE "(LF)" and REPLACE with "(SF)".

LIST OF ATTACHMENTS

Attachment No. 1: Responses to Bidders' Questions
Attachment No. 2: Proposal, Page P-3B
Attachment No. 3: Revised Specification Section 31 23 19 – Dewatering
Attachment No. 4: RCSD Existing RTU-1 PLC Drawings
Attachment No. 5: Appendix C: Davis Bacon Prevailing Wage Rates
Attachment No. 6: Revised Drawing Sheets

Attachment No. 1:
Responses to Bidders' Questions

ADDENDUM NO.04

ITEM NO. 2 – Responses to Bidders' Questions

CONTRACT RFB-RC-SWR-2023-06

SCREENING IMPROVEMENTS PROJECT

ROCKLAND COUNTY SEWER DISTRICT NO. 1

ROCKLAND COUNTY, NEW YORK

AUGUST 28, 2024

The attention of all proposers is directed to the following changes, additions, and/or substitutions affecting the above-referenced project. This addendum shall be included in and become part of the RFB for this project. Acknowledge receipt of this addendum in the space provided in the Proposal Form; this section must be signed and submitted with the bid proposal. Failure to do so, may subject the bidder to disqualification.

Below are the questions that have been received by the deadline for receipt of questions (August 22, 2024 12:00 PM) with Responses from the Owner:

Question 18:

Please postpone the bid date 3 weeks from August 29, 2024 to September 19, 2024.

Response: The bid date was extended to September 5, 2024 at 3:00 pm through Addendum No. 03.

Question 19:

Please provide engineers estimate for this project.

Response: The engineers estimate for this project is $7.1-$7.9M.

Question 20:

Page C-02 shows 30 LF of 8" Water pipe to be removed, and approximately 40 LF of abandoned electrical to be removed. Please provide the size, material and depth of the electrical line to be removed and the material and depth of existing water line to be removed.

Response: There are no available record documents that provide the depth or material of the water or electric. Drawing C-02 has been revised through this Addendum to indicate an assumed depth, material, and size.

Question 21:

Page C-02 shows 885 SF of asphalt to be removed. Please provide the thickness for the asphalt to be removed.

Response: Drawing C-02 has been revised through this Addendum to note the assumed pavement thickness, based on the geotechnical boring done in the driveway.

Question 22:

In spec section 33 24 00 2.03 it says HDPE will be used for the Storm Drain. On drawing C-03, the Storm drain is listed as 6" PVC. Please confirm the material for the storm drain pipe.

Response: The drains on Drawing C-03 are connected to the roof drains. The storm drain piping from the roof drains shall be PVC in accordance with Section 33 24 00, Article 2.02.

Question 23:

General Contract Conditions Article 112 indicates drawing C-07 is part of the drawing set. Drawing C-07 was not included in the set provided. Please provide drawing C-07.

Response: Drawing C-07 is not part of the Contract Drawing set. General Contract Conditions Article 112 has been revised through this Addendum to correct the drawing list.

Question 24:

Specification section 01 11 00, 1.03.A.2 indicates Work shown on sheets 1 through 85 (inclusive) of the Drawings. The drawing set has 86 drawings. Please confirm the number of drawings that are to be included in the drawing set. Please reference question 23 when responding.

Response: Section 01 11 00 paragraph 1.03.A.2 has been revised through this Addendum to indicate that the Contract Drawing set includes 86 drawing sheets. As noted in the response to Question 23, the drawing list included in General Contract Conditions Article 112 has also been revised through this Addendum.

Question 25:

Refer to the Door Schedule on drawing A-10 and confirm that the only flood door required is No. 100-4.

Response: Yes, Door No. 100-4 is the only flood door required. Drawing A-03 has been revised through this Addendum to add a callout on Door No. 100-4 for note 08 33 00.0 - HINGED FLOOD DOOR AND FRAME SYSTEM.

Question 26:

The Door Schedule on drawing A-10 indicates that new overhead doors No. 100-1 and No. 100-2 are motorized, and does not provide any operational information for overhead door No. 002-2. Contract drawing E-04 indicates that all three overhead doors are motorized. Please provide clarification on the requirements of the new overhead doors.

Response: Door No. 002-2 shall be insulated and motorized. Motor operation shall be in accordance with Section 08 33 23 paragraph 2.02.I. The Door Schedule on Drawing A-10 has been revised through this Addendum to clarify.

Question 27:

Regarding the Flood Barriers specified in 10 71 19, please confirm that they are only required at opening No. 100-1 and No. 100-2.

Response: Yes, flood barriers per Section 10 71 19 are required for Door No. 100-1 and Door No. 100-2. Drawing A-03 has been revised through this Addendum to add a callout on Door No. 100-1 and Door No. 100-2 for note 10 71 19.0 - REMOVABLE FLOOD BARRIERS.

Question 28:

Refer to specification 01 79 00-Instruction of Owner's Personnel, section 1.02.D., regarding video recording of equipment training sessions.

Question A: Please provide the list of equipment in which 3 days of a training specialist is required.

Question B: Please confirm that the contractor is responsible for the recording and providing the training video to the Owner.

Response: Training specialist is required for each item of equipment specified. The Contractor is responsible for the recording and providing the training video to the Owner.

Question 29:

Section K page P-18 "Consent of Surety" from the proposal seems to be incomplete. The Consent of Surety has to be notarized. Please provide a notary page.

Response: Proposal page P-21 is the Notary Page for the preceding 14 pages of the Proposal, which includes Section K on page P-18.

Question 30:

In order to provide the most accurate, cost-effective estimate, we request a 2-week postponement of the bid opening.

Response: The bid date was extended to September 5, 2024 at 3:00 pm through Addendum No. 03.

Question 31:

Refer to specification 01 75 00-Checkout and Startup Procedures, section 3.01. Paragraph C indicates that the "Contractor shall furnish a licensed operator to start-up the facilities." Typically, an authorized representative of the manufacturer will be involved in the equipment startup and commissioning of the equipment. If that is not the case, and a licensed operator is required, please answer the questions below:

Question A: Please provide the requirements of the licensed operator.

Question B: Since the new bar screen equipment is installed in phases by channel, is the licensed operator required at the end of each phase, prior to the Owner accepting that channel's equipment, then again after all the equipment is installed?

Response: Section 01 75 00 – Checkout and Startup Procedures, paragraphs 3.01.C and 3.04.B have been revised through this Addendum to replace “licensed operator” with “competent person”.

Question 32:

In looking at the Mechanical Process Flow Diagram on drawing M-02, please confirm that the Owner has the responsibility using existing gates and stop logs to isolate the entire Bar Rack Channels Area and each Mechanical Screen channel for the contractor's access to the work areas.

Response: No, it is ultimately the Contractor’s responsibility to isolate any area of work to prevent leakage and ensure safe working space for personnel in accordance with Section 01 14 00 – Coordination with Owner’s Operations. The Contractor may utilize existing gates and stop logs for isolation as part of their means and methods; however, provisions to ensure complete isolation of any screen channel or bar rack channel is the responsibility of the Contractor. Please be aware of the constraints described in Section 01 14 00 – Coordination with Owner’s Operations, paragraph 1.05.C.

Question 33:

In Addendum #2, the Environmental Facilities Corporation Mandatory State Revolving Fund documents in Appendix D and Appendix E were replaced. The revised documents made the following changes to the contract:

- The participation goals were changed from 20% combined MWBE to 20% DBE.
- Added Build America, Buy America (BABA) requirements.

Question A: Confirm the new participation goal is 20% DBE, and not 20% combined MWBE.

Question B: The contract documents now include both AIS and BABA certifications. Which certification is required on this contract?

Response: The new participation goal is 20% DBE. Both AIS Certification and BABA Certification are required for this project.

Question 34:

Request for substitution of pre-applied/underslab waterproofing materials per Section 07 26 16 – Below-Grade Vapor Retarders, paragraph 2.01.

Response: Requests for approval of substitutions or deviations will be handled in accordance with Section 01 25 00 – Substitution Procedures and will not be considered during the bidding phase.

Question 35:

In Specification Section 40 68 00.13-Process Control Software (Modify Existing) Paragraph 3.01.B, it states for the contractor to verify manufacturer, model and revision of the Owner's existing Network, PLC, and HMU Hardware and software as well as the number, design and complexity of relevant displays, alarm summary pages, data collection and trending/reporting to ensure familiarity prior to bid. Please provide the current revision number of the existing PLC Software at RTU-1 that will have to be modified for the new additional I/O. Also, please provide snapshots of the existing screens on RTU-1 for familiarity and counts of relevant screens to be implemented on the new HMI and to have the same "Look and Feel" of the exiting screens for the new graphic screen development for the new I/O.

Response: The most current drawings for the existing RTU-1 PLC have been provided through this Addendum. Site visits are available and encouraged during the bidding process to confirm existing conditions.

Question 36:

In Specification Section 40 68 00.13-Process Control Software (Modify Existing) Paragraph 3.01.C, it mentions modifying the SCADA System to incorporate the new facilities and equipment. Please advise on the current SCADA System Software being utilized and its revision. Also, please advise if there is a current Control System Architecture Drawing to reference for external connections.

Response: The current SCADA System Software being utilized is GE Proficy iFIX 2023. The most current drawings for the existing RTU-1 PLC have been provided through this Addendum.

Question 37:

In Specification Section 40 63 43-Programmable Logic Controllers (PLC), Paragraph 2.01.A, it states for the instrumentation subcontractor shall furnish PLC components as specified and on the drawings for the new I/O. It also states to refer to Rockland County Drawing 2105007-A1 for additional details of existing RTU-1 PLC. Please provide Rockland County Drawing 2105007-A1 for review of the existing panel and any space requirements/concerns for the newly added I/O PLC Cards, terminal blocks, UPS, and associated accessories and appurtenances. Also, please provide a current photo of the existing RTU-1 PLC Panel for the front door and a subpanel view picture to confirm space availability for the new I/O that may not be shown on the existing drawings from previous modifications not recorded.

Response: The most current drawings for the existing RTU-1 PLC have been provided through this Addendum. Site visits are available and encouraged during the bidding process to confirm existing conditions.

Question 38:

In specification section 40 67 63-Uninterruptible Power Systems (UPS), Paragraph 1.01.B, it states that one UPS shall be provided for each operator workstation and its peripherals provided under this contract. In review of the contract drawings we did not notice any operator workstations. Are there operator workstations and peripherals on this project that would require a UPS?

Response: No.

Question 39:

Refer to Contract Drawing S-10, Detail 2-Surface Spall Repair (measured in SF), and Detail 3-Contraction or Construction Joint Repair (measured in LF), Detail 4-Formed Spall Repair (measured in SF), and Bid item 9-Additional Construction Joint Repair (measured in LF). The unit of measurement for the Construction Joint Repairs is LF, even though the work is more like a spall repair, and will differ only in depth. Consider changing the Joint Repair units to SF or increasing the quantity of Spall Repairs in the base contract and unit price items and eliminate the Joint Repair scope and bid items.

Response: Units for construction joint repair have been adjusted to SF. The Schedule of Bid Items, Section 01 20 00 – Measurement and Payment, and Concrete Repair Quantities table on Drawing S-10 have been revised through this Addendum.

Question 40:

After reviewing the specification we noticed that the conveyor is something Headworks can manufacturer, and has been for decades, but is not listed as an acceptable manufacturer. We would like to request that they be added as an or equal if possible. Also, we assume no BABA or AIS requirements for this equipment? Is that correct?

Response: Requests for approval of substitutions or deviations will be handled in accordance with Section 01 25 00 – Substitution Procedures and will not be considered during the bidding phase. This is incorrect, BABA and AIS requirements apply for this project; refer to Addendum No. 02.

Question 41:

The specifications call for the bypass chute to discharge into a 55 Gal Drum, however the inside diameter of one of a 55 gal drum is ~1.875 feet (22.5 inches) and the channel width of the screen is 5.83 feet. Please note who will have to be responsible for any additional connections needed to ensure that all screenings make it into the drum

Response: Screen bypass chute shall be designed to ensure screenings are discharged to the screening container drum without spilling. Any additional connections required to ensure that all screenings are captured in the bypass containers shall be the Bar Screen Manufacturer's responsibility. Refer to Section 46 21 12 – Mechanically Cleaned Multi-Rake Type Bar Screen, paragraph 1.01.C.

Question 42:

Based on their downstream water depth, at peak flow per screen (40 MGD), Headworks meets the headloss requirements however out calculated upstream elevation of 5.382 ft is more than the maximum upstream elevation in their hydraulic profile of ~5ft. Is this acceptable?

Response: It is acceptable only if the calculated bar screen headloss meets the performance requirements detailed in Section 46 21 12 (6 inches at 30% Blind and 2 inches clean based on the downstream water depth specified in the Schedule).

Question 43:

Please clarify the overall length of the screw conveyor

Response: The nominal length of the screw conveyor is 39 feet, as detailed in Section 46 76 42 paragraph 1.02.B.

Question 44:

Headworks proposes to would provide a SW320 instead of a SW420, for the washer compactor. The 320 washer compactor is capable of handling the expected screening capacity, and the 420 is for lack of a better word, overkill

Response: Requests for approval of substitutions or deviations will be handled in accordance with Section 01 25 00 – Substitution Procedures and will not be considered during the bidding phase.

Question 45:

Please note that Headworks is not listed as an or equal for the screw conveyor. Can this change?

Response: Requests for approval of substitutions or deviations will be handled in accordance with Section 01 25 00 – Substitution Procedures and will not be considered during the bidding phase.

Question 46:

Please note that specification 46 21 12, 2.02, F, 4 calls for 0.133 cubic feet per foot capacity per rake, which is associated with 160 mm pitch chain. Please not that based on the design criteria a 125 mm pitch chain with a rake capacity of 0.101 cubic feet per foot, will suffice and will be cheaper than the 160 mm pitch chain. Is this acceptable?

Response: This will not be acceptable. Each cleaning rake shall be provided with a minimum capacity of 0.133 cubic feet per foot of rake head width, in accordance with Section 46 21 12, paragraph 2.02.F.4.

Question 47:

Specification 46 21 12, 1.02, C, 7, a-b, call for headloss calculations and calculations of the screen strength. Please specify if Headworks standard calculations will suffice or if a PE stamp is required.

Response: Headloss calculation shall be performed using standard industry method, i.e,. utilizing Kirschmer formula, which is the basis of design. Headloss calculations do not require Professional Engineer stamp. Structural calculations (i.e., screen structural design, anchorage design, etc.) shall be signed and sealed by Professional Engineer, in compliance with Section 46 21 12, paragraph 1.02.C.7.d .

Question 48:

Please specify the ceiling elevation

Response: The ceiling elevation is at EL 87.73 +/-. Refer to Arch Drawings.

Question 49:

Please confirm if glass bead blasting is an acceptable form of passivation per our standard in-lieu of chemical passivation - "All Stainless-Steel material purchased will be provided to Headworks Inc. pickled and passivated at the mill. Our offer is based on Headworks Inc. standard material finish where all stainless-steel surfaces shall be glass Bead Blasted prior to equipment assembly. The Bead Blast shall remove all weld discoloration and surface contaminants and provide for Spontaneous Passivation as recognized in ASTM A380, Cleaning, Descaling, and Passivation of Stainless-Steel Parts, Equipment, and Systems, 1. Scope, 1.1.1.1."

Response: No, mechanical screens shall be acid passivated as required in Section 46 21 12 paragraph 2.03.B.

Question 50:

Specification 46 21 12, 2.04, A, B, 1, calls for a witness shop test. Please specify who will be responsible for covering this cost and how many people will be present at the witness shop test.

Response: The Engineer and Owner will cover the cost (i.e., time, flights, meals, lodging, etc.) for their respective representatives to attend witness factory testing performed by the manufacturer at the manufacturer’s testing facility.

Question 51:

Please specify what equipment will need to meet AIS/BABA requirements

Response: Refer to the “Mandatory State Revolving Fund Equivalency Project Terms and Conditions” included as Appendix D as issued through Addendum No. 02, as well as the “Guidance for Mandatory State Revolving Fund Equivalency Project Terms and Conditions” and the “New York State Revolving Fund Equivalency Guidance Packet” included as Appendix E as issued through Addendum No. 02. The documents included in Appendix E provide guidance on the products materials that need to meet BABA and AIS requirements.

Question 52:

On page C-02, there is approximately 85 LF of RCP storm drain to be removed. Please provide the approximate depth of this pipe.

Response: Drawing C-02 has been revised through this Addendum; refer to note 4 on revised Drawing C-02.

Question 53:

On page S-08 section G, there are 6 risers shown, but to the left, it says 8 EQ RISERS = 3' - 4". Please confirm the number of risers for these stairs.

Response: Six (6) risers are required. Section G on S-08 has been revised through this Addendum.

Question 54:

Specification section 01 75 00 part 3.01.C & 3.04.B states that the contractor shall furnish a licensed operator to startup the facilities. Is there a required class of WWTP Licensed operator required and what is the anticipated duration of time that a licensed operator will be required.

Response: Section 01 75 00 – Checkout and Startup Procedures, paragraphs 3.01.C and 3.04.B have been revised through this Addendum to replace “licensed operator” with “competent person”.

Question 55:

Specification section 01 14 00 Part 1.09 Emergency Plant Flow Bypass. Part 1.09.A states in part that full plant flow must be maintained unless unanticipated equipment failures are encountered, "(e.g. failure of the bar screen in channel 2 duration construction of channel 3)" and part 1.09.C contractor is responsible for screening removal from bar rack on a 24/7 duration of the bypass. The failure of existing equipment requiring emergency bypass can not be anticipated and is not quantifiable at bid time. Please advise if the unanticipated emergency plant flow bypass under this condition will be paid under the allowance or consider a unit price bid item with a "day" unit of measure and a duration of bypass days to establish an equal basis of bid.

Response: Concur, “unanticipated” equipment failures cannot be anticipated nor quantified. Section 01 14 00 Article 1.09 was included to inform the bidders that a contingency plan was developed should this condition arise, and also to make explicit that bypass in this manner is ONLY acceptable in an emergency condition (i.e., bidders cannot utilize the Bar Rack Channels under any other conditions to maintain plant operations). Bidders shall not include bypass as described in Section 01 14 00 Article 1.09 (including screenings removal) in the work of Bid Items 1 or 2.

Question 56:

Specification section 40 05 59.23 part 2.02 for indicates one-piece construction for SS Slide Gate frames. Please advise if spliced frames would be considered for installation considerations due to the limited headroom / channel depth.

Response: No, the stainless steel slide gate frame shall be constructed to adhere to requirements detailed in Specification Section 40 05 59.23 – Fabricated Stainless-Steel Slide Gates.

Question 57:

On drawing S-04, the W10X33 SST grating support beam appears to be drawn as a continuous beam 21'8" long or is it the intent to provide this beam in multiple sections to match the channel construction phasing.

Response: Provide three (3) sections for W10x33 beam. Provide 4” minimum bearing on W10x49; see Note 8 on Drawing S-04 as revised through this Addendum for connection information. Section C on Drawing S-05 has been revised through this Addendum to include the following: "Note 4: Provide two 1/4 thick stainless-steel stiffeners welded to W10x49 below the W10x33, one each side of web of W10x49. Typical for 3 beams."

Question 58:

Contract drawing M-04 Note #2 - states "stop log groove shall be surface mount grove on one side and channel surface mount grove on the other side. Invert shall be surfaced mount option." The Stop log schedule provided in specification section 40 06 20 notes mounting configuration to be "channel surface mounted" Please clarify.

Response: Contract Drawing M-04 Note 2 is specifically referring to the stop log groove assembly that it is calling out (downstream of bar rack unit 3). This stop log groove will have a channel surface mounted guide for the north guide attached to the wall and a surface mounted guide that is located in the common bar rack effluent channel. The invert of this stop log groove will be provided with a surface mounted installation.

Question 59:

Contract drawing M-07 stop log elevation includes a call out for "hoist system". The stop log specification section only includes the log lifter and the hoist shown on M-05 location does not align with the locations of the stop logs. Please clarify.

Response: The "hoist system" called out called out on Contract Drawing M-07 is for illustration purpose. A davit crane shall be provided to raise / lower the stop logs and stop log lifter as shown on the contract drawings. The "hoist" called out on M-05 are provided for screens and other general purpose, and will not be used for installing and removing stop logs.

Question 60:

On page S-09, Detail 4 is titled "FALL PROTECTION WALL MOUNT INSTALLATION DETAIL" but on the detail drawing it is labelled "WALL MOUNT DAVIT CRANE". Please clarify if this is a davit crane mount or a fall protection mount.

Response: Detail 4 on Drawing S-09 applies for both equipment davit cranes and fall protection davit cranes; the title of Detail 4 on Drawing S-09 has been revised through this Addendum. See Drawing M-04 for locations.

Question 61:

There are 3 cleanouts shown on page C-03, two connecting to the Ductile Iron Floor Drain and one connecting to the Storm Drain. Neither the detail nor the callouts on drawing C-06 mention the material for the cleanout. Please provide the pipe material for the cleanouts.

Response: Drawing C-06 has been revised through this Addendum to update the cleanout detail note.

Question 62:

Spec section 01 35 45 1.04.A.1. says "THERE ARE MATERIALS PRESENT WITHIN DESIGNATED WORK AREAS THAT WILL REQUIRE SPECIAL HANDLING AND OTHER SAFEGUARD MEASURES". Please provide results that show what and where these materials are.

Response: The referenced statement is referring to the known hazardous materials discussed in Section 02 82 33, 02 83 33, 02 84 33, and 02 85 10. Refer to these specification sections for results that show what and where these materials are.

Question 63:

Contract drawing M-03 provides hydraulic conditions for average and peak flows, please provide channel hydraulic conditions for low flow rates.

Response: Low Flow condition is not provided, please refer to the mechanical equipment schedules listed in Division 40 and Division 46 of the Specifications for hydraulic performance requirements. Clarify the need for hydraulic condition for low flow.

Question 64:

For cleaning of channels and tanks, it is anticipated that there will be an accumulation of solids/grit/debris that will need to be removed. If so, please quantify the amount to establish and equal basis of bid.

Response: The Owner is currently working in the wet wells for the Main Pump Station Replacement Project. The Contractor will be responsible for removing the channel solid/grit/debris. The Contractor will be allowed to decant the liquid back to the plant but will be responsible for off-site disposal of the remaining solid/grit/debris material. The Owner does not have an estimate for this material.

Question 65:

Please advise where the solids / debris removal from the headworks manual and motorized bar screen influent channels can be disposed on site as indicated in specification section 01 14 00.

Response: The disposal location will be determined during the Pre-Construction Meeting.

Question 66:

Are there any requirements associated with startup of a new bar screen and the operational duration prior to taking next bar screen out of service to commence work?

Response: The screen shall be tested, accepted, and started up in accordance with Specification Section 46 21 12 prior to taking next bar screen out of service, refer to 3.04 -3.03 for details related to testing and start-up. Refer to Specification Section 46 00 00 - Equipment General Provisions and the Division 1 General Requirements for additional requirements.

Question 67:

Please confirm that the existing masonry and steel does not need to be painted.

Response: Refer to Note 09 90 00.0 – PAINTING on Drawing A-01, as well as architectural (A-series) drawings for locations to be painted. Refer to Note 2 on Drawing S-04, as revised through this Addendum. Painting work shall be in accordance with Section 09 90 00 – Painting.

Question 68:

On Drawing S-10, it states that the type 1 epoxy cementitious surface seal is "0" Qty. Please confirm that this is correct?

Response: Yes, this is correct.

Question 69:

On Drawing A-01 it states to prepare floor for application of concrete floor toppings with non-slip surface finish. Please confirm that this is only for the new floor.

Response: The referenced note on Drawing A-01 is Note 09 97 00.0 – CONCRETE FLOOR TOPPING. Refer to Drawing A-03; note tag 09 97 00.0 – CONCRETE FLOOR TOPPING indicates the area of work is limited to the Compactor Room.

Question 70:

There is no finish schedule on any of the A drawings, Please provide finish schedule for the existing and new building.

Response: Drawing A-09 has been revised through this Addendum to include the Finish Schedule.

Question 71:

Specification section 40 63 43 part 2.01.A - last sentence states "Refer to Rockland County drawing 2105007-A1 for additional details of existing RTY-1PLC. No Substitutions will be permitted. It does not appear that the reference drawing has been provided in the issued contract documents. Please provide or clarify.

Response: The most current drawings for the existing RTU-1 PLC have been provided through this Addendum.

Attachment No. 2:
Proposal, Page P-3B

SCHEDULE OF BID ITEMS - CONTRACT NO. RFB-RC-SWR-2023-06 [1] – CONTINUED

Item No.	Description of Work	Unit	Estimated Quantity	Unit Price In Words	Unit Price In Figures Dollars Cents	Extended Total In Figures Dollars Cents
7	**Additional Surface Spall Repair at a Depth of 4" or Less**	**Unit Price**	**190 Square Feet**	_____ Dollars _____ Cents _____ per Square Foot	$_____ per Square Foot	$_____
8	**Additional Formed Spall Repair at a Depth Greater Than 4"**	**Unit Price**	**190 Square Feet**	_____ Dollars _____ Cents _____ per Square Foot	$_____ per Square Foot	$_____
9	**Additional Construction Joint Repair**	**Unit Price**	**90 Square^3 Feet**	_____ Dollars _____ Cents _____ per Square^3 Foot	$_____ per Square^3 Foot	$_____

CONTRACT NO. RFB-RC-SWR-2023-06 - Total Price of Bid in Words:

_____

CONTRACT NO. RFB-RC-SWR-2023-06 - Total Price of Bid in Figures:

_____

To be verified by extension of above items.

NOTES:

1. In case of a discrepancy between the unit prices written in words and in figures, the unit prices written in words shall govern. In case of a discrepancy between unit prices bid and extended totals, the unit prices shall govern.
2. Refer to Specification Section 01 20 00 for Bid Item Descriptions.
3. Each bidder on a public work contract, where the preparation of separate specifications is not required, must submit with its bid a separate sealed list that names each subcontractor that the bidder will use to perform work on the contract, and the agreed-upon amount to be paid to each, for:
   (a) plumbing and gas fitting,
   (b) steam heating, hot water heating, ventilating and air conditioning apparatus and
   (c) electric wiring and standard illuminating fixtures.[3]

[1] Addendum No. 01
[3] Addendum No. 04

Attachment No. 3:
Revised Specification Section 31 23 19 – Dewatering

SECTION 31 23 19

DEWATERING

PART 1 – GENERAL

1.01 WORK INCLUDED

A. Design, furnish all labor, materials, and equipment, and perform all work necessary to lower and control the groundwater levels and hydrostatic pressures to permit all excavations and construction to be performed in dry and stable conditions. The work shall include the following:

1. Design dewatering system, including engineering analysis by a qualified New York State licensed Professional Engineer.

2. Testing, operation, maintenance, supervision, and final dismantling and removal from the site of the dewatering system.

3. Compliance with all regulations relating to this work, including water discharge and sediment/debris disposal. The Contractor's dewatering approach shall not be allowed to exceed the maximum daily discharge, pretreatment scheme, or point of discharge permitted by the project permit applications without prior approval from the Engineer and Agencies granting permit authority.

4. The diversion, collection, and removal of all ice, snow and surface runoff from the work areas, and removal of groundwater from new excavations to permit construction in the dry.

5. Coordinate with the work requiring dewatering including Excavation, Support of Excavation (SOE), Waterproofing and Foundation Construction.

6. The cost of any replacement or rehabilitation of the subgrade or structures damaged due to dewatering system failures, or Contractor negligence.

7. Use of chloride-based deicing is not allowed on this project.

8. The Contractor shall obtain and comply with all necessary permits from State and local agencies required for operation of the dewatering system, monitoring groundwater, and disposal of dewatering effluent.

9. The Contractor shall collect samples of the dewatering effluent as required by the applicable State and local permits and provide the services of a laboratory certified under the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) for the analyses of the samples collected to determine the quality of dewatering effluent prior to disposal.

011121

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 31 00 01 – Earthwork

B. Section 31 25 00 – Erosion and Sediment Control

1.03 REFERENCE SPECIFICATIONS CODES AND STANDARDS

A. Without limiting the generality of other requirements of these Specifications, all work herein shall conform to or exceed the applicable requirements of the following documents to the extent that the provisions therein are not in conflict with the requirements of this Section.

1. ASTM D1556 – Density of soil in place by the Sand Cone Method.

2. ASTM D2167 – Density of soil in place by the Rubber Balloon Method.

3. Bureau of Reclamation – Groundwater Manual Sediment Test by Imhoff Cone.

4. 6 NYCRR Part 750, State Pollutant Discharge Elimination System (SPDES) Permits

5. 6 NYCRR Part 601, Water Withdrawal Permitting, Reporting and Registration (Exclusive of Long Island Wells Regulated Under Part 602 of This Title)

6. ASTM standards applicable to piping, equipment and other items required for a complete dewatering system

7. Report of Subsurface Exploration and Geotechnical Engineering Assessment, prepared by French & Parrello Associates, dated May 2, 2023.

1.04 SUBMITTALS

A. Submit the following in accordance with Section 01 33 00 – Submittal Procedures:

1. Dewatering Qualification Data per Article 1.05 of this Section.

2. Existing Conditions: Using photographs, show the existing conditions of all adjacent construction and site improvements per Article 3.01 of this Section.

3. Shop Drawings indicating the following:

a. Plans showing the methods and location of dewatering and discharge including a sufficient number of detailed sections to clearly illustrate the scope of work.

1. Show arrangement, locations, and details of wells and sumps; locations of risers, headers, filters, pumps, power units, settling tanks and

discharge lines; and means of discharge, control of sediment, and disposal of water.

2. Include layouts of observation wells and flow-measuring devices for monitoring performance of dewatering system.

3. Relationship of the dewatering system components to existing site features, utilities, streets, and new construction.

b. Drawings and calculations shall bear the seal and signature of the qualified New York State licensed Professional Engineer who is in charge of designing the dewatering system and preparing the drawings.

c. List of materials and equipment to be used.

d. A sample of well records and monitoring forms to be maintained during construction.

e. A definition of the “radius of influence” that the proposed dewatering and construction activities will impart surrounding soils, structures, and below grade infrastructure.

4. Detailed description of the sequence of dewatering operations.

5. Dewatering well installation records indicating an identification number, location, dimensions, and installation procedures and materials.

6. Observation well installation records indicating an identification number, location, dimensions, and installation procedures and materials.

7. Emergency observation plan to be put into operation during failure of the dewatering system.

8. Monthly Dewatering System Monitoring Reports per Article 3.06 of this Section containing the following data on approved forms:

a. For observation wells, daily piezometric levels shall be identified by date, time, well number and system (subsystem if multiple pumps are used) pumping rate. Piezometric levels shall be noted in feet of drawdown and groundwater elevation.

b. For dewatering wells, suspended material test results shall be identified by date, time, well number, well pumping rate (if monitored) and system (subsystem if multiple pumps are used) pumping rate.

c. Installation records for new wells.

9. Schedule and records of all maintenance tests for primary and standby dewatering systems including the following:

    a. Maintenance tests and water quality tests for suspended matter at the discharge point including date, time of day, elapsed times of tests procedures, components tested, suspended particles, resultant observations and well readings.

    b. Daily discharge rates.

    c. Installation and removal of wells.

    d. General observations of the system such as equipment running times, and failures.

10. Dewatering well (and sump) removal records per Part 3 of this Section.

11. Observation well removal records per Part 3 of this Section.

12. Regulatory Compliance: Prior to the start of construction dewatering, submit a report comparing site groundwater quality data with the water quality standards to be complied with under permit(s) as applicable to the project. The permitting requirements to be considered under the Work of this section include, but may not be limited to:

    a. NYSDEC SPDES Discharge Permit(s) - General or Individual Permits - for dewatering effluent or stormwater discharges from construction activities at the project site.

    b. Water Withdrawal, if applicable, in association with construction dewatering.

    c. The Contractor shall be responsible for compliance with all dewatering permit requirements including renewals once construction dewatering begins.

1.05 QUALITY ASSURANCE

A. The Contractor shall be solely responsible for the arrangement, location, and depths of the dewatering system necessary to accomplish the work described herein.

B. The Contractor shall be solely responsibility for monitoring the performance of the dewatering system to meet pretreatment and permitted discharge requirements.

C. Contractor shall employ the services of a Dewatering Specialist or Subcontractor having the following qualifications:

1. Have completed at least five (5) successful dewatering projects of equal size and complexity and with equal systems within the last five (5) years.

2. Retain the services of a field representative having a minimum of five (5) years of experience in installation of well points, sumps, deep wells, or equal systems.

3. Retain the services of a New York Registered Professional Engineer having a minimum of five (5) years of experience in the design of well points, sumps, deep wells, or equal systems.

4. Well drillers shall be licensed in the State of New York.

D. Dewatering shall prevent the loss of fines, seepage, boils, quick conditions or softening of the foundation strata while maintaining stability of the sides and bottom of the excavation and providing dry conditions for construction operations.

E. The Contractor shall be responsible for all remedial action due to problems arising from improper/illegal dewatering.

1.06 REGULATORY REQUIREMENTS

A. The Contractor shall manage and dispose of all groundwater removed during dewatering activities in accordance with either New York State Pollutant Discharge Elimination System (SPDES) standards set by the New York State DEC for discharge to surface water. The Contractor shall acquire, and update as necessary, all permits and/or applications for water withdrawal and disposal of dewatering effluent. It shall be the Contractor's responsibility to update permits to match their final dewatering system design.

B. The Contractor is not permitted to discharge dewatering effluent to the wastewater treatment plant

PART 2 – PRODUCTS

2.01 MATERIALS

A. Provide casings, well screens, sump screens, piping, fittings, pumps, power, controls and other items required for dewatering system and suited for their intended purpose.

B. Materials and equipment used in the dewatering system shall adhere to accepted industry standards and be in good operating condition and able to perform satisfactorily over the required duration of the construction dewatering.

C. Provide treatment equipment as necessary to meet permit discharge requirements. Treatment to remove sediment and adjust for pH should be anticipated.

C. Provide sand and gravel filter materials around the dewatering well screens/sump screens. Wrapping geotextile fabric directly around the well screens shall not be allowed. Surging of the natural formation to form a "gravel pack" is strictly prohibited.

D. Materials, especially well and sump screens, shall be compatible with the environment to prevent erosion, deterioration, and clogging.

E. Provide standby power supply and/or emergency generator capabilities for maintaining uninterrupted construction dewatering.

F. Provide and store auxiliary dewatering equipment, consisting of pumps and hoses on the site in the event of breakdown. At least one (1) spare pump shall be stored onsite for every five (5) used.

G. Provide temporary pumps, pipes, hoses, flumes, or channels for the transport of dewatering discharge water to the outfall location after required pre-treatment.

H. Provide cement grout for well abandonment.

I. Provide sampling ports and flow meters.

PART 3 – EXECUTION

3.01 EXAMINATION OF THE SITE

A. Become familiar with the surface and subsurface site conditions.

B. Obtain the data required to analyze the water and soil environment at the site in order to assure that the materials used for the dewatering systems will not erode, deteriorate, clog or otherwise hinder the system's performance during the period of the dewatering.

C. Prior to the execution of the work, the Contractor, Owner and Engineer shall jointly survey the condition of adjoining structures. Photographs and records shall be made of any prior settlement or cracking of structures, pavements, and the like, that may become the subject of possible damage claims.

D. Examine the areas and conditions where dewatering system is to be installed and correct any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

E. Execution of any earth excavation, installing earth retention systems, and dewatering shall not commence until the related submittals have been reviewed and approved by the Owner and Engineer, to confirm that satisfactorily addressed and the geotechnical instrumentation has been installed and baselined.

3.02 DESIGN

A. The dewatering system shall be capable of relieving all hydrostatic pressure against the height of the excavation walls and of lowering the hydrostatic level below the bottom of the base slab a minimum of two (2) feet below the lowest excavation in the work areas both prior to excavation, and during excavation and construction.

B. The dewatering system shall be segmented so that if the operation of any one segment is disrupted, the remaining segment plus activated redundant components are capable of maintaining the groundwater at the stated levels.

C. Provide, operate and maintain all ditches, berms, site grading, sumps and pumping facilities to divert, collect and remove all surface water from work areas. All collected water shall be discharged into the outfall pipe.

D. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction, or completed. The dewatering effluent water will be discharged under a SPDES permit. Compliance with the SPDES permit requirements should be incorporated into the dewatering system design.

E. Provide pipe and pumps of sufficient size and quantity to be able to flood the excavation within 12 hours in an emergency situation. Restoration of the working area shall be carried out by the Contractor at no additional cost to the Owner.

F. Carry the dewatering system discharge out of the area of the excavation.

G. Provide a standby dewatering system that meets the following requirements:

1. Provide 100 percent standby power.

2. Provide a 15 percent minimum increase in the number of wells or pumping volume and related equipment required to operate the dewatering system installed and ready to operate.

3. Provide a minimum of three separate power units for the standby power system and one installed auxiliary unit for each individually powered pump.

4. Provide separate discharge lines from each well or common lines with valves such that any well or wells that malfunction or are damaged can be isolated form the others.

5. The systems shall be laid out and designed in such a way that portions of the system may be isolated for routine maintenance or repair in case of accidental damage without affecting the normal operation of the system.

H. Provide contracts or sufficient on-site fuel to maintain a five-day supply on site for fuel-powered systems.

I. Provide observation wells to determine compliance with dewatering requirements as indicated on the Drawings, Shop Drawings, and the Engineer.

J. Designate certain observation wells as emergency observation wells.

K. Pretreatment of dewatering effluent

1. The Contractor shall provide appropriately sized settling tanks to collect and store dewatering effluent commensurate with dewatering discharge rates to allow for settlement of suspended solids and sampling as required by disposal/discharge criteria. The tanks shall be equipped with an overflow collection system to prevent accidental release of dewatering effluent. Routine inspection of the tanks shall be carried out daily to ensure that tank integrity is being maintained, and that all valves or tank openings are properly locked out to avoid accidental discharge. Settling tanks shall be cleaned frequently to prevent excess deposition of solids which could overflow from the tank. Removed solids shall be classified and disposed of in accordance with the applicable local rules and regulations. Transportation and Disposal including waste manifests shall be in accordance with the applicable local rules and regulations.

2. The settling tank shall be sized based upon the maximum groundwater flow times a 1.5 safety factor.

3. The Contractor shall provide treatment for, or remove from the site to an approved disposal facility, all dewatering effluent or groundwater which exceeds any limit set for surface water or sewer discharge, whichever is applicable. Classification and disposal shall conform to the local rules and regulations or the requirements of the disposal facility.

3.03 INSPECTION

A. All tests and inspections require the witnessing and written approval of the Owner and Engineer.

B. Provide safe access for the Owner and Engineer to perform testing and inspection.

C. The Owner and Engineer will provide oral and written notice to the Contractor for all tests and inspections that do not meet approval.

3.04 INSTALLATION AND TESTING

A. Install the dewatering system from the existing ground surface or from the bottom of an excavation which is located above the natural groundwater level.

B. Pump each pumping well and/or dewatering sump individually at its maximum or design flow and take a water sample using the following procedures:

1. Obtain samples from stopcocks located along the discharge lines at points of high turbulence or between 4 and 8 o'clock on the perimeter of straight sections of pipe.

2. Flush the stopcock for a few seconds before taking a sample.

3. Take a 1-liter sample with the stopcock fully open.

C. Test the sample following the Sediment Test by Imhoff Cone for two to three minutes and measure the volume of settled materials to the nearest 0.01 milliliters (0.01 milliliters = 10 ppm).

D. All pumping wells and dewatering sumps shall be evaluated as follows:

1. Wells/sumps producing 10 ppm or less shall be accepted.

2. Wells/sumps producing between 10 and 20 ppm may be accepted by the Engineer based on the evaluation of average ppm for all wells, ppm of adjacent wells, and total quantity of water which is actually pumped to dewater the excavation.

3. Wells/sumps producing more than 20 ppm shall be remediated to provide acceptable testing results, or backfilled and reinstalled if acceptable results cannot be achieved.

E. Observation wells shall consist of a standpipe or riser of minimum 1.0-inch inside diameter and a minimum three (3) foot long well-point screen or slotted PVC section at the bottom. Observation wells shall be installed as follows:

1. Jetting installation method for observation wells will be considered acceptable except for observation wells installed within 10 feet of existing structures, piping or utilities.

2. Employ Case Boring Techniques for all observation wells within 10 feet of existing structures, piping, or utilities and backfill the annulus between the well point or riser and the natural soil with a free-flowing granular material similar to Ottawa Sand.

F. Test observation wells by adding or removing water from the riser to demonstrate their proper functioning.

G. Test the standby dewatering system with the following procedures:

1. Shut off the primary power source and demonstrate that the standby power can be activated prior to the groundwater level rising to within one (1) foot of the bottom of base slab elevation and that the standby power source is adequate to draw the groundwater level back down to the Contractor's design depth or to the minimum required depths.

2. Shut off one segment of the system and show that redundant components can be activated prior to the groundwater level rising to within one (1) foot of the bottom of base slab elevation and that the system is adequate to draw the groundwater level back down to the Contractor's design depth or to the minimum required depths.

3. If the dewatering system fails to meet either performance requirement, the Contractor shall draw the groundwater level to a greater depth, add wells, or modify the system such that it will be in conformance with these requirements when retested.

H. Provide temporary grading to facilitate dewatering and control of surface water.

I. Protect and maintain temporary erosion and sedimentation controls during dewatering operations, which are specified in Section 31 25 00 - Erosion and Sediment Control.

3.05 DEWATERING PROCEDURE

A. Maintain dewatering system in operation as required to properly dewater the excavation until work which requires dewatering is complete. In addition, do not excavate until the dewatering system is operational and the water level has been lowered below the anticipated depth of excavation.

1. The performance of the dewatering system shall be monitored and maintained as the excavation progresses deeper.

2. All equipment, berms, ditches, trenches and sump installations shall be checked and maintained daily to remove debris and keep open flow paths.

3. Adjust pumping speed/ flow rates and/or pipe sizes to achieve required dewatering.

B. Perform dewatering in such a manner as to prevent undermining or disturbing foundations of existing structures, utilities, or of work ongoing or previously completed. Schedule the dewatering work to coordinate with all the other related work such as excavation support systems, excavation, placing of concrete walls and slabs, and any other operations by other Contractors that might be affected by this work.

C. Discontinue open pumping from sumps and ditches, if such pumping is resulting in boils, loss of fines, softening of the ground, or instability of the slopes. Modify dewatering plan and resubmit to the Engineer at no additional cost to the Owner.

D. Operate the dewatering system continuously twenty-four (24) hours per day, seven (7) days per week until all structures have been satisfactorily constructed, including placement of fill materials, and no longer require dewatering.

E. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, and from flooding site or surrounding area.

F. Protect subgrades and foundation soils from softening and damage by rain or water accumulation.

G. Heat and light system (as necessary) for continuous operation, including during winter months, at no additional cost to the Owner.

3.06 MONITORING

A. Measure the water levels to the nearest one-tenth foot in all observation wells and submit the readings daily.

B. Measure the concentration of suspended material in the discharge water of each well once every two days. Wells which exceed the acceptable level of solids concentration shall be replaced.

C. Observe and record the total discharge volume and average total pumping rate of the pumping system (record all system flow meters) on a daily basis.

D. Test the performance of the standby system and all components by demonstrating that the system is operational at least every two weeks.

E. Test the observation wells every two weeks by adding and removing water from the risers to demonstrate their proper functioning.

F. Observation wells that become inoperable shall be immediately replaced while construction is halted if the Engineer determines that the observation well is critical.

G. Repair leaks promptly to prevent damage.

H. Remove and add riser pipe of each observation well located within the excavation as construction progresses until the well conflicts with the structure. When the conflict occurs, abandon the observation well, fill it with grout, and cut the riser off at grade.

I. In the event of a dewatering system failure, take the following steps:

1. Conduct in situ density tests conforming to ASTM D1556 or ASTM D2167 immediately above an at the structure founding grades.

2. Remove all soils that show unacceptable density and replace them with compacted fill as indicated in Section 31 00 01 – Earthwork.

3. Test the repaired soils as required by the Owner and Engineer to verify that they have been returned to their original in situ state or better.

4. Repair or replace damaged structures.

3.07 REMOVAL OF DEWATERING SYSTEM

A. Obtain written approval from the Owner and Engineer prior to ceasing dewatering operations. The Engineer shall provide confirmation that the structural components provide adequate weight to prevent buoyancy.

B. Obtain written approval from the Engineer to remove dewatering components when the dewatering system is no longer needed.

C. Remove all dewatering wells/sumps, buried and surface piping, cables, pump foundations, structural supports, and all other components and/or support facilities.

D. Backfill as specified in Section 31 00 01 – Earthwork, all trenches and excavations below final grades or in fill areas.

E. The Contractor shall be responsible for proper decontamination of dewatering system equipment and proper disposal of all residual contaminated materials (such as filter material and settlement silts) accumulated during operation of the pretreatment system equipment.

F. The Contractor shall repair all penetrations of the foundation slab required for the dewatering system in a manner that maintains the warranty of the waterproofing system.

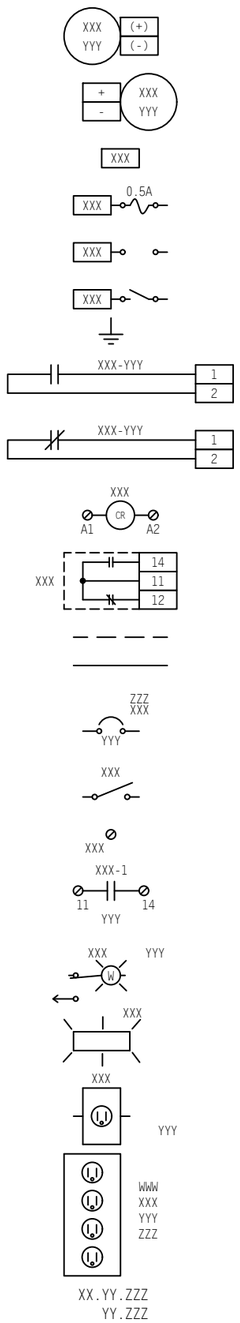
G. Repair any damage caused by the Contractor during dewatering operations at no additional cost to the Owner.

H. Provide documentation of dewatering and observation well removal including the date of removal, well number, location, procedures, and materials used.

END OF SECTION

Attachment No. 4:
RCSD Existing RTU-1 PLC Drawings

Symbols



Symbol Legend

Field Inputs with associated Terminal Numbers
"XXX" = Tag Prefix
"YYY" = Tag Number

Field Ouputs with associated Terminal Numbers
"XXX" = Tag Prefix
"YYY" = Tag Number

Terminal Block
"XXX" Terminal Number

Fused Terminal Block
"XXX" Terminal Number

Fused Terminal Block with no Fuse Installed
"XXX" Terminal Number

Knife Disconnect Terminal Block
"XXX" Terminal Number

Ground

Normally Open Contact with associated Terminal Numbers
"XXX" = Tag Prefix
"YYY" = Tag Number

Normally Closed Contact with associated Terminal Numbers
"XXX" = Tag Prefix
"YYY" = Tag Number

Relay Coil
"XXX" = Relay Designated Number
"A1" & "A2"= Relay Coil Screw Terminal

Form "C" Relay Contact with associated Terminal Number
"XXX" = Relay Coil Number

Field Wiring

Panel Wiring

Circuit Breaker
"XXX" = Designated Circuit Breaker Number
"YYY" = Circuit Breaker rated Amperage
"ZZZ" = Circuit Breaker Short Circuit Rating

Door Switch
"XXX" = Door Switch Designated Name

Terminal Screw
"XXX" = Terminal Screw Number

Relay Contact
"XXX" = Associated Relay Contact Number
"YYY" = Location of Associated Relay Coil

Pilot Light, Push to Test
"W" = Pilot Light Color
"XXX" = Pilot Light Designated Number
"YYY" = Pilot Description

Panel Light
"XXX" = Panel Light Designated Name

Receptacle
"XXX" = Receptacle Designated Name
"YYY" = Receptacle Type

Uninterruptable Power Supply (UPS)
"WWW" = UPS Designated Name
"XXX" = UPS VA Rating
"YYY" = Receptacle Plug Type
"ZZZ" = Receptacle Type

Drawing Reference (Different Drawings)
Drawing Reference (Same Sheet)
"XX" = Drawing Number
"YY" = Sheet Number
"ZZZ" = Line Number

Panel Specifications

Physical

1. Wire Duct - Wire duct shall be Panduit brand "Type F" narrow fingered with a height of 4" unless otherwise specified on the drawings. All duct shall be secured using plastic rivets at both ends and approximately every 8" in between. Duct color shall be as indicated on the drawings with gray being used for 120-480VAC and white used for all 12-48VDC, analog wiring and network cabling. When two ducts are located parallel to each other the slots shall be lined up, no gap should be left between the ducts. The duct shall be notched at any point where a wire or wires leave the duct and are attached to the panel using adhesive mounting bases for plastic wire ties.
2. Din Rail - Din rail shall be 35mm x 7mm zinc coated steel. All din rail shall extend the entire length of the area shown on drawings. It should be secured using 10-32 x 1/2" machine screws with flat washers and lock washers.
3. Dimensions on drawings shall be adhered to. Contact the Aaron Associates Project Engineer in the case of any dimensional discrepancies.

Wire

1. Standard wire shall be type MTW stranded, in the gauge and color indicated on the drawings. If no color is specified use the table below. Only one shade of each color shall be used in a panel.
2. Twisted shielded pair wire shall be Omni #DS11802 with an overall foil shield or approved equal. The conductor insulation shall be PVC colored red(+) and black(-). The outer insulation shall also be PVC, gray in color, and have an approximate outer diameter of 0.164

Line Power = Black -- Control Power (120VAC) = Red -- 120VAC Neutral = White
24VDC Positive = Med. Blue -- 24VDC Negative = White with med. blue trace
Foreign Voltage = Yellow -- Analog Positive = Red -- Analog Negative = Black

Labels

1. All wire label shall be Phoenix Contact KTME25x9 self-laminating (or exact equiv), adhesive wire labels.
2. All devices shall be labeled as indicated on the drawings. Labels shall have a black background with white letters.
3. All panels shall be UL508A listed and marked as required.
4. Exterior labels shall be engraved and installed as shown on the exterior nameplate legend.
5. Interior Device labels shall be engraved and installed as shown on the interior nameplate legend. Use Phoenix Contact #1004348 Terminal Strip Marker Carrier with #0819275 label or equivalent label.
6. Pilot devices shall be labeled on the interior side using the Pilot Device Tag ID (Equip. ID) found on the exterior nameplate legend.

Workmanship

1. All wiring in ducts shall be neat and installed in a professional manner.
2. Service loops shall be left in all panel wiring. All wiring of a given type shall have loops of identical length.
3. Twisted shielded cables shall have the outer jacket stripped back 6", shrink tubing over the drain wire, and have an overall piece of shrink tubing 1" in length centered over the end of the jacket.
4. Wire shall be bundled to one side of the duct using plastic wire ties.
5. Wire labels shall be printed legibly in black (no handwriting), adhered approx. $\frac{1}{4}$" outside associated terminal block properly rotated for viewing without hindrance and aligned with like terminal blocks on same vertical/horizontal rails/rows.
6. All devices shall be mounted squarely on the panel.

Miscellaneous

1. Devices shall be oriented as shown on the drawings, however, it is noted that relay contacts should generally face towards an AC (gray) wire duct and AC & DC terminals of devices should face in a direction matching their associated wire duct.
2. Top of panel penetrations should be avoided.
3. No cabling shall be routed along the sub plate in the area where the PLC resides, in order to allow for further expansion.
4. All terminal blocks of differing potentials when placed adjacent to each other shall be separated by the proper terminal barrier or end retainer, as warranted.
5. Multi-conductor cable jacket shall be cut back in a manner where only individual conductors are outside the wire duct.
6. Manufacturer's jumpers should be used wherever feasible and as indicated in the BOM and should be marked at the jumpered points.
7. Non-factory jumpers should be routed in and out of wire duct and be labeled at both ends.
8. Any wiring designated by a solid line shall be installed during panel fabrication, including jumpers on the field side of analog input (AI) terminals for 24Vdc common connections to devices that are anticipated to be loop-powered as shown on the drawings herein.
9. For AI's, where a fuse is not shown in a terminal, no fuse or holder is provided.
10. Unlike wiring (AC vs. DC/network) shall pass directly through wire duct at 90° it is not designated to be in.

Panel Specifications (cont.)

Miscellaneous (cont.)

11. All panel penetrations shall be of machine quality cut, de-burred, and not deviate over $\frac{1}{16}$".
12. Any panel containing a network switch will likely contain internal networking connections. Consult the provided network diagram for schedule of required internal network connections to be provided.
13. Consult the Aaron Associates Project Engineer with any questions regarding any deviations from these specifications.
14. Wireway & DIN Rail installations should be contiguous with no breaks.

Installation Specifications

1. Gray Panduit = AC Wiring
   White Panduit = DC, signal and network Wiring
   Blue Panduit = Intrinsically Safe (IS) Wiring
2. 120VAC and 24VDC conductors shall only be wired perpendicularly to each other unless in their respective colored wireway.
3. Wireways are labeled on each interior layout drawing to distinguish between field or internal panel wiring. All conductors shall be run through wireways.
4. Conductors of intrinsically safe circuits shall be seperated from nonintrinsically safe circuit conductors by a space of not less than 2 in. or by grounded metal partitions or insulating barriers.
5. Conduits shall be properly sealed to stop liquids from entering the control panel. No conduit entries shall be installed directly above the PLC system.
6. The PLC system shall be shielded while installing any conduits or conduit entries on the top of the enclosure as to protect from falling debris.
7. Please take note of any UPS (uninterruptible power supply) in the BOM and exterior layout drawing prior to choosing conduit entries. The UPS will typically be installed on the floor of the enclosure unless otherwhise specified.
8. If a UPS (uninterruptible power supply) is present in control panel, seperate power is provided for UPS vs non-UPS powered devices. Please take note of seperate neutral terminals (HN vs 2).
9. Please note the dedicated field instrument power page (typ. sht 3). Seperate neutral and ground terminals are provided for each instrument.
10. The convenience receptacle provided is for computer equipment only. Loads over 2A shall not be plugged into the receptacle.
11. Dashed boxes around devices indicate the device is located outside of the control panel.
12. If field wiring to relays are required, please note the relay pole (CRxx-1 = 1st pole on relay).

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

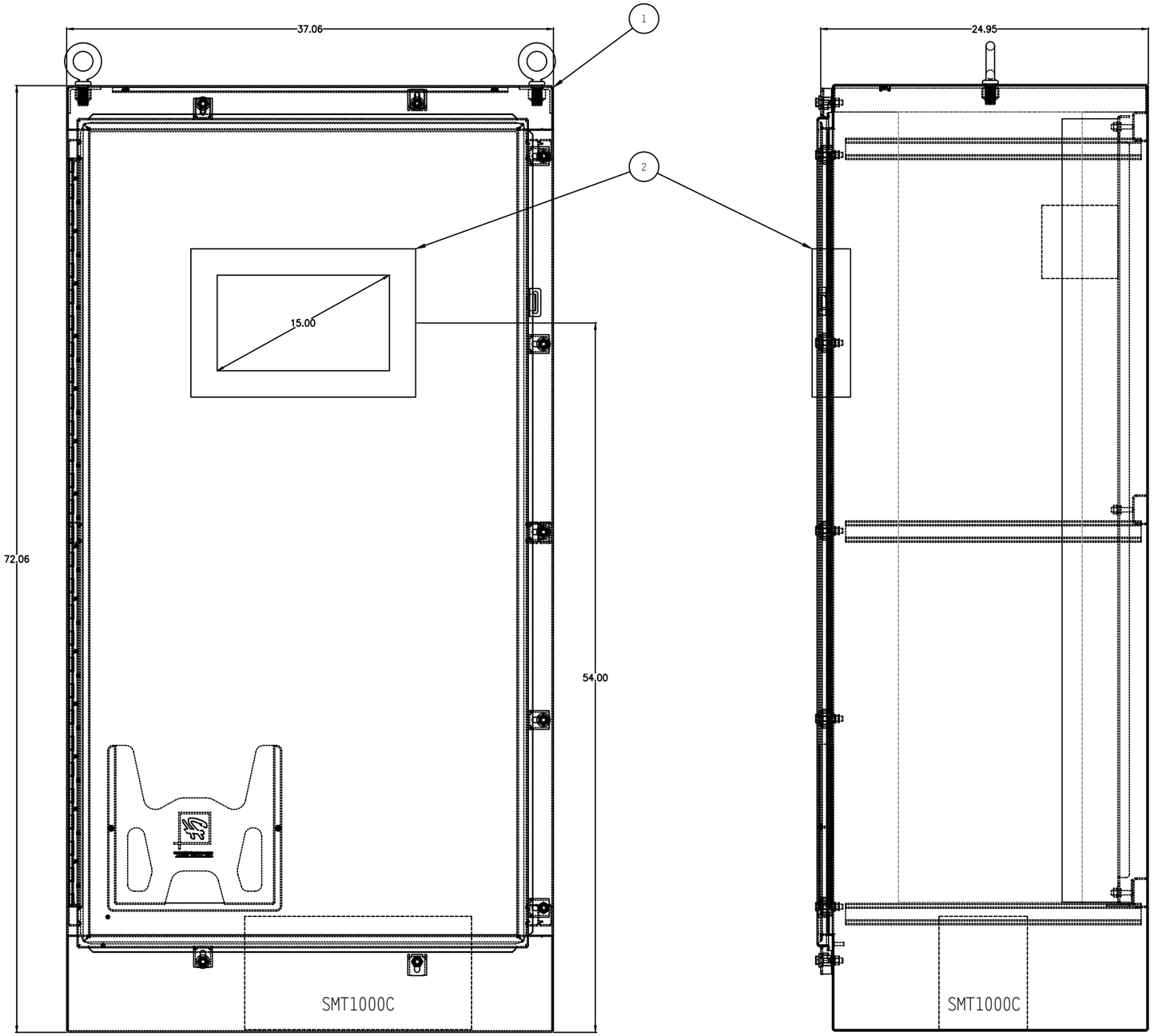
Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Aaron Associates Drawing Symbol Legend & Panel/Installation Specifications
PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	1	1	2105007-S1

ITEM	MANUFACTURER	QTY	MODEL	DESCRIPTION
1	Hoffman	1	A72H37224FS	Existing Free Standing Enclosure 72"H x 37"W x 24"D
2	Emerson	1	IC785CSWB15PC128	15in RXI Panel PC, 8GB RAM, 128GB SSD



REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

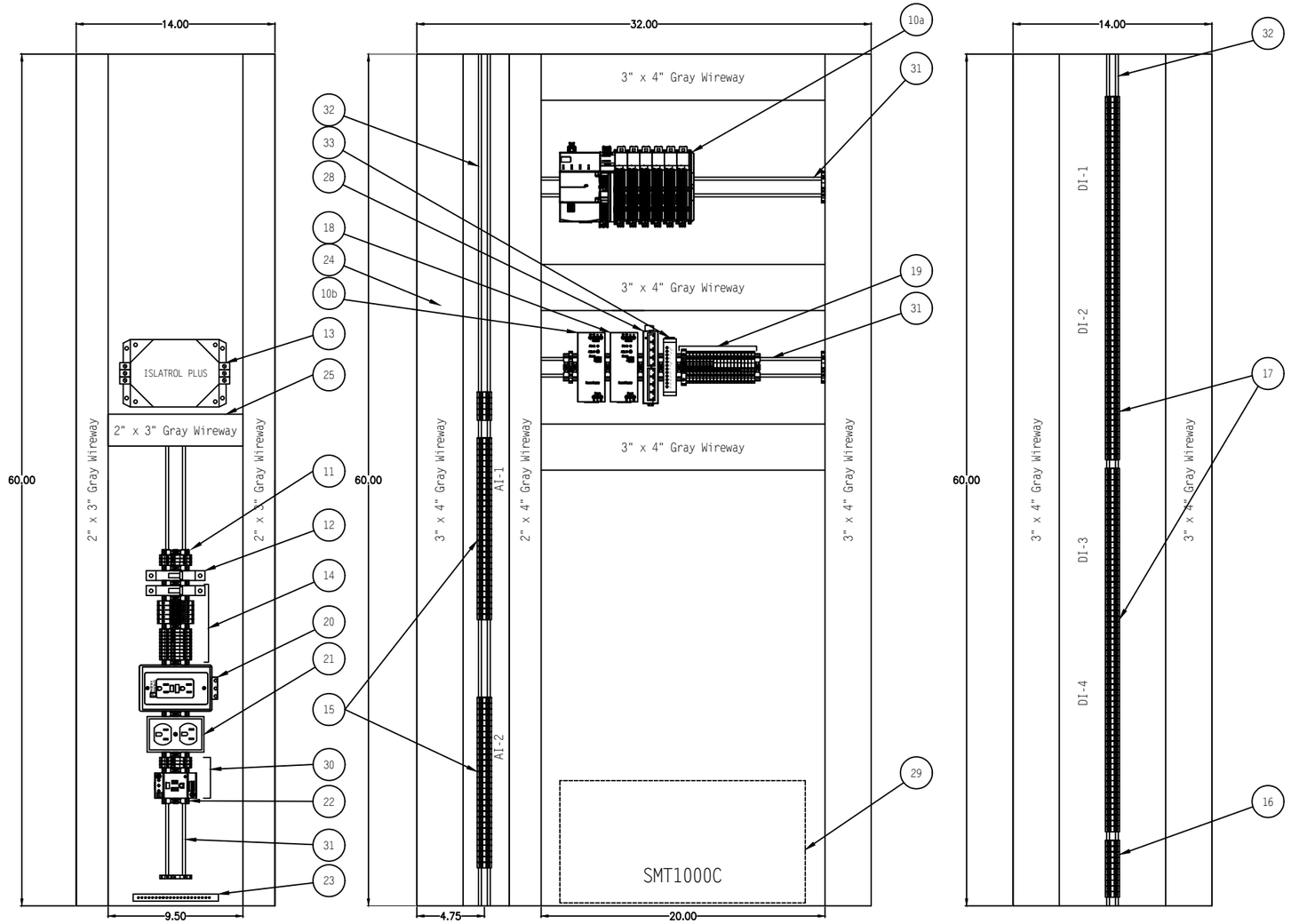
Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1) Exterior Cabinet Layout

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	1	2	2105007-A1



LEFT SIDE SUBPANEL
(EXISTING)

CENTER SUBPANEL
(EXISTING)

RIGHT SIDE SUBPANEL
(EXISTING)

ITEM	MANUFACTURER	QTY	MODEL	DESCRIPTION
10a	Allen-Bradley			CompactLogix PLC Hardware
		1	5069-L320ER	CompactLogix Processor, 2MB, Ethernet/IP
		2	5069-IF8	CompactLogix Analog Input Module, Differential, 8pt
		4	5069-IB16	CompactLogix Digital Input Module, 24VDC, 16pt
		1	5069-ECR	CompactLogix Right End Cap
		1	5069RTB64SCREW	Compact 5000 6 & 4 Screw RTB
		6	AB5069RTB18SCREW	Compact 5000 18 Screw RTB
10b	Allen-Bradley			CompactLogix PSU (MOD Power)
		1	1606-XLB240E	24VDC Power Supply, 10A
11	Phoenix Contact			Terminal Blocks for Incoming Power
		2	30 46 18 4	UT 4-MTD Feed Through Terminal Block
		1	30 46 20 7	UT 4-MTD-PE/S Grounding Terminal Block
12	Phoenix Contact			Main Circuit Breaker
		1	29 07 57 3	20A Branch Circuit Breaker, TMC 81C 20A, (CB-1)
13	ASCO	1	275120NF015AN3N0	Model 275 Surge Protective Device, 120VAC, 15A
14	Phoenix Contact			Circuit Breakers and Terminals for 120VAC Power Distribution
		4	07 12 27 5	TCP 6 Miniature Circuit Breaker, 6 Amp (CB-2, CB-4, CB-5, CB-6)
		1	07 12 21 7	TCP 2 Miniature Circuit Breaker, 2 Amp (CB-7)
		1	29 07 57 1	15 A Branch Circuit Breaker, TMC 81C 15A (CB-3)
		5	31 18 20 3	UK 6-FSI/C Circuit Breaker Base
		4	30 46 18 4	UT 4-MTD Feed Through Terminal Block
		5	30 46 20 7	UT 4-MTD-PE/S Grounding Terminal Block
15	Buchanan			Existing Terminal Blocks for Analog Inputs (AI-1)
		62	N/A	N/A
16	Buchanan			Existing Terminal Blocks for 24VDC Distribution
		10	N/A	N/A
17	Buchanan			Existing Terminal Blocks for Digital Inputs (DI-1, DI-2)
		128	N/A	N/A
10b	Allen-Bradley			CompactLogix PSU (SA and 24VDC Power Distribution)
		1	1606-XLB240E	24VDC Power Supply, 10A
19	Phoenix Contact			Terminal Blocks for 24VDC Distribution
		1	07 12 27 5	TCP 6 Miniature Circuit Breaker, 6 Amp (CB-51)
		1	31 18 20 3	UK 6-FSI/C Circuit Breaker Base
		8	30 46 18 4	UT 4-MTD Feed Through Terminal Block
		8	30 46 20 7	UT4-MTD PE/S Grounding Terminal Block
		9	30 36 80 6	P-FU 5X20 6.2mm Fuse Plug
		9	30 46 14 2	UT4-TG Pluggable Terminal (FU-52 thru FU-57)
20	Phoenix Contact	1	56 00 46 2	GFCI EM-DUO GFCI Convenience Receptacle, 15A
21	Leviton	1	5262-IG	Industrial Series Heavy Duty 15A 125V Duplex Receptacle, Orange
22	Phoenix Contact	Lot	08 00 88 6	End Retainers E/NS 35 N
23	Panduit	1	UGB2/0-414-6	Ground busbar (signal)
24	N/A	Lot	N/A	Existing Wireway (Size and color per dwg)
25	Panduit	1	N/A	Type "F" Slotted Wireway (Size and color per dwg)
26	Phoenix Contact			Jumper Bars for Distribution (Not Shown)
		Lot	30 32 19 8	FBS 10-6 BU Plug-in Bridge, Blue, For 24VDC+ Terminals
		Lot	30 30 27 1	FBS 10 Plug-in Bridge, Red, For 120VAC Line Terminals
		Lot	30 32 25 3	FBS 10-GY Plug-in Bridge, Gray, For 24VDC COM and 120VAC Neutral Terminals
27	Bussman (or equal)			Fuses (Size and quantity per dwgs)
		Lot	Various	GMA- 5mm X 20mm Fast-Acting Glass Tube Fuse, designed to UL/CSA 248-14
28	Phoenix Contact	1	1102079	FL SWITCH 1000-8POE-GT, Industrial Ethernet Switch, 8 POE Ports
29	APC	1	SMT1000C	UPS, 120VAC, 1000VA
30	Phoenix Contact			UPS Receptacle & Terminal Blocks
		1	08 04 15 5	UPS Receptacle, EO-AB/UT/LED/15
		2	30 46 18 4	UT 4-MTD Feed Through Terminal Block
		1	30 46 20 7	UT4-MTD PE/S Grounding Terminal Block
31	Phoenix Contact	Lot	08 01 73 3	(NEW) DIN Rail Perforated - NS 35/ 7,5 PERF 2000MM
32	N/A	Lot	N/A	Existing Dinrail
33	Digi	1	70001777	DigiOne IAP Protocol Converter, 24VDC

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1)
Interior Cabinet Layout

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
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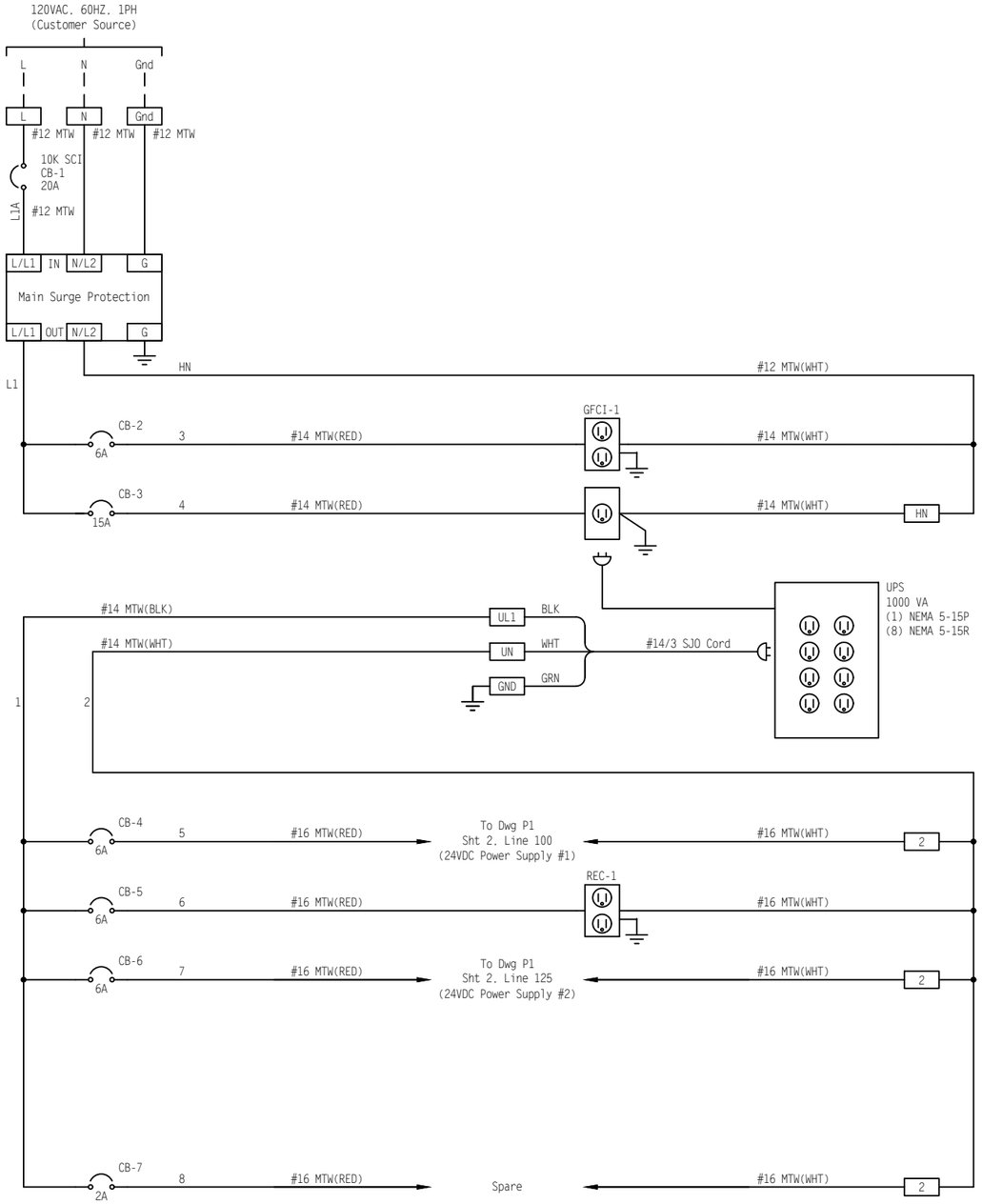


KEY:
FIELD WIRING — — — —
PANEL WIRING ————

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

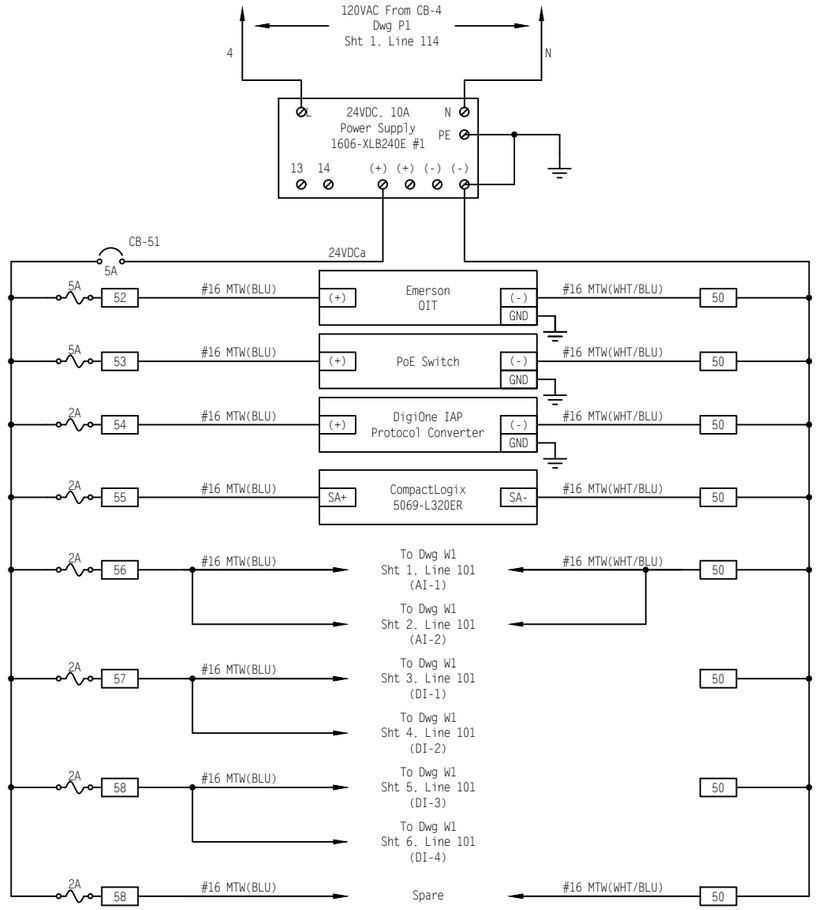
Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

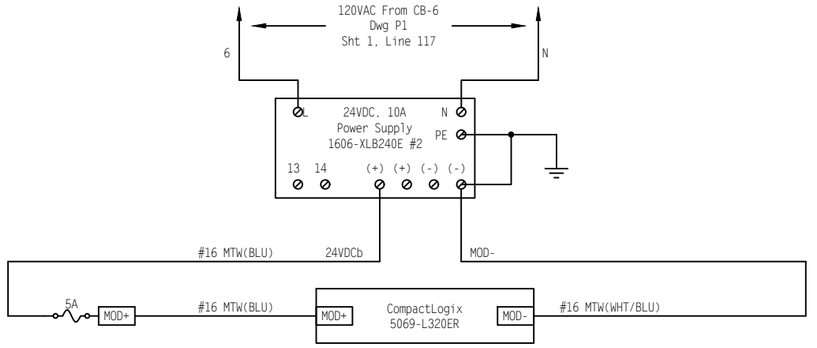
TITLE: Remote Terminal Unit Panel (RTU-1)
120VAC Power Distribution

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	1	2	2105007-P1





KEY:
FIELD WIRING — — — —
PANEL WIRING ————————

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1)
24VDC Power Distribution

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	2	2	2105007-P1

Field Devices | Cabinet Devices

24VDC From FU-56 Dwg P1 Sht 2. Line 110
(-) 50 #16MTW(WHT/BLU)
(+) 56 #16MTW(BLU)

5069-IF8 Analog Input

JI 0131	(+) / (-)	130+ / 130-	#18TSP(RED) / #18TSP(BLK)	0 Input 0+ / 1 Input 0-	Main Sewage P Pump No.1 Power Consumption
		112C / SHLD			
JI 0134	(+) / (-)	131+ / 131-	#18TSP(RED) / #18TSP(BLK)	2 Input 1+ / 3 Input 1-	Main Sewage P Pump No.4 Power Consumption
JI 0132	(+) / (-)	132+ / 132-	#18TSP(RED) / #18TSP(BLK)	4 Input 2+ / 5 Input 2-	Main Sewage P Pump No.2 Power Consumption
		113C / SHLD			
JI 0133	(+) / (-)	133+ / 133-	#18TSP(RED) / #18TSP(BLK)	6 Input 3+ / 7 Input 3-	Main Sewage P Pump No.3 Power Consumption
JI 0135	(+) / (-)	134+ / 134-	#18TSP(RED) / #18TSP(BLK)	8 Input 4+ / 9 Input 4-	Main Sewage P Pump No.5 Power Consumption
		114C / SHLD			
JI 0136	(+) / (-)	135+ / 135-	#18TSP(RED) / #18TSP(BLK)	10 Input 5+ / 11 Input 5-	Main Sewage P Pump No.6 Power Consumption
		136+ / 136-	#18TSP(RED) / #18TSP(BLK)	12 Input 6+ / 13 Input 6-	Spare
		115C / SHLD			
		137+ / 137-	#18TSP(RED) / #18TSP(BLK)	14 Input 7+ / 15 Input 7-	Spare
				16 Shield / 17 Shield	

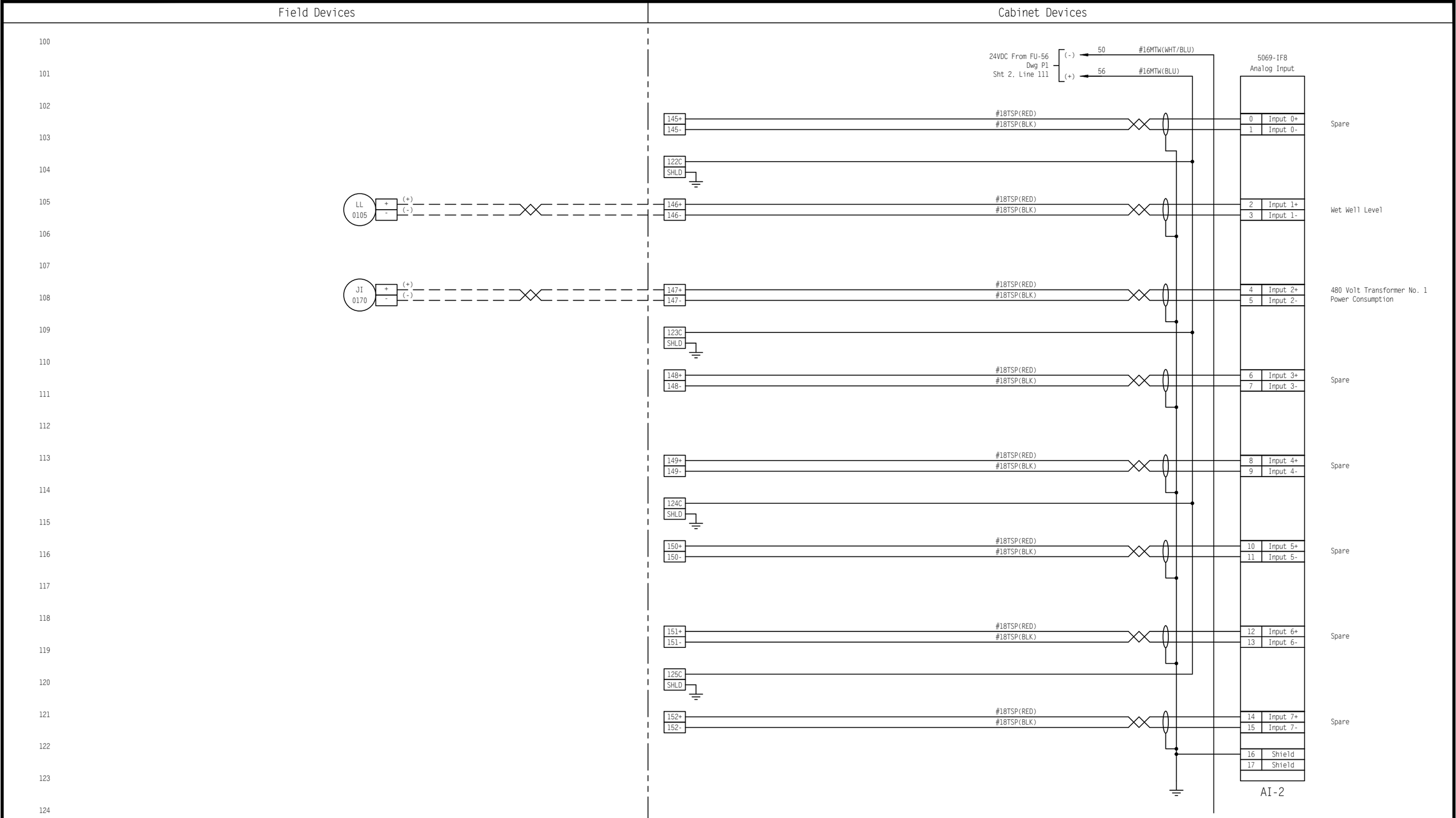
AI-1

KEY:
FIELD WIRING — — — —
PANEL WIRING ————

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1) Wiring - Analog Input #1
PROJECT: Rockland County Sewer District #1
SCALE: | DRAWN BY: RCL | CHECKED BY: SRM | APP'D BY: SRM
DATE: 08/11/21 | SHEET 1 OF SHEETS 6 | DRAWING NO. 2105007-W1



KEY:
FIELD WIRING — — — —
PANEL WIRING ————

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

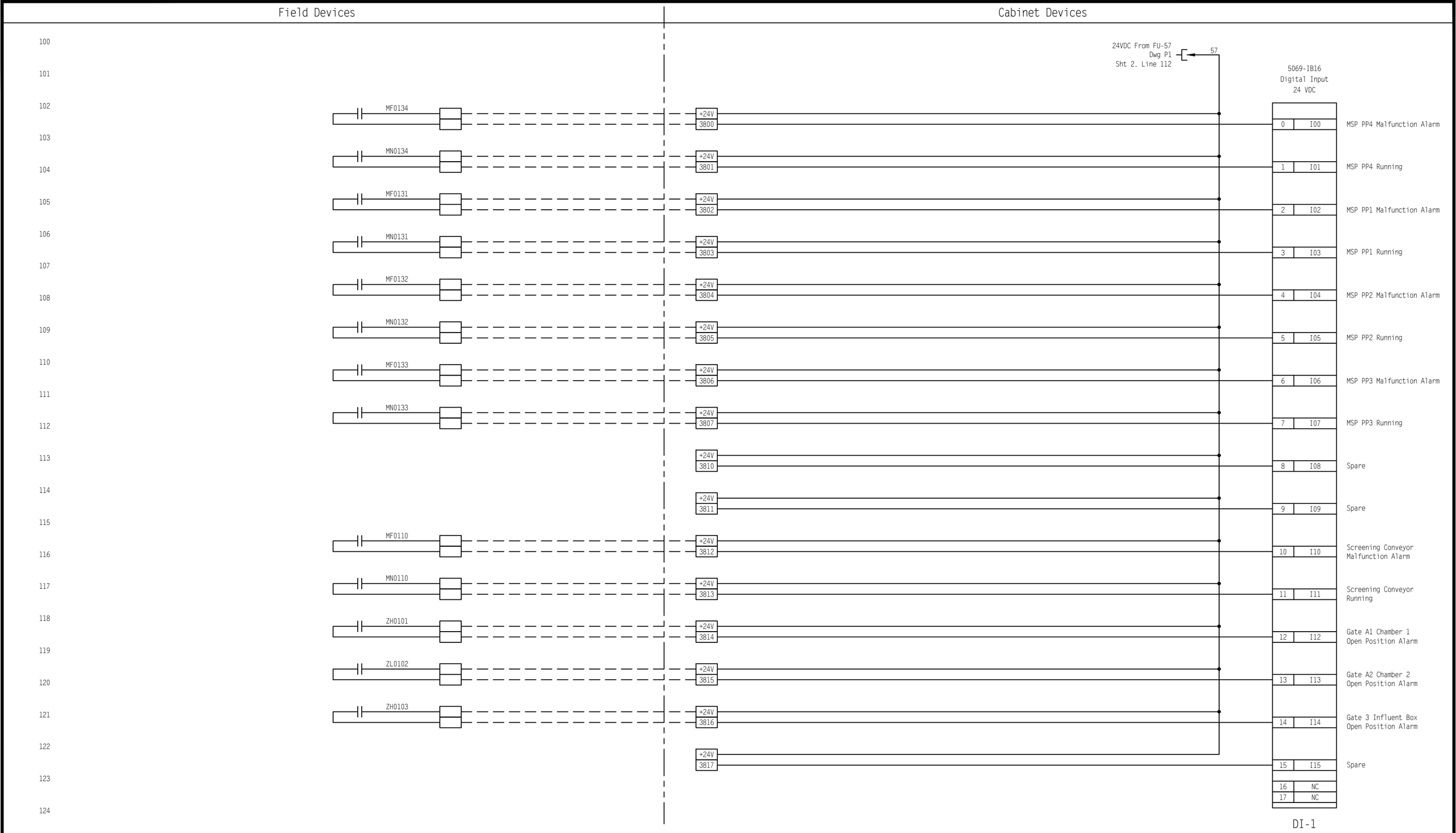
Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1)
Wiring - Analog Input #2

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	2	6	2105007-W1



KEY:
FIELD WIRING — — — —
PANEL WIRING ————

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

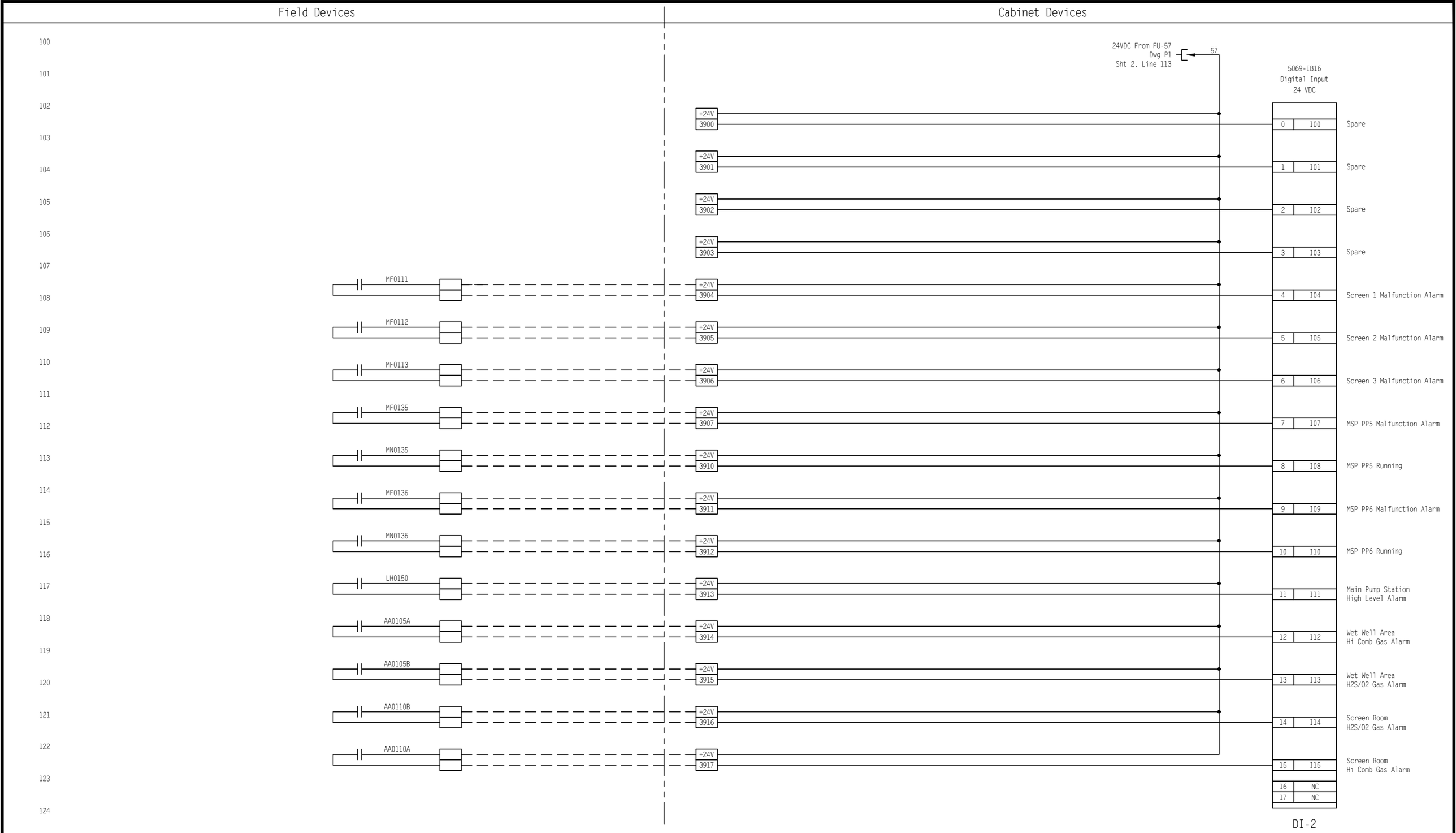
Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1)
Wiring - Digital Input #1

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	3	6	2105007-W1



KEY:
FIELD WIRING — — — —
PANEL WIRING ————

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

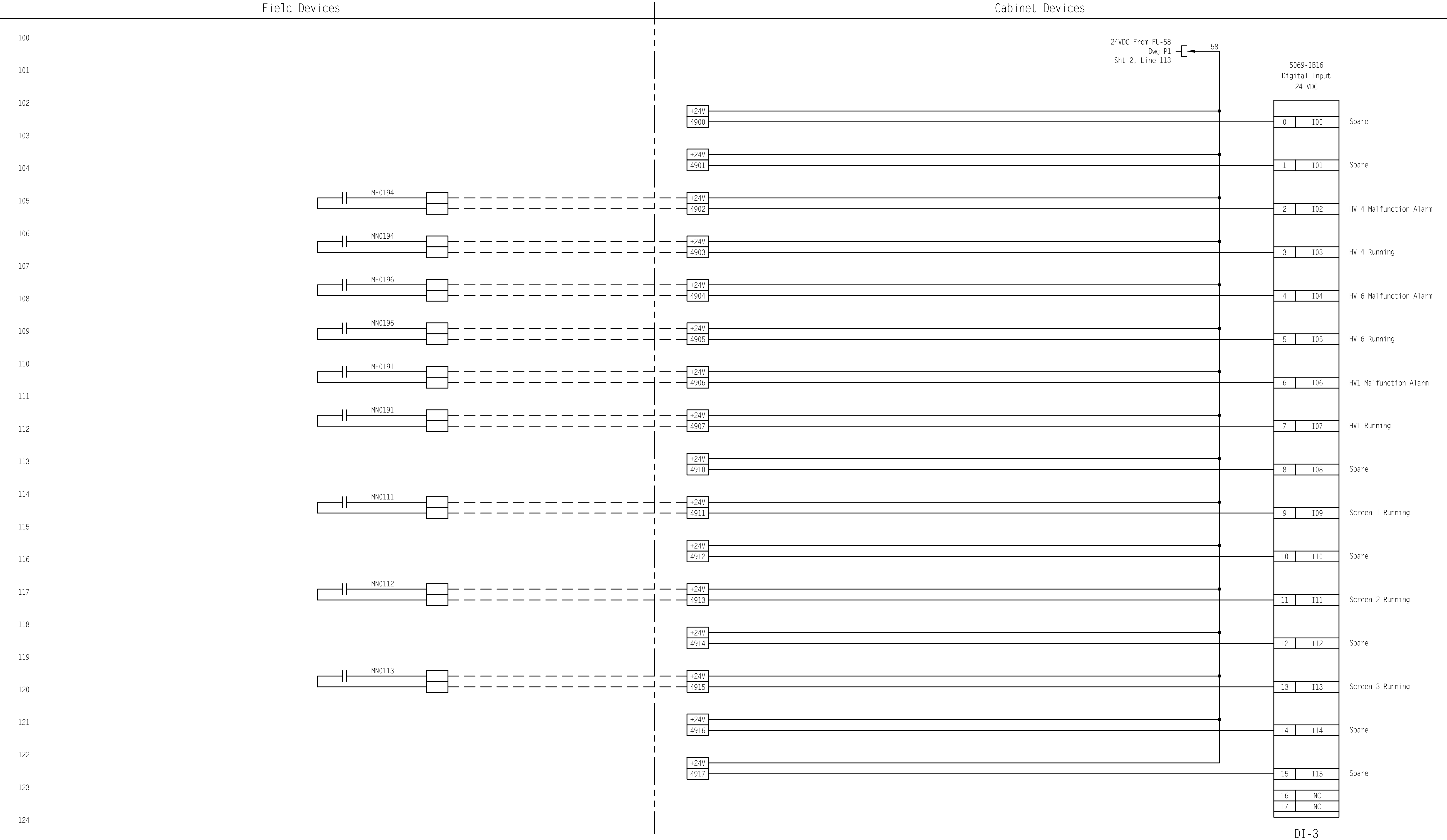
Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1)
Wiring - Digital Input #2

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	4	6	2105007-W1



Field Devices
Cabinet Devices
24VDC From FU-58
Dwg P1
Sht 2, Line 113
58
5069-IB16
Digital Input
24 VDC
MF0194
MN0194
MF0196
MN0196
MF0191
MN0191
MN0111
MN0112
MN0113
+24V
4900
4901
4902
4903
4904
4905
4906
4907
4910
4911
4912
4913
4914
4915
4916
4917
0 I00 Spare
1 I01 Spare
2 I02 HV 4 Malfunction Alarm
3 I03 HV 4 Running
4 I04 HV 6 Malfunction Alarm
5 I05 HV 6 Running
6 I06 HV1 Malfunction Alarm
7 I07 HV1 Running
8 I08 Spare
9 I09 Screen 1 Running
10 I10 Spare
11 I11 Screen 2 Running
12 I12 Spare
13 I13 Screen 3 Running
14 I14 Spare
15 I15 Spare
16 NC
17 NC
DI-3

KEY:
FIELD WIRING
PANEL WIRING

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1) Wiring - Digital Input #3

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	5	6	2105007-W1

Field Devices

Cabinet Devices

24VDC From FU-58
Dwg P1
Sht 2. Line 114

58

5069-IB16
Digital Input
24 VDC

+24V 5000	0	I00	Spare
+24V 5001	1	I01	Spare
+24V 5002	2	I02	Spare
+24V 5003	3	I03	Spare
+24V 5004	4	I04	Spare
+24V 5005	5	I05	Spare
+24V 5006	6	I06	Spare
+24V 5007	7	I07	Spare
+24V 5010	8	I08	Spare
+24V 5011	9	I09	Spare
+24V 5012	10	I10	Spare
+24V 5013	11	I11	Spare
+24V 5014	12	I12	Spare
+24V 5015	13	I13	Spare
+24V 5016	14	I14	Spare
+24V 5017	15	I15	Spare
	16	NC	
	17	NC	

DI-4

KEY:
FIELD WIRING — — — —
PANEL WIRING ————

REV	DATE	DESCRIPTION	BY
4	04/18/22	Layout Update	BSD
3	03/08/22	As Built	AAV
2	11/22/21	Change to CompactLogix	JPM
1	08/11/21	Initial Submittal	RCL

Aaron Associates
2 Mattoon Road
Waterbury, CT 06708

TITLE: Remote Terminal Unit Panel (RTU-1)
Wiring - Digital Input #4

PROJECT: Rockland County Sewer District #1

SCALE:	DRAWN BY:	CHECKED BY:	APP'D BY:
	RCL	SRM	SRM

DATE:	SHEET	OF SHEETS	DRAWING NO.
08/11/21	6	6	2105007-W1

Attachment No. 5:
Appendix C: Davis Bacon Prevailing Wage Rates

Appendix C:
Davis Bacon Prevailing Wage Rates [1] [2]

[1] Addendum No. 01
[2] Addendum No. 04

NO TEXT ON THIS PAGE

"General Decision Number: NY20240020 08/23/2024

Superseded General Decision Number: NY20230020

State: New York

Construction Types: Building, Heavy, Highway and Residential

County: Rockland County in New York.

BUILDING; HEAVY; HIGHWAY; AND RESIDENTIAL CONSTRUCTION PROJECTS
(Includes single family homes and apartments up to and including 4 stories)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0	01/05/2024
1	02/09/2024
2	03/08/2024
3	04/05/2024
4	05/31/2024
5	07/05/2024
6	08/23/2024

ASBE0091-001 05/29/2023

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (Duties limited to preparation, wetting, stripping, removal, scraping, vacuuming, bagging and disposing of all insulation materials whether they contain asbestos or not from mechanical systems)	$ 44.97	47.35
Insulator/asbestos worker (Includes application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems)	$ 44.97	47.35

BOIL0005-001 01/01/2024

	Rates	Fringes
BOILERMAKER	$ 67.38	49.33+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Thanksgiving Day, Memorial Day, Independence Day, Labor Day and Good Friday, Friday after Thanksgiving, Christmas Eve Day and New Year's Eve

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BRNY0005-005 06/01/2022

	Rates	Fringes
BRICKLAYER		
BUILDING/RESIDENTIAL CONSTRUCTION		
Bricklayers, Cement Masons, Plasterers, Stone Masons	$ 44.79	36.50
HEAVY & HIGHWAY CONSTRUCTION		
Bricklayers, Cement Masons, Plasterers, Stone Masons, Pointers, Caulkers & Cleaners	$ 41.96	33.38

CARP0279-004 07/01/2022

	Rates	Fringes
Carpenters :		
Building and Heavy & Highway Construction	$ 45.60	32.35

Residential	$ 29.66	21.11

CARP0740-001 07/01/2023

	Rates	Fringes
MILLWRIGHT	$ 58.70	57.11

CARP1556-006 07/01/2023

	Rates	Fringes
Dock Builder & Piledrivermen	$ 59.16	55.31

CARP1556-007 07/01/2023

	Rates	Fringes
Diver Tender	$ 53.57	55.31
Diver	$ 74.03	55.31

CARP1556-010 07/01/2019

	Rates	Fringes
Pipe Bending Machine Operator	$ 54.63	50.98

ELEC0363-006 04/01/2024

	Rates	Fringes
Electricians:		
BUILDING, HEAVY & HIGHWAY CONSTRUCTION	$ 49.50	3%+37.67+a
RESIDENTIAL CONSTRUCTION	$ 50.50	3%+39.17

FOOTNOTE:
a. Paid Holidays: New Year's Day, President's Day, Memorial Day, Fourth of July, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving, Christmas Day

ELEC1249-002 05/01/2023

	Rates	Fringes
ELECTRICIAN (LINE CONSTRUCTION-LIGHTING AND TRAFFIC SIGNAL INCLUDING ANY AND ALL FIBER OPTIC CABLE NECESSARY FOR THE TRAFFIC SIGNAL SYSTEMS, AND TRAFFIC MONITORING SYSTEMS, ROAD WEATHER INFORMATION SYSTEMS)		
Flagman	$ 30.36	7%+35.40
Groundman (Digging Machine Operator)	$ 45.54	7%+35.40
Groundman (Truck Driver)	$ 40.48	7%+35.40
Groundman Truck Driver (Tractor Trailer Unit)	$ 43.01	7%+35.40
Lineman and Technician	$ 50.60	7%+38.40
Mechanic	$ 40.48	7%+35.40

PAID HOLIDAYS:

a. Memorial Day, New Year's Day, President's Day, Good Friday, Decoration Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and Election Day for the President of the United States and Election Day for the Governor of New York State, provided the employee works two days before or two days after the holiday.

ELEC1249-004 05/01/2023

	Rates	Fringes
ELECTRICIAN (Line Construction)		
Overhead and underground distribution and maintenance work and all overhead and underground transmission line work including any and all fiber optic ground wire, fiber optic shield wire or any other like product by any other name manufactured for the dual purpose of ground fault protection and fiber optic capabilities :		
Flagman	$ 34.44	7%+35.40
Groundman digging machine operator	$ 51.66	7%+35.40
Groundman truck driver (tractor trailer unit)	$ 48.79	7%+35.40
Groundman Truck driver	$ 45.92	7%+35.40
Lineman and Technician	$ 57.40	7%+38.40
Mechanic	$ 45.92	7%+35.40
Substation:		
Cable Splicer	$ 63.14	7%+38.40
Flagman	$ 34.44	7%+35.40
Ground man truck driver	$ 45.92	7%+35.40
Groundman digging machine operator	$ 51.66	7%+35.40
Groundman truck driver (tractor trailer unit)	$ 48.79	7%+35.40
Lineman & Technician	$ 57.40	7%+38.40
Mechanic	$ 45.92	7%+35.40
Switching structures; railroad catenary installation and maintenance, third rail type underground fluid or gas filled transmission conduit and cable installations (including any and all fiber optic ground product by any other name manufactured for the dual purpose of ground fault protection and fiber optic capabilities), pipetype cable installation and maintenance jobs or projects, and maintenance		

bonding of rails; Pipetype
cable installation
Cable Splicer.....$ 64.59 7%+38.40
Flagman.....$ 35.23 7%+35.40
Groundman Digging Machine
Operator.....$ 52.85 7%+35.40
Groundman Truck Driver
(tractor-trailer unit).....$ 49.91 7%+35.40
Groundman Truck Driver.....$ 46.98 7%+35.40
Lineman & Technician.....$ 58.72 7%+38.40
Mechanic.....$ 46.98 7%+35.40

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, Good Friday, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and Election Day for the President of the United States and Election Day for the Governor of New York State, provided the employee works two days before or two days after the holiday.

ELEC1249-008 01/01/2024

	Rates	Fringes
ELECTRICIAN (Line Construction)		
TELEPHONE, CATV FIBEROPTICS CABLE AND EQUIPMENT		
Cable splicer	$ 39.24	3%+5.70
Groundman	$ 19.74	3%+5.70
Installer Repairman-Teledata		
Lineman/Technician-Equipment Operator	$ 37.24	3%+5.70
Tree Trimmer	$ 31.45	3%+10.48

a. New Year's Day, President's Day, Good Friday, Decoration Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving, Christmas Day.

ELEV0001-002 03/17/2022

	Rates	Fringes
ELEVATOR MECHANIC		
Elevator Constructor	$ 75.14	47.446+a+b
Modernization and Repair	$ 59.09	45.564+a+b

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Good Friday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

b. PAID VACATION: An employee who has worked less than 5 years shall recieve vacation pay credit on the basis of 4% of his hourly rate for all hours worked; an employee who has worked 5 to 15 years shall receive vacation pay credit on the basis of 6% of his hourly rate for all hours worked; an employee who has worked 15 or more years shall receive

vacation pay credit on the basis of 8% of his hourly rate for all hours worked.

ELEV0138-002 01/01/2024

THE TOWN OF STONY POINT

	Rates	Fringes
ELEVATOR MECHANIC	$ 70.15	37.885+a+b

FOOTNOTE:
a.Vacation: 6%/under 5 years based on regular hourly rate for all hours worked. 8%/over 5 years based on regular hourly rate for all hours worked.
b. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

ENGI0825-012 01/01/2018

BUILDING HEAVY AND HIGHWAY, ROAD AND STREET CONSTRUCTION

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 50.57	30.30
GROUP 2	$ 48.98	30.30
GROUP 3	$ 47.07	30.30
GROUP 4	$ 45.44	30.30
GROUP 5	$ 43.73	30.30
GROUP 6	$ 52.39	30.30

NOTES:
Hazmat Premium 20 percent
Hydrographic Premium .50

FOOTNOTE:

a. New Years Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day, Washington's Birthday, Election Day, and Veterans Day provided the employee works one day during the calendar week in which the holiday occurs.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Autograde-Pavement-Profiler (CMI and Similar Types); Autograde Slipform Paver (CMI and Similar Types); Backhoe; Central Power Plants (all types); Concrete Paving Machine (s-240 and Similar Types); Cranes (All Types, Including Overhead And Straddle Traveling Type); Cranes, Gantry; Derricks (Land, Floating or Chicago Boom Type) Drillmaster/Quarrymaster (Down the Hole Drill) Rotary Drill; Self-Propelled, Hydraulic Drill, Self-Powered Drill Draglines, Elevator Graders, Front End Loaders (5 yds. and over), Gradalls, Grader: Rago, Helicopters (Copilot), Helicopters, (Communication Engineer), Locomotive (large), Mucking Machines, Pavement and Concrete Breaker (Superhammer, Hoe Ram, Brokk 250 and Similar Types), Pile Driver (length of Boom Including Length of Leads Shall Determine Premium Rate Applicable), Pile Driver (length of boom including length of leads shall determine rate

applicable), Roadway Surface Grinder Scooper (loader and shovel), Shovels, Tree Chopper with Boom, Trench Machines, Tunnel Boring Machines.

GROUP 2: ""A"" Frame; Backhoe (Combination); Boom Attachment on Loaders (Rate Based On Size Of Bucket) Not Applicable To Pipehook) Boring and Drilling Machines, Brush Chopper, Shredder and Tree Shredder Tree Shearer, Cableways, Carryalls, Concrete Pump, Concrete Pumping System, Pumpcrete and Similar Types, Conveyors, 125 ft and over; Drill Doctor (duties include dust collector, maintenance), Front End Loader (22 yds. but less than 5 yds.), Graders (Finish); Groove Cutting Machine (ride on type), Heater Planing; Hoists: (all type hoists, Shall Also Include Steam, Gas, Diesel, Electric, Air Hydraulic, Single and Double Drum, Concrete, Brick Shaft,Caisson, Snorkel Roof, and or any other similar type Hoisting Machines, Portable or Stationary, Except Chicago Boom Type). Long Boom Rate to Be Applied if Hoist"") Hydraulic Cranes-10tons and Under; Hydro-Axe; Hydro- Blaster; Jacket (Screw Air Hydraulic Power Operated Unit or Console Type: Not Hand Jack or Pile Load Test Type), Log Skidder; Pans, Pavers (all) Concrete; Plate and Frame Filter Press; Pumpcrete Machines; Squeeze Crete and Concrete Pumping (regardless of size); Scrapers; Sidebooms; ""straddle"" Carrier, Ross and Similar Types; Vacum Truck; Whip Hammer; Winch Trucks(Hoisting).

GROUP 3: Asphalt Crubing Machine, Asphalt Plant Engineer, Asphalt Spreader;Autograde Tube Finisher & Texturing Machine (CMI and Similar types) Autograde Curecrete Machine (CMI and Similar Types); Bar Bending Machine (power), Batchers, Batching Plant and Crusher on Site; Belt Conveyor System; Boom Type Skimmer Machines; Bridge Deck Finisher; Bulldozers (all); Car Dumpers (Railroad); Chief of Party; Compressor and Blower Type Units (used) Independenty or Mounted On Dual Purpose Trucks, On Job Site or In Conduction with Job Site, In Loading and Unloading of Concrete, Cement, Fly Ash, Instantcrete, or Similar Type Materials); Compressor 92 or 3 in Battery); Concrete Finishing Machines; Concrete Saws and Cutters (ride on type); Concrete Spreaders, Hetzel, Rexomatic and Similar types; Concrete Vibrators; Conveyors, Under 125 ft), Crushing Machines, Ditching Machine, Small (ditchwitch, Vermeer or Similar type); Dope Dots (mechanical with or without pump), dumpsters; Elevator; Fireman; Forklifts (econombile, lull, and similar types of equipment); Front End Loaders (1 yd. and over but less than 2 yds.); Generators (2 or 3 in Battery/ within 100 ft); Giraffe Grinders, Graders and Motor Patrols; Grout Pump; Gunnite Machines (excluding nozzle); Hammer Vibratory (in conjuction with generators); Hoists (Roof, Tuggeaerial Platform Hoist and House Cars), Hoppers, Hoppers Doors (power operated); Hydro-Blaster (where required); Ladders (Motorized); Laddervator; Locomotive, Dinky type; Maintenance, Utility Man; Mechanics; Mixers (Excepting Paving Mixers); Motor Patrols and Graders; Pavement Breakers, Small, Self-Propelled ride on type (also Maintains Compressor or Hydraulic Unit); Pavement Breaker, Truck Mounted; Pipe Bending Machine (power); Pitch Pump; Plaster Pump (regardless of size); Post Hold Digger (post pounder and auger); Rod Bending Machines (power); Roller, Black Top; Scales, (power); Seaman Pulverizing Mixer; Shoulder Widener; Silos; Skimmer Machines (Boom Type); Steel Cutting Machine, Services and Maintains; Tamrock Drill; Tractors; Tug Captain; Vibrating Plants (used in

conjuction with unloading); welder and Repair Mechanics; Concrete cleaning/decontamination machine operator; Directional boring machine; Heavy equipment robotics operator; Master environmental maintenance operator, Ultra high pressure waterjet cuttting tool system operator; Vacuum blasting machine operator

GROUP 4: Brooms and Sweepers; Chippers; Compressors (single); Concrete Spreaders (small type); Conveyor Loaders (not including Elevator Graders); Engines, Large Diesel (1620 h.p.) and Staging Pump; Farm Tractors; Fertilizing Equipment (Operator and Maintenance of); Fine Grade Machine (small type); Form Line Graders (small type); Front End Loader (under 1 yd); Generator (single); Grease, Gas, Fuel and Oil Supply Trucks; Heaters (Nelson or Other Type Including Propane, Natural Gas or Flowtype Units); Lights, Portable Generating Light Plants; Mixers, Concrete Small; Mulching Equipment (Operation and Maintenance of); Pumps (2 of Less Than 4 Inch Suction); Pumps 94 Inch Suction and Over Including Submersible Pumps); Pumps (Diesel Engine and Hydraulic); Immaterial of Power; Road Finishing Machines (Small Type); Rollers, Grade, Fill Or Stone Base; Seeding Equipment (Operation and maintence of); Sprinkler and Water Pump Trucks (Used on job Site or in conduction with Job Site); Steam Jennies and Boilers, Irrespective of Use; Stone Spreader; Tamping Machines, Vibrating Ride On; Temporary Heating Plant (welson or Other Type, Including Propane, Natural Gas or Flow Type Units); Water and Sprinkler Trucks (Used On Job Site In Conduction with Job Site); Welding Machines-Within 100 ft (Gas, and /or Electric Converters of Any type, single, two or three in a battery). welding system, multiple (rectifier transformer type) well point systems (including installation by bull gang and maintenance of); Off Road back dumps.

GROUP 5: Oiler, tire repair

GROUP 6: Helicopter pilots

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* ENGI0825-013 01/01/2018

	Rates	Fringes
Power equipment operators:		
BUILDING CONSTRUCTION		
STEEL ERECTION		
GROUP 1	$ 59.09	30.30
GROUP 2	$ 57.43	30.30
GROUP 3	$ 50.14	30.30
GROUP 4	$ 47.48	30.30
GROUP 5	$ 45.95	30.30
GROUP 6	$ 44.19	30.30
GROUP 7	$ 53.70	30.30
BUILDING CONSTRUCTION TANK ERECTION		
GROUP 1	$ 58.81	30.30
GROUP 2	$ 57.22	30.30
GROUP 3	$ 53.70	30.30
GROUP 4	$ 50.13	30.30
GROUP 5	$ 44.92	30.30
OILOSTATIC MAINLINES AND TRANSPORTATION PIPE LINES		
GROUP 1	$ 51.20	30.30
GROUP 2	$ 49.55	30.30

GROUP 3	$ 47.41	30.30
GROUP 4	$ 45.91	30.30
GROUP 5	$ 44.19	30.30
GROUP 6	$ 53.13	30.30
RESIDENTIAL CONSTRUCTION		
ALL JOB CLASSIFICATION	$ 11.49 **	7.75

NOTES:

Hydrographic Premium	.50
Hazmat Premium	20 percent
Tunnel Premium	.75

FOOTNOTE:

a. PAID HOLIDAYS: New Years Day, Independence Day, Memorial Day, Labor Day Thanksgiving Day, Christmas Day, Washington's Birthday, November Election Day, Veterans Day, Decoration Day provided the employee works one day in the calendar week during which the holiday occurs

POWER EQUIPMENT OPERATORS: STEEL ERECTION CLASSIFICATIONS

GROUP 1: Cranes (All Cranes, Land or Floating with Booms Including Jib 140 ft and over, Above Ground); Derricks, Land, Floating or Chicago Boom Type with Booms including Jib 140 ft and over above ground).

GROUP 2: Cranes (All Cranes, Land or Floating with Booms Including Jib Less Than 140 ft Above Ground); Derricks, Land, Floating or Chicago Boom Type with Booms Including Jib Less Than 140 ft above Ground).

GROUP 3: ""A"" Frame, Cherry Pickers 10 tons and under, Hoists Shall Also Include Steam, Gas, Desel, Electric, Air Hydraulic, Single and Double Drum Concrete, Brick Shaft Caisson, or Any Other Similar Type Hoisting Machines, Portable or Stationary, Except Chicago Boom Type; Jacks: Screw Air Hydraulic Power Operated unit or Console Type (not hand Jack or Pile Load Test Type); Side Booms.

GROUP 4: Aerial Platform used as Hoist; Compressor: 2 or 3 in Battery; Elevators or House Cars; Conveyors and Tugger Hosits; Chief of Party; Fireman; Forklift; Generators (2 or 3); Maintenance (Utility Man); Rod Bending Machine (power); Welding Machines (Gas or Electric, 2 or 3 in Battery, Including Diesels); Captain: Power Boats: Tug Master: Power Boats.

GROUP 5: Compressor, Single; Welding Machine, Single, Gas, Diesel, and Electric Converters of any Type: Welding System Multple (Rectifier Transformer Type); Generator, Single.

GROUP 6: Oiler, staddle carrier

GROUP 7: Helicopter Pilot

For BUILDING CONSTRUCTION TANK ERECTION

NOTES:

Tunnel Premium	.75
Hazmat Premium	20 %
Hydrographic Premium	.50

FOOTNOTE:

a. PAID HOLIDAYS: New Years Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, Christmas Day, Washington's Birthday, November Election Day, Veterans Day, Decoration Day provided the employee works one day in the calendar week during which the holiday occurs

POWER EQUIPMENT OPERATORS: TANK ERECTION CLASSIFICATIONS

GROUP 1: Operating Engineers on all Cranes, Derricks, etc with Booms Including Jib 140 ft or More Above Ground.

GROUP 2: Operating Engineer on all Equipment, Including Cranes, Derricks, etc with Booms Including Jib, Less Than 140 ft above the ground.

GROUP 3: Helicopter Pilot

GROUP 4: Air Compressors, Welding Machines and Generators are Covered and are Defined as Cover: Gas, Diesel, or Electric Driven Equipment and Sources of Power from a Permanent Plant: ie: Steam, Comgressed Air, Hydraulic or Other Power, For The Operating of any Machine or Automatic Tools, Used In The Erection, Alteration, Repair and Dismantling of Tanks and Any and All ""Dual Purpose"" Trucks Used On The Construction Job Site, or in the Loading and Unloading of Materials, at the Construction Job Site or in Conjuction with the Job Site.

GROUP 5: Oiler

For OILOSTATIC MAINLINES AND TRANSPORTATION PIPE LINES NOTES:

Hydrographic Premium	.50
Hazmat Premium	20%
Tunnel Premium	.75

FOOTNOTE:

a. PAID HOLIDAYS: New Years Day, Independence Day, Memorial Day, Labor Day, Thanksgivings Day, Christmas Day, Washington's Birthday, November Election Day, Veterans Day and Decoration Day provided the employee works one day in calendar week during which the holiday occurs.

OILSTATIC MAINLINES AND TRANSPORTATION PIPE LINES CLASSIFICATIONS

GROUP 1: Backhoe; Cranes (all types); Draglines, Front End Loaders (5yds. and over), Gradalls, Helicopters (co-pilot), Helicopters (Communication Engineer); Scooper (Loader and Shovel) Koehring; Trench Machines.

GROUP 2: ""A"" Frame; Backhoe (Combination Hoe Loader); Boring and Drilling Machines; Ditching Machines, Small, Ditchwitch, Vermeer or Similar type; Forklifts; Front End Loaders 92 yds. and over but less than 5 yds.); Graders, Finish (fine); Hydraulic Cranes 10 tons and under (over 10 tons) Cranes Rate Applies); Side Booms: Winch Trucks (Hoisting).

GROUP 3: Backfiller; Brooms and Sweepers; Bulldozers; Compressor (2 or 3 in battery); Chief of Party; Front End Loaders (under 2 yds); Generators; Giraffe Grinders;

Graders and Motor Patrols; Machanic; Pipe Bending Machine (power);Tractors; Water and Sprinkler Trucks used on Job Site or in Conduction with Job Site); Welder and Repair Mechanic; Captain (power boats); Tug Master (power boats).

GROUP 4: Compressor (single); Dope Pots (Mechanical with or without Pump); Dust Collectors; Pumps (4 inch suction and over); Pumps (2 of less than 4 inch suction); Pumps, Diesel Engine and Hydraulic (immaterial of power); Welding Machines, Gas or Electric Converters of any type- 2 or 3 in Battery Multple Welders; Well Point Systems (including installation and Maintenance); Farm Tractors.

GROUP 5: Oiler, grease, gas, fuel and oil supply trucks; Tire repair and maintenance

GROUP 6: Helicoter Pilot

IRON0417-001 07/01/2023

	Rates	Fringes
IRONWORKER	$ 42.38	50.95+a

a) Paid Holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Day after Thanksgiving (unpaid), Christmas Day.

LABO0754-001 06/01/2022

	Rates	Fringes
LABORER		
BUILDING & RESIDENTIAL CONSTRUCTION Hazardous Waste Handler	$ 39.05	21.95+a
BUILDING & RESIDENTIAL CONSTRUCTION Air track operators, joy drill operators	$ 37.90	21.95+a
All types of landscaping, pit men, dump men, building laborers (clean up), Flag Persons	$ 33.80	21.95+a
Blasters	$ 37.05	21.95+a
Bull float man, stud or riveting gunman, all scalers, power buggy operators (all types), mixer men, (by machine or hand), power saw (all types), brush king, jackhammer, jib rig operators, pavement breakers, vibrator men, powder men, ramset operators, torchmen, cement spray men, gunite nozzle men, sandblasting, all other machine or semi-skilled and asbestos and hazardous waste removal;...	$ 37.05	21.95+a

Form setter, liners, joint setters, top concrete men	$ 37.35	21.95+a
Hod carriers, scaffold and runway men, steel rod carrriers, rip rap and dry stone layers, concrete laborer, mason tenders, piplayers, (all types), signal men, rail and fence men (all types), core drillers, wrecking and demolition men;	$ 36.81	21.95+a
HEAVY & HIGHWAY CONSTRUCTION		
Hazardous Waste Handler		
Category A:	$ 50.25	28.15
Category B:	$ 50.25	28.15
Category C:	$ 50.25	28.15
Category D:	$ 50.25	28.15
HEAVY & HIGHWAY CONSTRUCTION		
GROUP 1	$ 52.35	28.15
GROUP 2	$ 50.25	28.15
GROUP 3	$ 46.10	28.15
GROUP 4	$ 42.60	28.15

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving day; Christmas Day, President's Election Day; Non-Presidental Election day; and Veterans Day, provided the employee works two days or reported to work two days in the work week and was unable to work.

For HEAVY & HIGHWAY CONSTRUCTION

FOOTNOTE:

a. PAID HOLIDAYS: New Years Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, Christmas Day, President's Birthday, Presidental Election Day, Veterans Day provided the employee works one day in the calendar week during which the holiday occurs.

LABORERS HEAVY/HIGHWAY CLASSIFICATIONS

GROUP 1: Blasters

GROUP 2: Track Operator; Joy Drill Operator

GROUP 3: Nipper, Power Buggy Operator; Plaster Tender; Mixer Man (by Machine or hand); Scaffold Runway Man; Power Saw; Brush King; Steel Rod Carrier; Jack Hammer; Wagon Driller; Jib Rig Operator; Pavement Breaker; Vibrator Man; Bit Grinder; Powder Man; Ramset Operator; Rip Rap and Dry Stone Layer; Cement Spray Man; Gunnite Nozzle Man; Spray and Nozzle Man on Mulching and Seeding Machine; Sand Blaster; Concrete Saw; All other Machine or Semi-Skilled Men; Asbestos and Hazardous Waste Removal; Concrete Laborer; Building Laborer; Mason Tender; Carpenter Tender; Pipe Layer (all types); Signal Man; Gabion Basket Assembler; Bull Float Man; Form Setter; Liner; Joint Setter; Sheeter;

Tip Concrete Man; Stud or Riveting Gun Man; All Scalers; Asphalt Men (all types); Rail and Fence (all types); Core Driller; Wrecking and Demolition Man; Bar Man; Seeder; Planter; Landscape Men (all types), Ax Man; Pit and Dump Men; Road Laborer

GROUP 4: Flag Person

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* PAIN0009-010 05/01/2024

	Rates	Fringes
GLAZIER	$ 49.00	55.75

PAIN0155-004 05/01/2021

	Rates	Fringes
Painters:		
Drywall Finisher	$ 39.14	24.66
Lead Abatement Work	$ 39.14	24.66
Painter/Paperhanger	$ 39.14	24.66
Spray Rate	$ 40.14	24.66

PAIN0806-001 10/01/2023

	Rates	Fringes
Painters:		
Structural Steel and Bridge	$ 56.00	54.33

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* PLUM0373-001 05/01/2024

	Rates	Fringes
PLUMBER		
PLUMBERS AND STEAMFITTERS	$ 51.20	45.57
REFRIGERATION	$ 40.09	36.42
SINGLE FAMILY DWELLINGS	$ 16.60 **	4.95

SFNY0669-002 04/01/2024

	Rates	Fringes
SPRINKLER FITTER	$ 53.34	30.77

SHEE0038-001 07/01/2024

	Rates	Fringes
Sheet metal worker	$ 53.22	46.20

TEAM0445-001 05/01/2023

	Rates	Fringes
Truck drivers:		
GROUP 1	$ 34.58	44.59+a
GROUP 1A	$ 35.72	44.59+a
GROUP 2	$ 34.02	44.59+a
GROUP 3	$ 33.80	44.59+a
GROUP 4	$ 33.69	44.59+a
GROUP 5	$ 33.57	44.59+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Labor Day, President's Day, Presidential Election Day, Veterans Day, Decoration Day, Independence Day, Thanksgiving Day and Christmas Day provided the employee works two days in any calendar week during which the holidays occurs.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Drivers on Letourneau tractors, double barrel euclids, Athey wagons and similar equipment (except when hooked to scrapers), I-beam and pole trailers, drivers of road oil distributors, tire trucks and tractors and trailers with 5 axles and over, Articulated Back Dumps and Articulated Water Trucks.

GROUP 1A: Drivers on detachable Gooseneck Low bed Trailers rated over 35 tons.

GROUP 2: Drivers on all equipment 25 yards and over, up to and including 30 yard bodies and cable dump trailers and powder and dynamite trucks.

GROUP 3: Drivers on all equipment up to and including 24 yard bodies, mixer trucks, dump crete trucks and similar types of equipment, fuel trucks, batch trucks and all other tractor trailers.

GROUP 4: Drivers on tri axles, ten-wheelers, grease trucks and tillermen.

GROUP 5: Drivers on pick-up trucks used for materials & parts, drivers on escort man over-the-road and drivers on straight trucks.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($17.20) or 13658 ($12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is

like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

State Adopted Rate Identifiers

Classifications listed under the ""SA"" identifier indicate that the prevailing wage rate set by a state (or local) government was adopted under 29 C.F.R ◆1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 01/03/2024 reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

==========

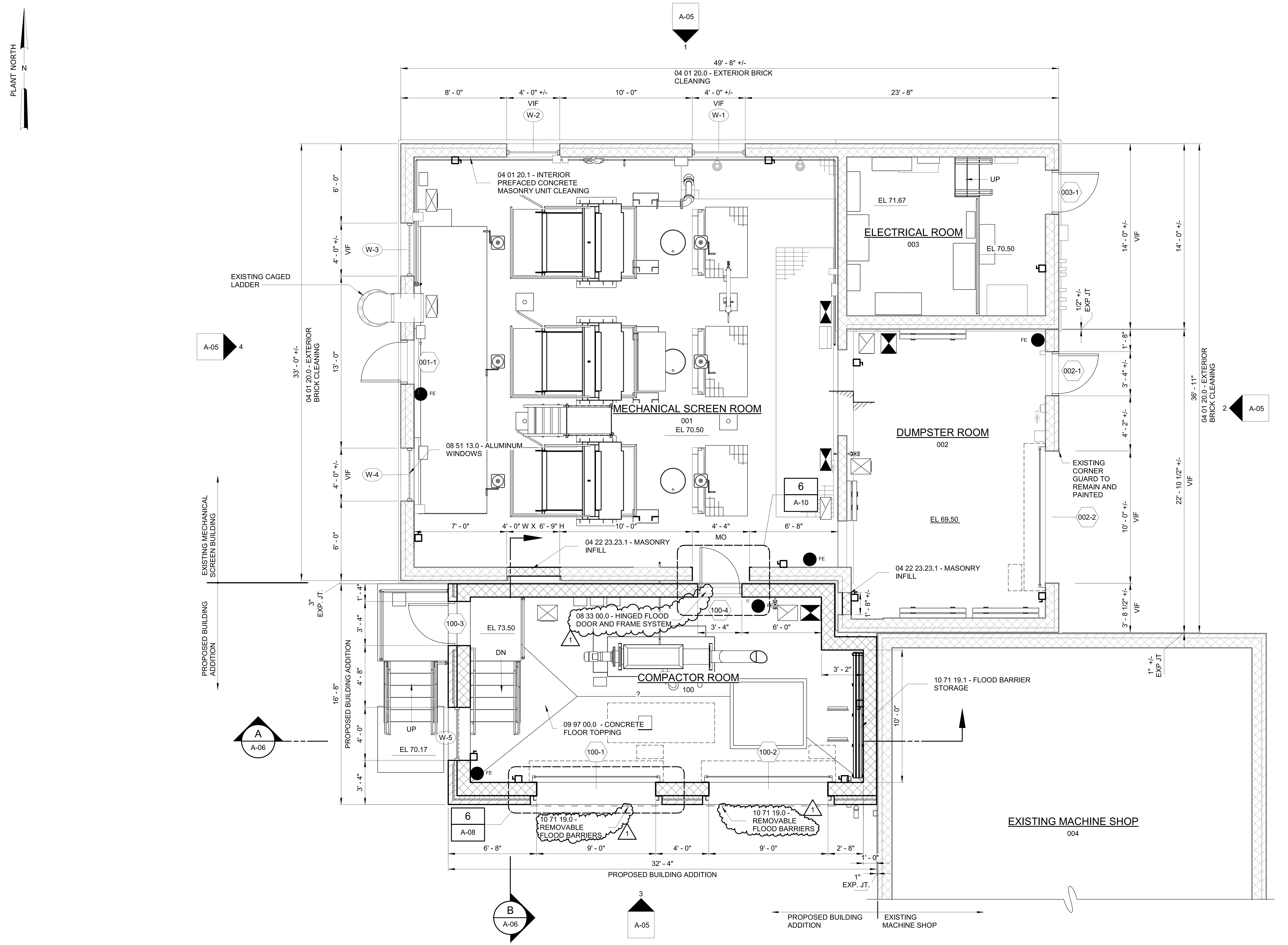
END OF GENERAL DECISION"

NO TEXT ON THIS PAGE

Attachment No. 6:
Revised Drawing Sheets

NOTE:

1. REFER TO DRAWING A-01 FOR ARCHITECTURAL NOTES



FLOOR PLAN EL 70.50

1/4" = 1'-0"

LEGEND

EXISTING WALL

PROPOSED WALL

1/4" = 1'-0"

REV	ISSUED FOR	DATE	BY
1	ADDENDUM No. 4	08/2024	PDS
0	BID	06/2024	PDS

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J.MARTINEZ
DRAWN BY:	J.MARTINEZ
CHECKED BY:	M. STALLONE

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

FOR BID

Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

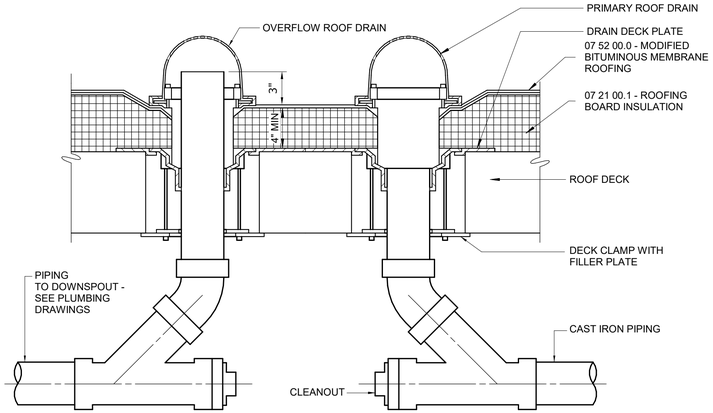
ROCKLAND COUNTY SEWER DISTRICT NO.1
ORANGEBURG, NEW YORK

ORANGEBURG WASTEWATER TREATMENT PLANT SCREENING IMPROVEMENTS PROJECT

ARCHITECTURAL FIRST FLOOR PLAN

DATE:	JUNE 2024
HAZEN NO.:	90462-000
CONT NO.:	RFB-RC-SWR-2023-06
DRAWING NUMBER:	A-03

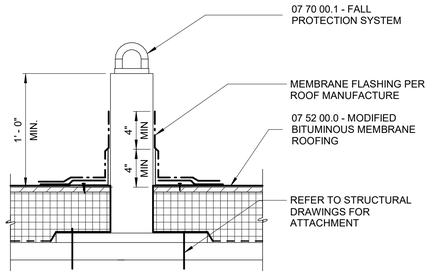
Autodesk Docs://90462-000_EDS and CA for RCSD Screen Rehab/90462-000-100-MSB-A.rvt
8/15/2024 4:09:05 PM



ALL ROOFING DETAILS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

ROOF DRAIN

DETAIL	1
1 1/2" = 1'-0"	A-04

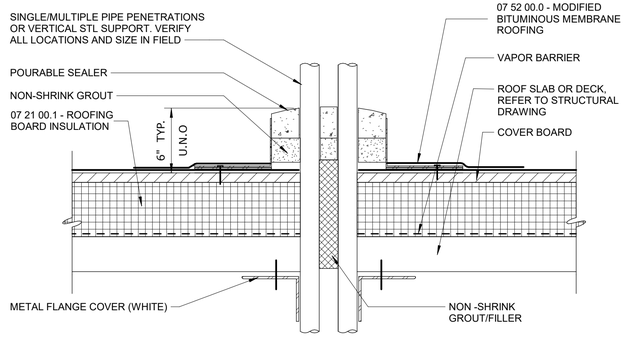


FALL PROTECTION

DETAIL	2
1 1/2" = 1'-0"	A-06

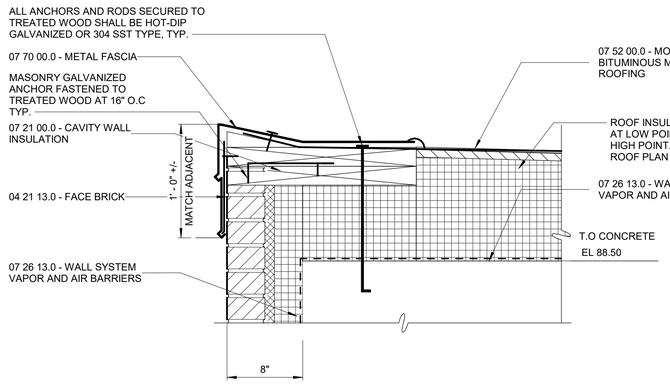
NOTE:

1. REFER TO DRAWING A-01 FOR ARCHITECTURAL NOTES



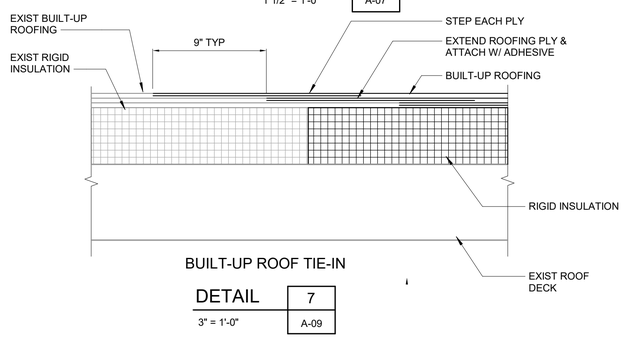
POURABLE SEALER POCKET

DETAIL	3
3" = 1'-0"	A-09



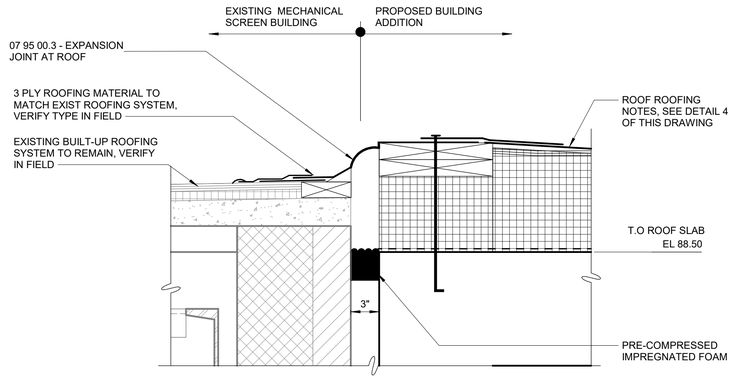
ROOF FASCIA

DETAIL	4
1 1/2" = 1'-0"	A-07



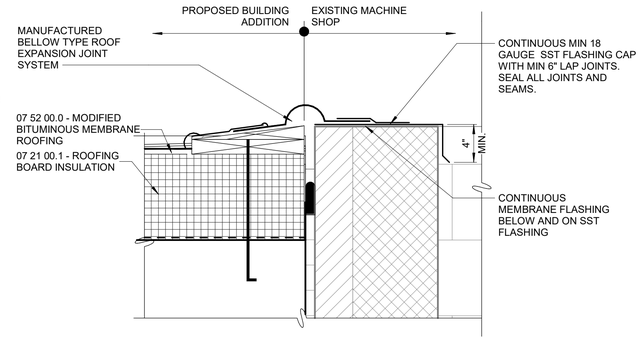
BUILT-UP ROOF TIE-IN

DETAIL	7
3" = 1'-0"	A-09



ROOF EXPANSION JOINT

DETAIL	5
1 1/2" = 1'-0"	A-06



ROOF EXPANSION JOINT

DETAIL	6
1 1/2" = 1'-0"	A-06

ROOM FINISH SCHEDULE 1

NO.	DESCRIPTION	FLOOR		BASE		WALLS		CEILING		REMARKS
		SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	
EXISTING MECHANICAL SCREEN BUILDING										
001	MECHANICAL SCREEN ROOM	EX	EX	EX	EX	EX	EX	-	-	REFER TO NOTE 09 90 00 FOR PAINTING SCOPE - SEE STRUCTURAL DRAWINGS FOR CELING SCOPE
003	ELECTRICAL ROOM	EX	EX	EX	EX	EX	EX	-	-	REFER TO NOTE 09 90 00 FOR PAINTING SCOPE - SEE STRUCTURAL DRAWINGS FOR CELING SCOPE
002	DUMPSTER ROOM	EX	EX	EX	EX	EX	EX	-	-	REFER TO NOTE 09 90 00 FOR PAINTING SCOPE - SEE STRUCTURAL DRAWINGS FOR CELING SCOPE
PROPOSED ADDITION										
100	COMPACTOR ROOM	CONC	CFT	CONC	CFT	GFB	-	CONC	-	

ROOM FINISH LEGEND

CONC	CONCRETE	ES	EXPOSED STRUCTURE
CFT	CONCRETE FLOOR TOPPING - 09 97 00	EX	EXISTING
CMU	CONCRETE MASONRY UNITS	PT	PAINT - 09 90 00

ROOM FINISH SCHEDULE NOTES:

1. REFER TO DRAWING A-01 FOR ARCHITECTURAL NOTES.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM No. 4	08/2024	PDS
0	BID	06/2024	PDS

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J.MARTINEZ
DRAWN BY:	J.MARTINEZ
CHECKED BY:	M. STALLONE

FOR BID

REGISTERED ARCHITECT MICHAEL A. STALLONE 019014 STATE OF NEW YORK

Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

ROCKLAND COUNTY SEWER DISTRICT NO.1
ORANGEBURG, NEW YORK

ORANGEBURG WASTEWATER TREATMENT PLANT SCREENING IMPROVEMENTS PROJECT

ARCHITECTURAL
ROOF DETAILS AND FINISH SCHEDULE 1

DATE:	JUNE 2024
HAZEN NO.:	90462-000
CONT NO.:	RFB-RC-SWR-2023-06
DRAWING NUMBER:	A-09

DOOR SCHEDULE

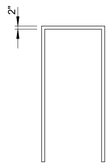
NO.	FRAME TYPE	FRAME MATL	DOOR TYPE	DOOR MATL	WIDTH	HEIGHT	THICKNESS	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	HARDWARE NO	REMARKS
001-1	F-1	SST	NG	SST	3' - 0"	7' - 2"	1 3/4"	3/A-10	3/A-10	3/A-10	1	FIELD VERIFY OPENING
002-1	F-1	SST	NG	SST	3' - 0"	7' - 2"	1 3/4"	3/A-10	3/A-10	3/A-10	1	FIELD VERIFY OPENING
002-2	MFR	SST	OH	SST	10' - 0"	14' - 0"	3/4"	4/A-10	4/A-10	4/A-10	-	FIELD VERIFY OPENING
003-1	F-1	SST	F	SST	3' - 0"	7' - 2"	1 3/4"	3/A-10	3/A-10	3/A-10	1	FIELD VERIFY OPENING
100-1	MFR	STL	OH	SST	9' - 0"	10' - 4"	3/4"	5/A-10	5/A-10	5/A-10	-	INSULATED OVERHEAD DOOR, MOTORIZED
100-2	MFR	STL	OH	SST	9' - 0"	10' - 4"	3/4"	5/A-10	5/A-10	5/A-10	-	INSULATED OVERHEAD DOOR, MOTORIZED
100-3	F-1	SST	NG	SST	3' - 0"	7' - 10"	1 3/4"	2/A-10	2/A-10	2/A-10	1	
100-4	F-1	SST	F	SST	3' - 0"	7' - 2"	1 3/4"	1/A-10	1/A-10	1/A-10	2	FLOOD DOOR SYSTEM TO BE PROVIDED BY FLOOD DOOR MANUFACTUR

1 INSULATED OVERHEAD DOOR, MOTORIZED

NOTE:

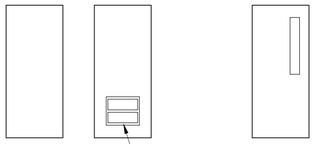
1. REFER TO DRAWING A-01 FOR ARCHITECTURAL NOTES

FRAME TYPES 1/4" = 1'-0"

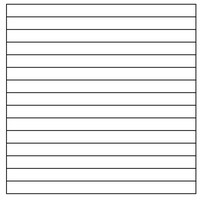


F-1

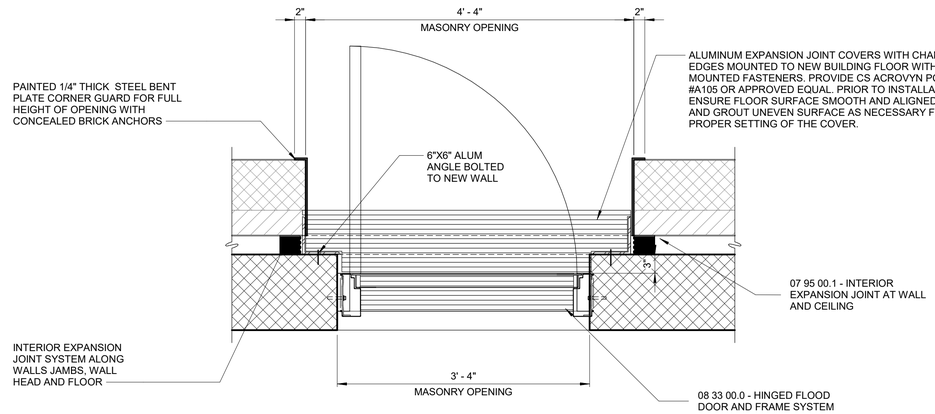
DOOR TYPES 1/4" = 1'-0"



F H NG

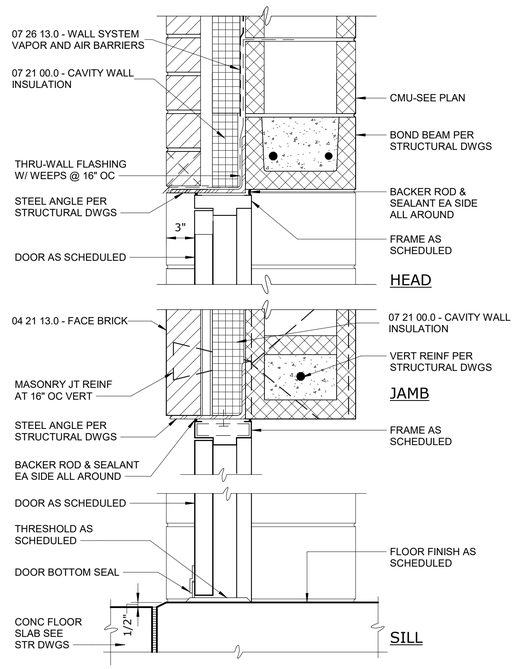


OH



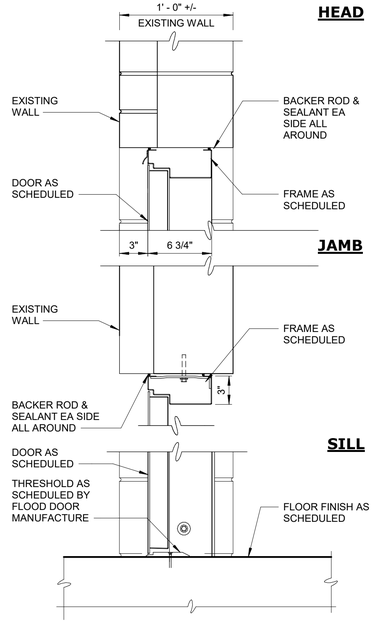
FLOOD DOOR

1" = 1'-0"



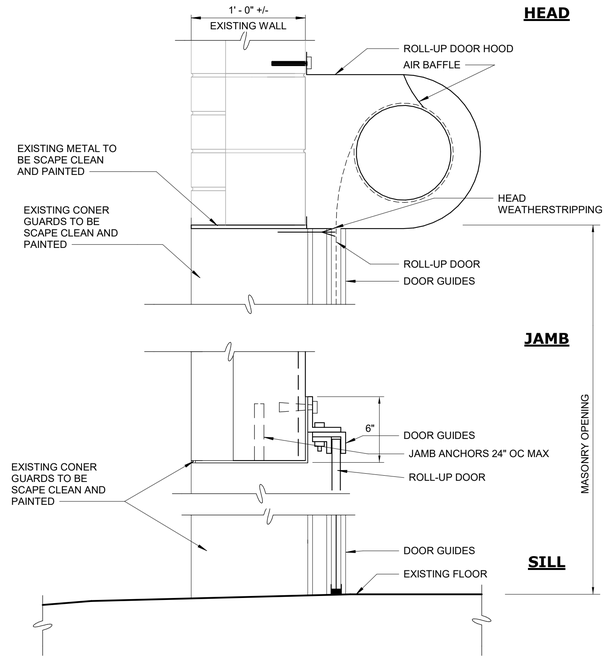
DOOR IN MASONRY WALL

DETAIL	2
1 1/2" = 1'-0"	A-10



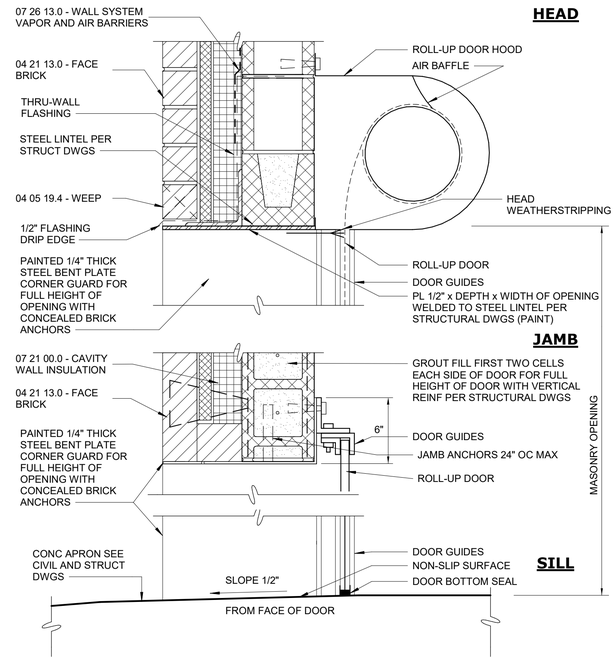
EXTERIOR DOOR AT EXISITNG EXTERIOR WALL

DETAIL	3
1 1/2" = 1'-0"	A-10



ROLL-UP DOOR AT EXISTING WALL

DETAIL	4
1 1/2" = 1'-0"	A-10



ROLL-UP DOOR

DETAIL	5
1 1/2" = 1'-0"	A-10

REV	ISSUED FOR	DATE	BY
1	ADDENDUM No. 4	08/2024	PDS
0	BID	06/2024	PDS

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE — 0 1/2" 1"

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J.MARTINEZ
DRAWN BY:	J.MARTINEZ
CHECKED BY:	M. STALLONE

FOR BID

REGISTERED ARCHITECT — MICHAEL A. STALLONE — 019078 — STATE OF NEW YORK

Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11th FLOOR
NEW YORK, NEW YORK 10018

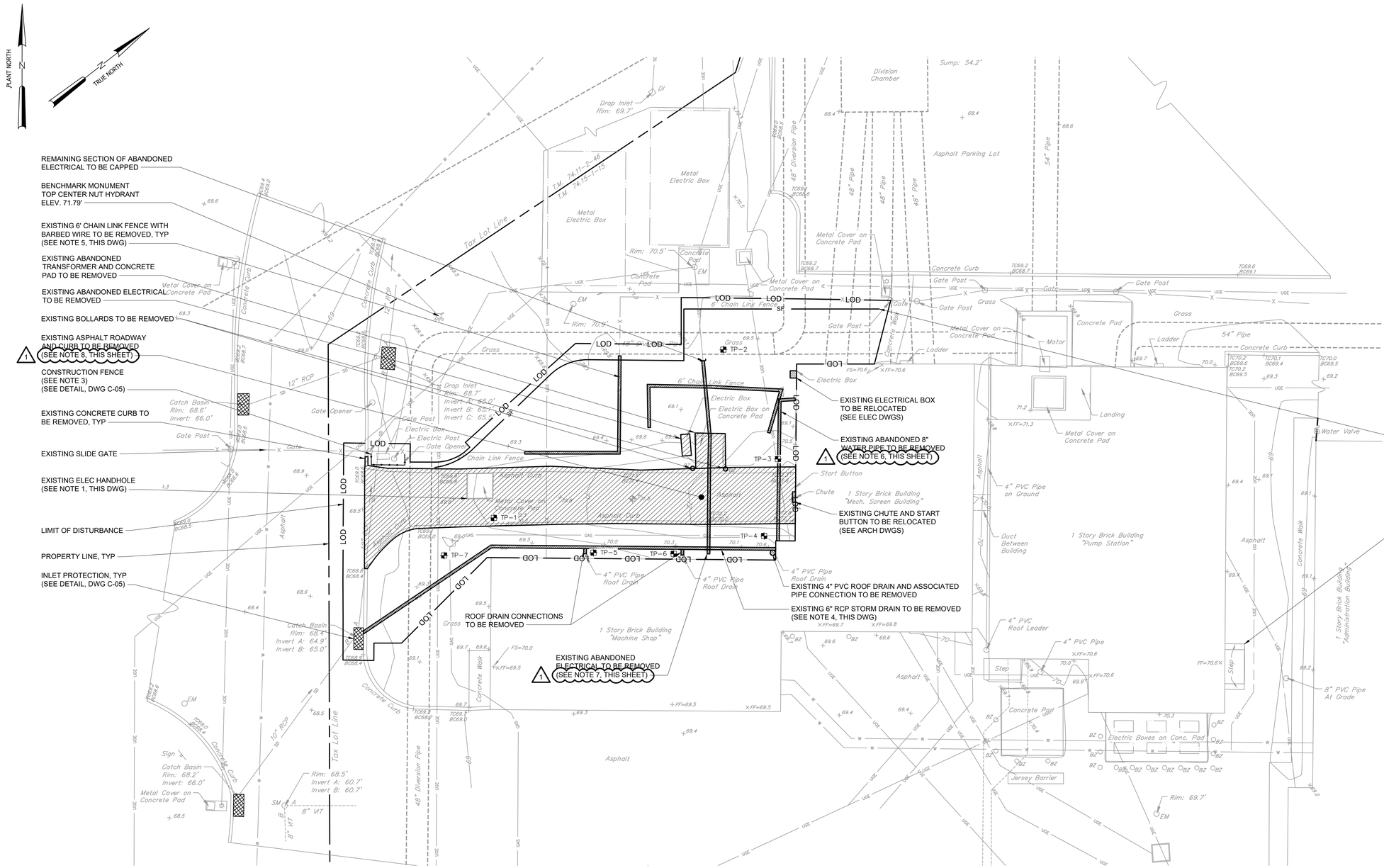
ROCKLAND COUNTY SEWER DISTRICT NO.1
ORANGEBURG, NEW YORK

ORANGEBURG WASTEWATER TREATMENT PLANT SCREENING IMPROVEMENTS PROJECT

ARCHITECTURAL
DOOR SCHEDULE AND DETAILS

DATE:	JUNE 2024
HAZEN NO.:	90462-000
CONT NO.:	RFB-RC-SWR-2023-06
DRAWING NUMBER:	A-10

Autodesk Docs://90462-000_EDS and CA for RCSD Screes Rehab/90462-000-100-MSB-A.rvt
8/15/2024 4:09:06 PM



PLAN
SCALE: 1" = 10'

0 10 20 FT.
1"=10'

NOTES:

1. FRAME AND COVER TO BE RE-SET TO ACCOMMODATE CHANGES IN GRADE FOR NEW ACCESS DRIVEWAY. SEE DWG C-03.
2. CONTRACTOR SHALL PERFORM TEST PITS AT LOCATIONS SHOWN PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL PERFORM UP TO TWO (2) ADDITIONAL TEST PITS AS DIRECTED BY THE ENGINEER OR THE OWNER. THESE TEST PITS ARE AT THE DISCRETION OF THE ENGINEER OR OWNER AND DOES NOT PRECLUDE THE CONTRACTOR FROM VERIFYING EXISTING CONDITIONS. ALL COSTS ASSOCIATED WITH PERFORMING TEST PITS SHALL BE INCLUDED IN THE LUMP SUM OF THE CONTRACT.
3. CONSTRUCTION FENCE SHALL BE PLACED TO PROTECT ELECTRICAL EQUIPMENT ADJACENT TO THE ACCESS DRIVEWAY. THE PLACEMENT OF THE FENCE SHALL NOT IMPEDE FUNCTIONALITY OF THE EXISTING SLIDE GATE.
4. EXISTING RECORD INFORMATION HAS BEEN GATHERED FROM RECORD DRAWINGS, "DRAWINGS FOR THE CONSTRUCTION OF THE SEWAGE TREATMENT PLANT EXPANSION PHASE I ; FOR THE ROCKLAND COUNTY SEWER DISTRICT NO. 1", NO AVAILABLE INVERT INFORMATION FOR THE DEPTH OF THE 6" STORM DRAIN. CONTRACTOR SHALL ASSUME AN INVERT ELEVATION OF 65.0
5. ANY REMOVAL OF FENCE TO ACCOMMODATE THE CONSTRUCTION ACTIVITIES INCLUDING FENCE REMOVAL/ REPLACEMENT NOT SHOWN ON THE CONTRACT DOCUMENTS SHALL BE RESTORED IN KIND. TEMPORARY FENCE SHALL BE PROVIDED IN PLACE AND LEFT SECURED AT THE END OF EACH DAY. ALL LABOR, MATERIALS AND EQUIPMENT ASSOCIATED WITH REMOVAL, REPLACEMENT, AND RESTORATION OF FENCING TO ACCOMMODATE CONSTRUCTION ACTIVITIES SHALL COME AT NO ADDITIONAL COST TO THE OWNER.
6. NO AVAILABLE RECORDS FOR WATER PIPE'S MATERIAL OR DEPTH. CONTRACTOR SHALL ASSUME A TOP OF PIPE ELEVATION OF 65.0 AND THAT THE MATERIAL IS CAST IRON PIPE.
7. NO AVAILABLE RECORDS FOR ELECTRICAL'S SIZE, MATERIAL, OR DEPTH. CONTRACTOR SHALL ASSUME 2' x 2' CONCRETE DUCT BANK WITH A TOP OF DUCT BANK ELEVATION OF 66.5.
8. CONTRACTOR SHALL ASSUME THE DEPTH OF ASPHALT TO BE THREE INCHES.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM NO. 4	08/2024	PDS
0	BID	06/2024	PDS

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE (0 1/2" 1")

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN

FOR BID

STATE OF NEW YORK — DANIEL JAMES SHEERAN — 088955 — LICENSED PROFESSIONAL ENGINEER

Hazen

HAZEN AND SAWYER
498 SEVENTH AVENUE, 11TH FLOOR
NEW YORK, NEW YORK 10018

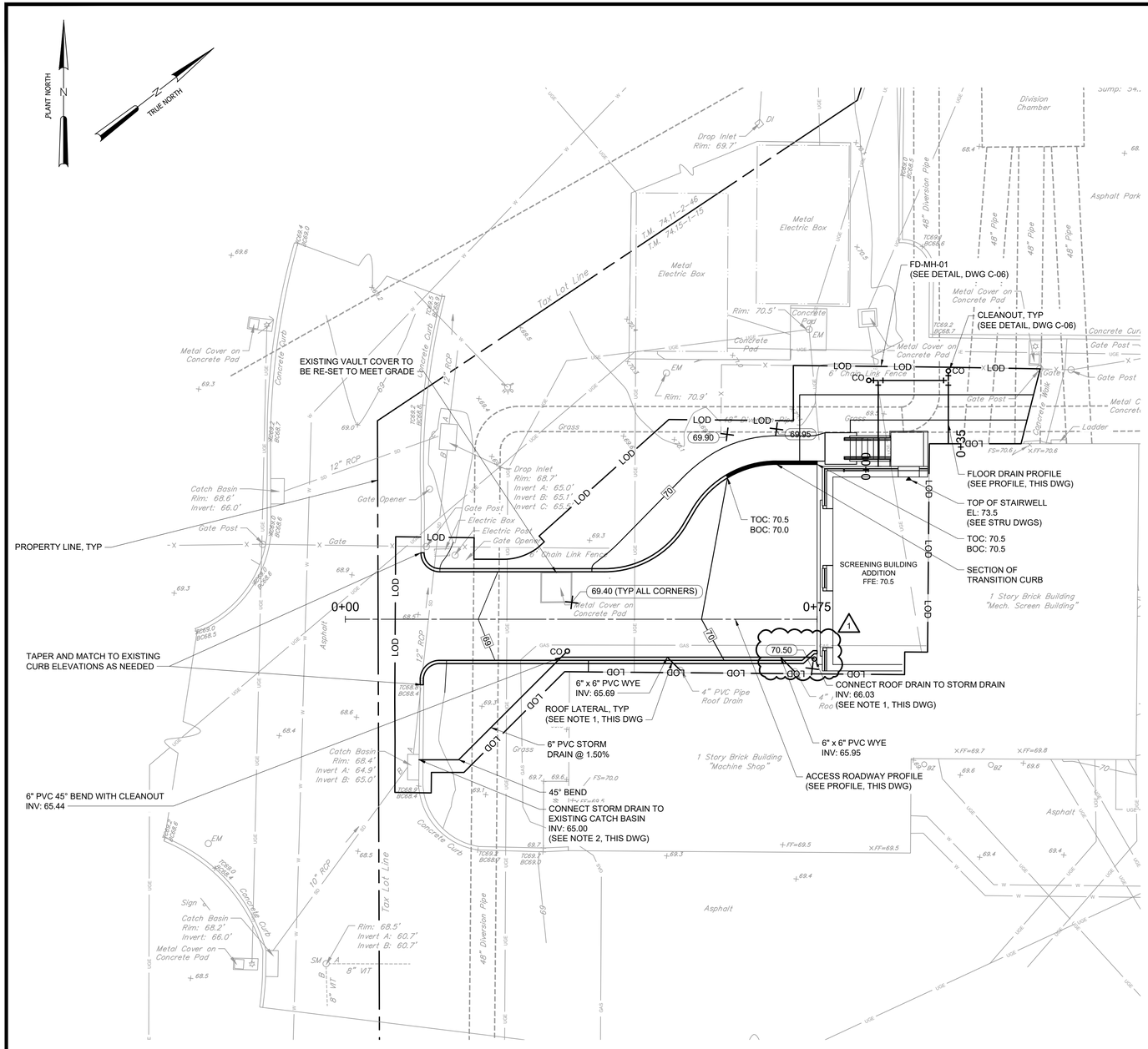
ROCKLAND COUNTY SEWER DISTRICT NO.1
ORANGEBURG, NEW YORK

ORANGEBURG WASTEWATER TREATMENT PLANT SCREENING IMPROVEMENTS PROJECT

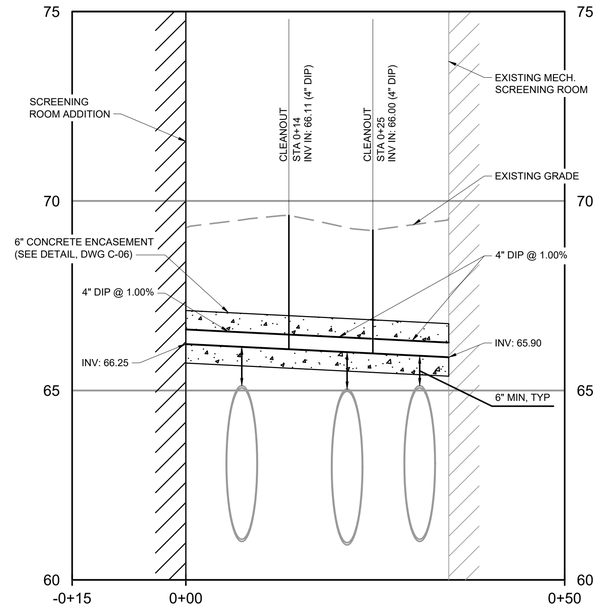
CIVIL
EXISTING CONDITIONS,EROSION CONTROL AND DEMOLITION SITE PLAN

DATE:	JUNE 2024
HAZEN NO.:	90462-000
CONT NO.:	RFB-RC-SWR-2023-06
DRAWING NUMBER:	C-02

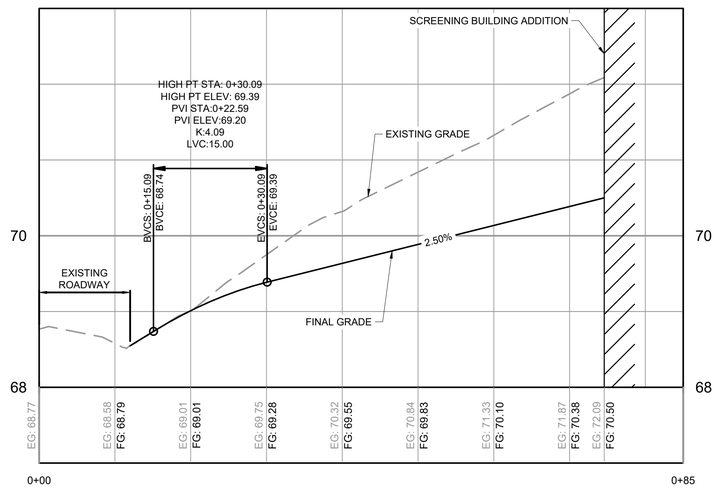
File: C:\USERS\JTANNER\DCACDOCS\HAZEN AND SAWYER\90462-000_EDS AND CA FOR RCSD SCREES REHAB\PROJECT FILES\01_DESIGN\CIVIL\C-02 Saved by JTANNER Save date: 8/22/2024 12:46 PM
PLOT DATE: 8/22/2024 4:40 PM BY: JTANNER



PLAN
SCALE: 1" = 10'



FLOOR DRAIN PROFILE
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 2'



ACCESS ROADWAY PROFILE
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 1'

NOTES:

1. CONTRACTOR SHALL TRANSITION EXISTING 4" CIP ROOF DRAINS TO 6" PVC STORM DRAIN PIPE WITH FERNCO 1051 SERIES STANDARD FLEXIBLE COUPLING OR APPROVED EQUAL. CONTRACTOR SHALL TEST PIT EXISTING ROOF DRAINS, ROOF DRAIN LATERALS, AND STORM DRAINS TO CONFIRM PIPE MATERIALS, ELEVATIONS, ALIGNMENT, AND OUTSIDE DIAMETER OF PIPING PRIOR TO SHOP DRAWING SUBMITTAL TO ENGINEER FOR REVIEW.
2. CONTRACTOR SHALL REMOVE EXISTING 6" RCP STORM DRAIN PIPE CONNECTION FROM THE EXISTING CATCH BASIN. PVC STORM DRAIN SHALL BE INSTALLED AT THE SAME PENETRATION AND ANNULAR SPACE SHALL BE FILLED WITH NON-SHRINK GROUT. ANY MODIFICATION TO THE EXISTING CATCH BASIN TO ACCOMMODATE THE PVC STORM DRAIN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. MODIFICATION TO THE EXISTING CATCH BASIN SHALL COME AT NO ADDITIONAL COST TO THE OWNER.

0 10 20 FT.
1"=10'
2 1 0 2'
SCALE: 1" = 2'
1 0.5 0 1'
SCALE: 1" = 1'

REV	ISSUED FOR	DATE	BY
1	ADDENDUM NO. 4	08/2024	PDS
0	BID	06/2024	PDS

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE (0 1/2" 1")

PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN

FOR BID

DANIEL JAMES SHEERAN — 088955 — LICENSED PROFESSIONAL ENGINEER — STATE OF NEW YORK

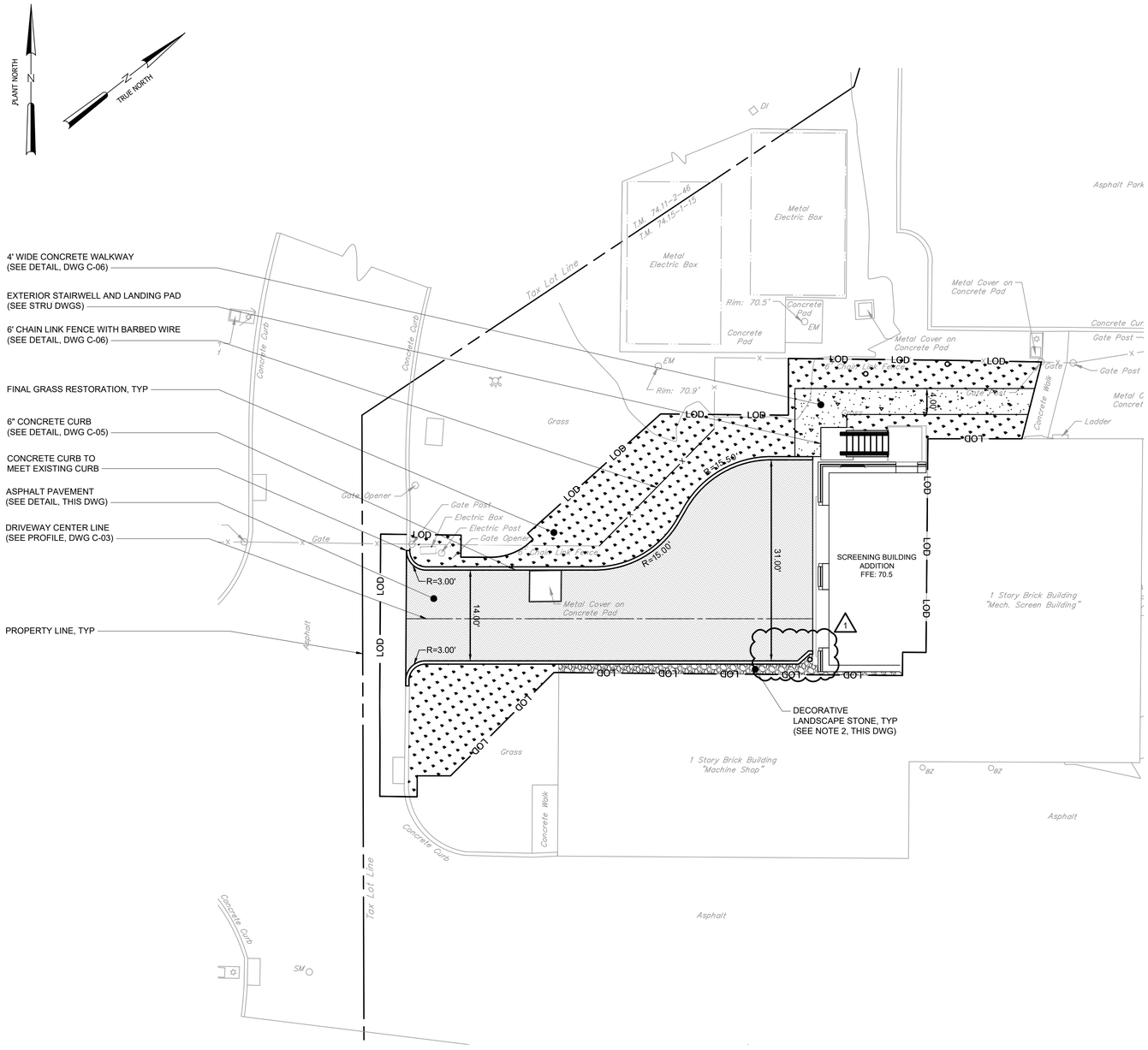
Hazen
HAZEN AND SAWYER
498 SEVENTH AVENUE, 11TH FLOOR
NEW YORK, NEW YORK 10018

ROCKLAND COUNTY SEWER DISTRICT NO.1
ORANGEBURG, NEW YORK

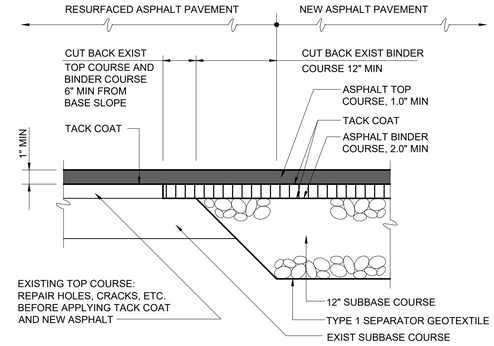
ORANGEBURG WASTEWATER TREATMENT PLANT
SCREENING IMPROVEMENTS PROJECT

CIVIL
GRADING AND DRAINAGE PLAN

DATE:	JUNE 2024
HAZEN NO.:	90462-000
CONT NO.:	RFB-RC-SWR-2023-06
DRAWING NUMBER:	C-03



PLAN
SCALE: 1" = 10'

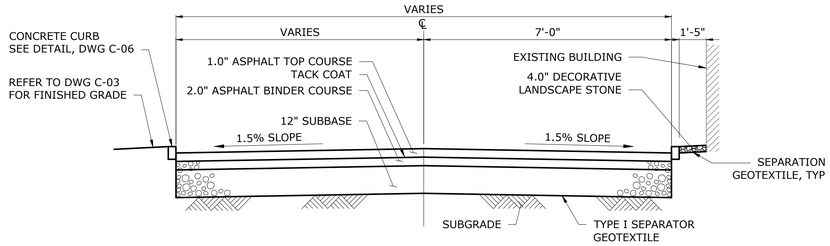


NOTE: CONTRACTOR SHALL MATCH THE TOTAL THICKNESS OF THE EXISTING PAVEMENT SECTION.

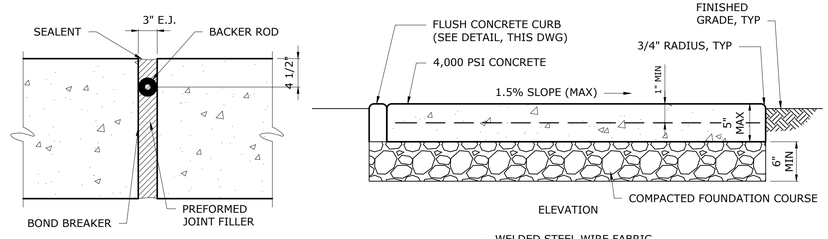
TYPICAL PAVEMENT JUNCTION
NTS

NOTES:

1. YARD PIPING, BURIED UTILITY INFRASTRUCTURE AND SITE TOPOGRAPHY IS NOT SHOWN FOR CLARITY. SEE DRAWINGS C-02 - C-03.
2. DECORATIVE LANDSCAPE STONE SHALL BE SMOOTH ROUNDED STONE SIZED BETWEEN ONE TO TWO INCHES. CONTRACTOR SHALL SUBMIT THREE SAMPLES OF DIFFERENT STONE TYPE TO THE ENGINEER AND OWNER FOR REVIEW AND APPROVAL.



TYPICAL ACCESS DRIVEWAY SECTION
NTS



NOTES:
1. EXPANSION JOINTS ARE TO BE LOCATED 10'-0" ON CENTER.
2. TOOLED OR CUT JOINTS LOCATED AT 5'-0" ON CENTER.
3. CONCRETE TO BE BROOM FINISHED.
4. CONCRETE AND GRANULAR FILL TO BE PLACED ON SUBGRADE COMPACTED TO 95% DENSITY.

CONCRETE WALKWAY
NTS

1"=10' 0 10 20 FT.

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0	BID	06/2024	PDS

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PROJECT ENGINEER:	R. FROST
DESIGNED BY:	J. TANNER
DRAWN BY:	J. TANNER
CHECKED BY:	D. SHEERAN

FOR BID

STATE OF NEW YORK — DANIEL JAMES SHEERAN — 088955 — LICENSED PROFESSIONAL ENGINEER

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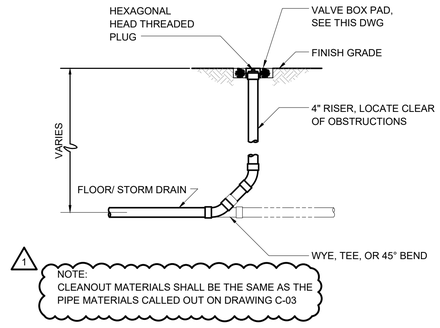
498 SEVENTH AVENUE, 11TH FLOOR
NEW YORK, NEW YORK 10018

ROCKLAND COUNTY SEWER DISTRICT NO.1
ORANGEBURG, NEW YORK

ORANGEBURG WASTEWATER TREATMENT PLANT SCREENING IMPROVEMENTS PROJECT

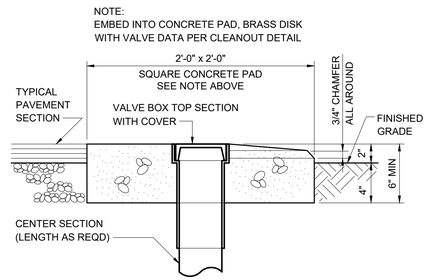
CIVIL
FINAL SITE PLAN

DATE:	JUNE 2024
HAZEN NO.:	90462-000
CONT NO.:	RFB-RC-SWR-2023-06
DRAWING NUMBER:	C-04



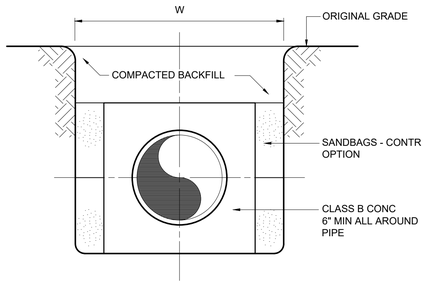
CLEANOUT

NOT TO SCALE



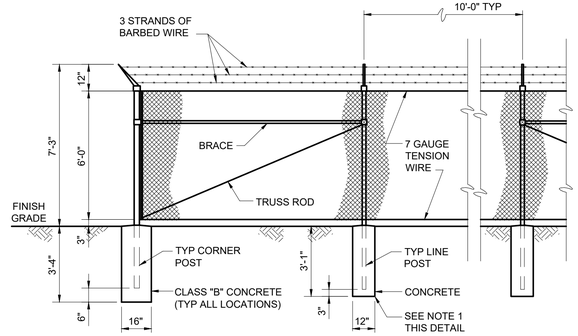
VALVE BOX PAD

NOT TO SCALE



CONCRETE ENCASEMENT

NTS



CORNER/LINE

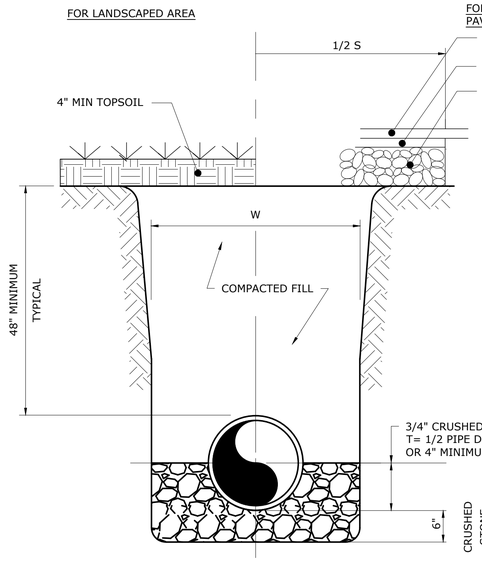
NOTES:

1. IF ROCK IS ENCOUNTERED WHEN SETTING POSTS, DRILL HOLES 4 INCHES LARGER IN DIAMETER THAN POSTS AND BACKFILL TO GRADE WITH CLASS "B" CONCRETE.

CHAIN LINK FENCE

NTS

FOR LANDSCAPED AREA



FOR ASPHALT PAVEMENT

1" TOP COURSE
2" BINDER COURSE
12" GRAVEL ROAD SUBBASE COURSE

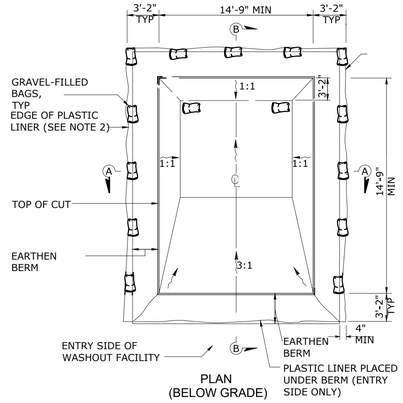
TRENCH EXCAVATION LIMITS		
INTERNAL DIAMETER OF PIPE	W WIDTH OF TRENCH MAX	W=MIN
4"-6"	3'-9"	O.D.+20"
8"-10"	3'-9"	O.D.+20"
12"	3'-9"	O.D.+20"
14"-16"	4'-2"	O.D.+20"
18"	4'-4"	O.D.+20"
20",21"	4'-8"	O.D.+20"
24"	4'-11"	O.D.+20"
27"	5'-9"	O.D.+24"
30"	6'-7"	O.D.+24"
DEPTH OF CUT	S MAXIMUM PAVEMENT REPLACEMENT WIDTH	
0-6'	S=W+4'	
>6-8'	S=W+8'	
>8-10'	S=W+12'	
>10-12'	S=W+16'	
>12-14'	S=W+20'	
>14-16'	S=W+24'	
>16-18'	S=W+28'	
>18'	S=W+32'	
W = TRENCH WIDTH AT BOTTOM OF PIPE. TRENCH SIDE SLOPES SHALL BE IN ACCORDANCE WITH OSHA REQUIREMENTS.		

NOTES:

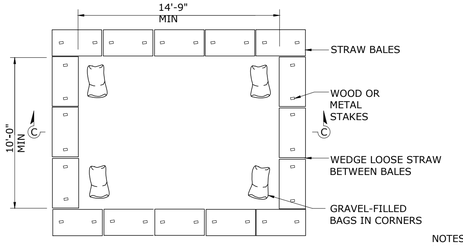
1. ALL TRENCHES SHALL BE BACKFILLED WITH GOOD TO EXCELLENT FILL AS PER NYCDEP STANDARD SEWER AND WATER MAIN SPECIFICATIONS AND CONTRACT SPECIFICATIONS.

TYPICAL TRENCH

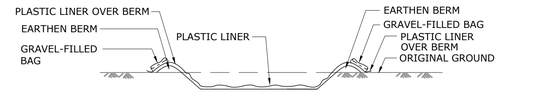
NTS



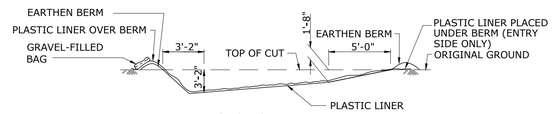
PLAN
(BELOW GRADE)



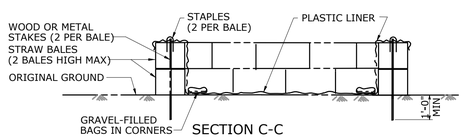
PLAN
(ON GRADE)



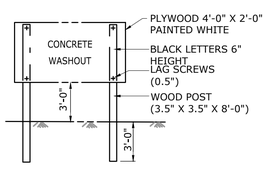
SECTION A-A



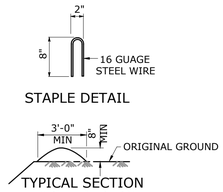
SECTION B-B



SECTION C-C



CONCRETE WASHOUT
SIGN DETAIL



STAPLE DETAIL

TYPICAL SECTION
EARTHEN BERM

NOTES:

1. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 32'-10" OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
2. PLASTIC LINER SHALL BE ANCHORED WITH GRAVEL-FILLED BAGS FOR BELOW GRADE CONCRETE WASHOUT FACILITY.
3. THE CONTRACTOR SHALL PROVIDE WATERTIGHT, PORTABLE WASHOUT CONTAINERS IF SPACE CONSTRAINTS OF THE SITE DO NOT ALLOW THE USE OF THE DETAIL ABOVE. CONTRACTOR SHALL FURNISH, MAINTAIN, AND REMOVE CONTAINERS TO THE SITE AS REQUIRED FOR THEIR CONCRETE DELIVERIES AT NO ADDITIONAL COST TO THE OWNER.

CONCRETE WASHOUT

NTS

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PROJECT ENGINEER: R. FROST
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DRAWN BY: J. TANNER
CHECKED BY: D. SHEERAN

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

FOR BID

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Hazen

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ORANGEBURG, NEW YORK

ORANGEBURG WASTEWATER TREATMENT PLANT
SCREENING IMPROVEMENTS PROJECT

CIVIL
DETAILS
SHEET 2

DATE: JUNE 2024
HAZEN NO.: 90462-000
CONT NO.: RFB-RC-SWR-2023-06
DRAWING NUMBER: C-06

File: C:\USERS\JTANNER\DCACDOCS\HAZEN AND SAWYER\90462-000_EDS AND CA FOR RCSD SCREES REHAB\PROJECT FILES\01_DESIGN\CIVIL\C-06 Saved by JTANNER Save date: 8/22/2024 4:23 PM
PLOT DATE: 8/22/2024 4:40 PM BY: JTANNER