



Addendum No.: 2

Date Of Addendum: 2/6/19

CT DAS ● Construction Services ● Office of Legal Affairs, Policy, and Procurement

York Correctional Institution Central Plant and Piping Distribution

201 West Main Street, Niantic, CT

BI – JA – 465

Original Bid Due Date / Time:

3/07/19

2:00 PM EST

Previous Addendums: Addendum 1

**TO: Prospective Bid Proposers:**

This Addendum forms part of the "Contract Documents" and modifies or clarifies the original "Contract Documents" for this Project dated 12/21/18. Prospective Bid Proposers **shall** acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form.

**Failure to acknowledge receipt of the total number the Addenda issued for this Project on the space provided on Section 00 41 00 Bid Proposal Form shall subject Bid Proposers to disqualification.**

The following clarifications are applicable to drawings and specifications for the project referenced above.

**Item 1:**

See attached for responses to pre-bid questions Q1 thru Q4.

**Item 2:**

See attached Temporary Fencing Plan for Bid Package 31A Site Preparation.

**Item 3:**

Bid Package 31A Site Preparation

**ADDITIONAL TREE REMOVAL CLARIFICATION (Bid Package 31A):**

- Remove all trees from the rear side of all of the buildings to the secure fence line.
- Remove all trees on the side and to the rear of Building 10.
- Remove all trees 15 feet into the tree line behind Buildings 11 and 13.
- Remove all trees within 15 feet of the light pole line next to the access road (Rim road) around the secure facility. Include approximately 10 trees that are 20 inches or larger in diameter (DBH) that are close to the 15-20 foot range that could potentially jeopardize the fence. These can be identified during the walk through.

**Item 4:**

Section 00 01 10 Table of Contents (for all three (3) Project Manual volumes)

**UPDATE** the page counts for the Addendum 1 Table of Contents for the following Specification section items:

"00 01 15 List of Drawing Sheets" from "7" to "8"

"00 11 16 Invitation to Bid" from "10" to "4"

"00 21 13 Notice to Bidders" from "16" to "10"

"00 31 13 Preliminary Project Schedule & Site Logistic Plan (Baseline Master Schedule)" from "41" to "59"

"00 83 01 Bid Packages" from "2" to "146"

"01 21 00 Allowances" from "2" to "3"

"01 22 00 Unit Prices" from "2" to "5"

"01 35 16 Alteration Project Procedures" from "8" to "7"



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**Item 5:**

Section 00 11 16 Invitation to Bid

**REPLACE** the entire section with the attached.

**Item 6:**

Section 00 31 13 Preliminary Project Schedule & Site Logistic Plan (Baseline Master Schedule)

**ADD** the attached building logistics plans

**Item 7:**

Section 00 41 00 Bid Proposal Form

**REPLACE** the entire section with the attached.

**Item 8:**

Section 00 52 73 Subcontract Agreement Form

**REPLACE** the entire section with the attached.

**Item 9:**

Section 00 83 01 Bid Packages

**ADD** the attached bid packages (1A, 3A, 4A, 5A, 7A, 9A, 9B, 9C, 21A, 26A, and 31B)

**Item 10:**

Section 01 21 00 Allowances

**REPLACE** the entire section with the attached.

**SUMMARY OF CHANGES FROM BID PACKAGE**

**UPDATED** to include all Bid Packages

**Item 11:**

Section 01 22 00 Unit Prices

**REPLACE** the entire section with the attached.

**SUMMARY OF CHANGES FROM BID PACKAGE**

**UPDATED** to include all Bid Packages

**Item 12:**

Section 01 35 16 Alteration Project Procedures, paragraph 1.2.B.5

**DELETE** "... Section 02 41 19 "Selective Structure Demolition"..."

**SUBSTITUTE** "...Section 02 41 19 "Selective Demolition"..."

**Item 13:**

Section 01 35 16 Alteration Project Procedures, paragraph 1.2.B.4 and 1.2.B.6

**DELETE** paragraphs 1.2.B.4 and 1.2.B.6

**RENUMBER** paragraphs 1.2.B.5, 1.2.B.7, 1.2.B.8, and 1.2.B.9 to 1.2.B.4, 1.2.B.5, 1.2.B.6, and 1.2.B.7, respectively.

**Item 14:**

Section 01 35 16 Alteration Project Procedures, paragraph 2.2.A

**DELETE** "...said items to [Insert] on [Insert], CT [Insert]..."

**SUBSTITUTE** "...said items to the York Correctional Institution Building 10 loading dock..."



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**Item 15:**

Section 01 35 16 Alteration Project Procedures, paragraph 2.2.A

**ADD** the following items under “1. Equipment:“

“Building 0: Air compressor

Building 3: Air compressor

Building 4: Air compressor

Building 5: Air compressor

Building 7: Air compressor

Building 9A: Air compressor

Building 9B: Air compressor

Building 10: Two (2) air compressors

Building 11: Air compressor and two (2) TACO pumps

Building 12: Two (2) TACO pumps

Building 13: Air Compressor and two (2) TACO pumps”

**DELETE** items 2.2.A.1, 2.2.A.2, 2.2.A.3, 2.2.A.4, 2.2.A.5, and 2.2.A.6

**Item 16:**

Section 01 35 16 Alteration Project Procedures, paragraph 2.2.B

**DELETE** “...salvageable items at [Insert], [Insert], Connecticut [Insert] and store items in the appropriate location as directed by [Insert] personnel...”

**SUBSTITUTE** “...salvageable items at the York Correctional Institution Building 10 loading dock and store items in the appropriate location as directed by facility personnel....”

**Item 17:**

Section 01 35 16 Alteration Project Procedures, paragraphs 3.1.C.2, 3.1.D.3, and 3.1.E.2

**DELETE** “...[Owner] [Contractor]...”

**SUBSTITUTE** “...Owner....”

**Item 18:**

Section 01 35 16 Alteration Project Procedures, paragraph 3.1.G.2

**DELETE** “...as specified in Section 01 35 16 Alteration Project Procedures and Section 01 20 00 Contract Considerations, Section 01 35 29 Health, Safety and Emergency Response Procedures, Section 01 35 43 Environmental Procedures, Section 01 50 00 Temporary Facilities and Controls, Section 02 41 13 Selective Demolition, Section 02 41 16 Structure Demolition, Section 02 50 00 Demolition and Alterations, Section 02 56 01 Securing, Construction and Dismantling of a Temporary Waste Stockpile Area, Section 02 61 14 Excavation and Handling of Controlled Material, Section 02 61 22 Removal and Disposal of Controlled Material, Section 02 71 00 Groundwater Treatment, Section 02 81 00 Transportation and Disposal of Regulated Soil, Section 31 10 00 Site Clearing, Section 31 20 00 Site Earth Moving, Section 31 20 01 Building Excavation and Backfill, and the Soil Management...”

**SUBSTITUTE** “...as specified in Section 01 35 16 Alteration Project Procedures and Section 01 20 00 Contract Considerations, Section 01 35 29 Health, Safety and Emergency Response Procedures, Section 01 35 43 Environmental Procedures, Section 01 50 00 Temporary Facilities and Controls, Section 02 41 19 Selective Demolition, Section 02 56 01 Securing, Construction and Dismantling of a Temporary Waste Stockpile Area, Section 02 61 14 Excavation and Handling of Controlled Material, Section 02 61 22 Removal and Disposal of Controlled Material, Section 02 71 00 Groundwater Treatment, Section 31 10 00 Clearing and Grubbing, and the Soil Management....”



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**Item 19:**

Section 01 35 16 Alteration Project Procedures, paragraph 3.1.H.2

**DELETE** "...as specified in Section 01 35 16 Alteration Project Procedures and Section 01 20 00 Contract Considerations, Section 01 35 29 Health, Safety and Emergency Response Procedures, Section 01 35 43 Environmental Procedures, Section 01 50 00 Temporary Facilities and Controls, Section 02 41 13 Selective Demolition, Section 02 41 16 Structure Demolition, Section 02 50 00 Demolition and Alterations, Section 02 56 01 Securing, Construction and Dismantling of a Temporary Waste Stockpile Area, Section 02 61 14 Excavation and Handling of Controlled Material, Section 02 61 22 Removal and Disposal of Controlled Material, Section 02 71 00 Groundwater Treatment, Section 02 81 00 Transportation and Disposal of Regulated Soil, Section 31 10 00 Site Clearing, Section 31 20 00 Site Earth Moving, Section 31 20 01 Building Excavation and Backfill, and the Soil Management Plan for the York Correctional Institution included in Section 50 00 00 Project-Specific Additional Information. Section 01 35 16 Alteration Project Procedures and Section 01 35 29 Environmental Health and Safety, Section 01 50 00 Temporary Facilities and Controls, Section 02 41 13 Selective Demolition, Section 02 41 16 Structure Demolition, Section 02 50 00 Demolition and Alterations, Section 31 23 19 Wastewater Treatment Systems, and..."

**SUBSTITUTE** "...as specified in Section 01 35 16 Alteration Project Procedures and Section 01 20 00 Contract Considerations, Section 01 35 29 Health, Safety and Emergency Response Procedures, Section 01 35 43 Environmental Procedures, Section 01 50 00 Temporary Facilities and Controls, Section 02 41 13 19 Selective Demolition, Section 02 41 16 Structure Demolition, Section 02 50 00 Demolition and Alterations,, Section 02 56 01 Securing, Construction and Dismantling of a Temporary Waste Stockpile Area, Section 02 61 14 Excavation and Handling of Controlled Material, Section 02 61 22 Removal and Disposal of Controlled Material, Section 02 71 00 Groundwater Treatment, Section 02 81 00 Transportation and Disposal of Regulated Soil, Section 31 10 00 Site Clearing and Grubbing, Section 31 20 00 Site Earth Moving, Section 31 20 01 Building Excavation and Backfill, and the Soil Management Plan for the York Correctional Institution included in Section 50 00 00 Project-Specific Additional Information. Section 01 35 16 Alteration Project Procedures and Section 01 35 29 Environmental Health and Safety, Section 01 50 00 Temporary Facilities and Controls, Section 02 41 13 19 Selective Demolition, Section 02 41 16 Structure Demolition, Section 02 50 00 Demolition and Alterations, Section 31 23 19 Wastewater Treatment Systems, and..."

**Item 20:**

Section 23 09 23 Building Management System, paragraph 1.5.A.1

**DELETE** paragraph 1.5.A.1

**SUBSTITUTE** paragraph 1.5.A.1 with:

"1. Automatic Control Valves and Control Dampers"





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**Item 21:**

Section 23 09 23 Building Management System, Section 2.12 AUTOMATIC BUTTERFLY VALVES (ANSI CLASS 600)

**DELETE** Section "2.12 AUTOMATIC BUTTERFLY VALVES (ANSI CLASS 600)"

**SUBSTITUTE** Section 2.12 with:

**"2.12 AUTOMATIC HIGH PERFORMANCE BUTTERFLY VALVES (ANSI CLASS 150)**

- A. Valve to be high performance double offset type design and shall conform with MSS SP-68 Standard for High Pressure Butterfly Valves with Offset Design.
- B. Provide full lug body type for connection to ANSI 150 or ANSI 300 class flanges.
- C. Body shall be cast steel with neck extended to suit insulation thickness
- D. Disc shall be cast steel.
- E. Stem shall be 17-4 ph stainless steel
- F. Wear ring (seat) shall be:
  - 1. Teflon or urethane with Buna N or Viton backup O-ring for ANSI 150 and ANSI 300 class service
  - 2. 316 stainless steel wear ring with EPDM O-ring
- G. Provide non asbestos packing material
- H. Valves shall be suitable for bi-directional dead-end service with either flange removed at service pressures and temperatures.
- I. Factory leakage test shall be bubble tight to ANSI or WOG pressure rating at corresponding service temperature.
- J. Provide motorized control valves with remote operating station if control valve is installed more than 7 feet above finished floor. Remote operating station to be provided and installed so that operations staff can operate control valve from floor level. Remote operating station shall include controls for operation of the control valve and show valve status/position. Provide power and control wire and conduit as needed. Provide stanchion framing and/or mounting hardware as needed for mounting remote operating station.
- K. Provide valves with factory installed actuators of the electric or electro hydraulic type and sized for tight shutoff at maximum system differential pressure. Actuators for modulating service shall be equipped with integral position potentiometer. Provide actuators with an integral hand wheel or local manual controls for manual operation. Each actuator shall be equipped with adjustable limit switches. Input voltage shall be 24, 120, or 480 VAC, 60 HZ. 120 VAC power for plant valves will be furnished and installed by others. This contractor will provide all required coordination with related trades.
- L. Valves shall be line size unless otherwise noted on drawings.
- M. Approved Manufacturers: Bray series 41, Jamesbury 815L, Cameron WKM, Belimo SHP, Keystone K-Lok.
- N. This contractor shall coordinate with other specification sections as required to provide properly sized valves and actuators. Plant valves shall be supplied with automatic actuators sized appropriately to accommodate and over system flow and pressure requirements."



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**Item 22:**

Section 23 09 23 Building Management System, Section 2.13 SOFTWARE

**RENUMBER** Section "2.13 SOFTWARE" as Section "2.14 SOFTWARE"

**Item 23:**

Section 23 09 23 Building Management System, Section 2.13

**ADD** Section "2.13 DAMPER OPERATORS" as follows:

**"2.13 DAMPER OPERATORS**

- A. General: Provide smooth, proportional control with sufficient power for air velocities 20% greater than maximum design velocity and to provide tight seal against maximum system pressures. Provide spring return to normal position. Damper operators shall be installed in accessible locations. Damper operators shall not be installed inside exhaust air ducts, or exhaust air units.
- B. Electric Operators: Maintenance free electric actuator, reversible, with push rod and bracket for swivel mounting and for the transmission of power. Synchronous motor with load independent running time providing parallel operation of several operators. Gear train with low noise level. Magnetic hysteresis coupling with magnetic transmission of torque, with no mechanical contact between the coupling members. The actuator shall be safe against blocking and overload proof even when operated continuously.
- C. Electronic Operators: Maintenance free, 24 or 120 VAC, 4-20 mA or 0-10 VDC input, reversible, direct-drive or push rod and bracket, metal or aluminum housing, brushless DC motor with stall protection, quiet, low-power operation, have visual position indicator, and manual override.
- D. Quantity of operators: Provide a sufficient number to achieve unrestricted movement throughout damper range, such that, one operator does not operate more than the maximum square footage of damper area as recommended in standard catalog of manufacturer.
- E. Provide damper control and interlocks as required per drawings and sequence of operations. Coordinate power and control wiring and conduit as needed.
- F. Coordinate selection and sizing of damper operators with control dampers as specified in Specification 23 33 00 Air Duct Accessories.
- G. Approved Manufacturers:
  - 1. Johnson
  - 2. Siemens
  - 3. Belimo

**Item 24:**

Section 23 11 23 Facility Natural Gas Piping, Section 1.10 PROJECT CONDITIONS

**DELETE** Section "1.10 PROJECT CONDITIONS"

**SUBSTITUTE** Section 1.10 with:

**"1.10 PROJECT CONDITIONS**

- A. The installation of the natural gas rig will be completed by others (utility company) under a separate project at the approximate location shown on the contract documents.
- B. Installation contractor to connect to natural gas rig (provided and installed by others under a separate project) and provide natural gas piping from natural gas rig to boiler/burner natural gas trains as shown on the contract documents."



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**Item 25:**

Design Narrative Report, Section 2.2.1, CONDENSER WATER SYSTEM (COOLING TOWERS), paragraph 3

**DELETE** "...motor with a larger motor and replacement of the existing gear box."

**SUBSTITUTE** "... motor with a larger motor, replacement of the existing gear box, and installation of new VFDs. The existing hot deck railing and access ladders will be replaced. New interior basin access and maintenance platforms, ladders, and railings will be installed inside the existing cooling tower cells. The installation contractor will coordinate with the existing cooling tower manufacturer (Marley) who will provide the material and assembly/installation instructions for the upgrades including the new motors, gear boxes, VFDs, railings, ladders, and access platforms."

**Item 26:**

Design Narrative Report, Section 2.2.1, CHEMICAL TREATMENT (EXISTING VENDOR), paragraph 1

**DELETE** "The design team will contact the existing chemical treatment vendor and develop a chemical treatment plan for the new systems. The design team will identify what equipment is to be furnished and installed by the installation contractor for this project and what will be provided by the existing chemical treatment vendor."

**SUBSTITUTE** "The design team has discussed the plant upgrades with the existing chemical treatment vendor and has coordinated the drawings with the system requirements as discussed with the existing chemical treatment vendor."

**Item 27:**

Design Narrative Report, Section 2.2.2, UNDERGROUND DISTRIBUTION CONCEPT, paragraph 5

**DELETE** "There will be no need for manholes or underground vaults to access and manipulate the valves."

**SUBSTITUTE** "The underground sectionalizing valves will be contained within manholes or precast underground vaults with secure manhole covers located above the valve operator stems. The sectionalizing valves will be manipulated from grade by removing the manhole covers and using a "T" wrench, except for the valves behind Building 10. Due to the depth of the valves, manipulating the valves behind Building 10 will require removing manhole covers, climbing down into the vault, and operating the valves from inside the vault."

**Item 28:**

Design Narrative Report, Section 2.3, PHASING & TEMPORARY EQUIPMENT, General Phasing Notes

**ADD** item 5:

"5. The CMR will develop and provide the final construction phasing plan; the following is provided for reference."

**Item 29:**

Design Narrative Report, Section 2.3, PHASING & TEMPORARY EQUIPMENT, Preliminary Phasing Plan

**DELETE** items 2, 3, and 4.

**RENUMBER** items 5, 6, and 7 as items 2, 3, and 4.

**Item 30:**

Design Narrative Report, Section 8 CONTROLS

**DELETE** Section "8 CONTROLS" (entire section)

**REPLACE** Section "8 CONTROLS" (entire section) with the attached.



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**DRAWINGS:**

Please note that all changes to the drawings issued for this Addendum are bubbled and tagged as Addendum 2.

**Item 31:**

Drawing C502 Site Details

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ADDENDUM 1**

**UPDATED** detail 6 title for clarity.

**Item 32:**

Drawing C503 Site Details

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ADDENDUM 1**

**UPDATED** underground valve vault details.

**Item 33:**

Drawing M204 Plant Condenser Water Flow Diagram Installation

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ISSUE FOR BID**

**UPDATE** clarified cooling tower arrangement and labeling

**Item 34:**

Drawing M406 Plant CW Flow Diagram Installation Phase 5

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ISSUE FOR BID**

**UPDATE** clarified cooling tower arrangement and labeling

**Item 35:**

Drawing M501 Central Plant Plan Installation Phase 1

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ISSUE FOR BID**

**UPDATE** updated/clarification of air compressor relocation scope note 1

**Item 36:**

Drawing M505 Central Plant Plan Installation Phase 5

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ISSUE FOR BID**

**UPDATE** clarified cooling tower arrangement and labeling

**Item 37:**

Drawing M518 Building 9C Boiler Room Installation Section

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ADDENDUM 1**

**UPDATED** section to show second underground piping offset.



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**Item 38:**

Drawing M709 Building 4 Part Plan Demolition

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ADDENDUM 1**

**ADDED** part plan showing removal of temporary 4"HWS&R piping

**Item 39:**

Drawing M803 Equipment Schedules - 3

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ISSUE FOR BID**

**UPDATED** chiller schedule; cooling tower schedule and notes to clarify cooling tower cell re-labeling and to call out for new handrails, access ladders, access platforms for refurbished cooling tower cells.

**Item 40:**

Drawing M804 Equipment Schedules - 4

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ISSUE FOR BID**

**UPDATED** refrigerant purge fan schedule

**Item 41:**

Drawing M905 Details - 6

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ADDENDUM 1**

**UPDATED** detail 5 to include Energy Meter; updated detail 9 title for clarification

**Item 42:**

Drawing M906 Details - 7

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ISSUE FOR BID**

**ADDED** boiler stack roof penetration detail

**Item 43:**

Drawing M907 Details - 8

**REPLACE** the entire drawing with the attached.

**SUMMARY OF CHANGES FROM ADDENDUM 1**

**UPDATE** clarified cooling tower arrangement and labeling

**End of Addendum 2**



**PRE-BID QUESTIONS AND ANSWERS – ADDENDUM 2**

- ***Q1: (23A/26A) On Addendum #1 Drawing M518, the grade elevation where the image of a person is 38.9' and the bottom of the trench is 35.34', which would make that approximately 3'-7" deep to the bottom of pipe. The 10" pipe with insulation is about 14" diameter, that would be approximately 28" of cover, and on Addendum #1 Drawing C502 Detail #6 indicates 42" min. cover. Do we need to Heat Trace the entire runs of all the HW & CHW S&R lines or do we lower the grade at the bottom of the trench? Please advise.***

A1: The intent is to provide heat tracing for limited lengths of underground piping where 42" cover is not available and not to provide heat tracing for entire runs of underground distribution piping. The segments of underground distribution which have less than 42" cover are generally short sections of piping which are near the new "doghouses" at the buildings and in the Building 9C loading dock area. The existing Fuel Oil piping from the Central Plant wall to the above ground Fuel Oil storage tank also gets heat traced per Drawing M209.

- ***Q2: (23A/26A) Are the Heat Trace Systems owed by Bid Package 23A or Bid Package 26A?***

A2: Electrical Bid Package 26A shall furnish and install specified electric heating cables, accessories, warning labels, warning tape, power wiring, grounding, and control panels for the heat trace systems per Section 23 05 33, after piping has been tested and before insulation is installed, or in prefabricated heat trace tubes as indicated on Addendum #1 Drawings M518 and C502. Mechanical Bid Package 23A shall furnish and install signal and control wiring for the heat trace systems and connect the heat trace systems to the BMS. Heat trace is required for lateral HW and CHW S&R hydronic piping runs piping near and inside the new outdoor pipe enclosure "doghouses" typical as shown on Drawing C502, for the existing Fuel Oil piping to the Fuel Oil storage tank as shown on Drawings M209 and M414, and for the lateral HW and CHW S&R hydronic piping at the Building 9C loading dock area as shown on Addendum #1 Drawing M518.

- ***Q3: (23A/26A) Should the above ground bridge piping on Building 8 be prefabricated with heat trace? In a prefabricated heat trace system, the heat trace cable can be replaced without removing any insulation. This will make easier the maintenance and replacement for the heat trace cable down the road. Also, it's easier to install during construction.***

A3: Above ground HW S&R main loop piping will have constant flow in winter months so only the HW and CHW S&R lateral piping to the pipe enclosure “doghouses”, with less than 42” of cover, are vulnerable to freezing if isolated from the main loop.

- ***Q4: (23A/26A) Detail #3 on Drawing C501 shows a Field Insulated Elbow Kit. All other details are showing factory prefabricated fittings. Section 23 21 13.13 paragraphs 2.1 B & 2.1 G states fittings should be factory pre-fabricated/ pre-engineered and pre-insulated. Are field Insulated Fittings allowed on this project or Detail #3 should be dismissed?***

A4: Factory pre-fabricated/pre-insulated/pre-engineered fittings are required for the underground piping installation. Please disregard Detail 3, dwg C501.



BRIDE LAKE

SOILS ID: 29B  
AGAWAM FINE  
SANDY LOAM

SOILS ID: 29A  
AGAWAM FINE  
SANDY LOAM

SOILS ID: 107  
LIMERICK AND  
LIM SOILS

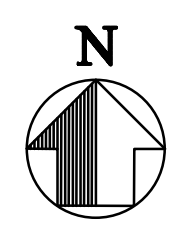
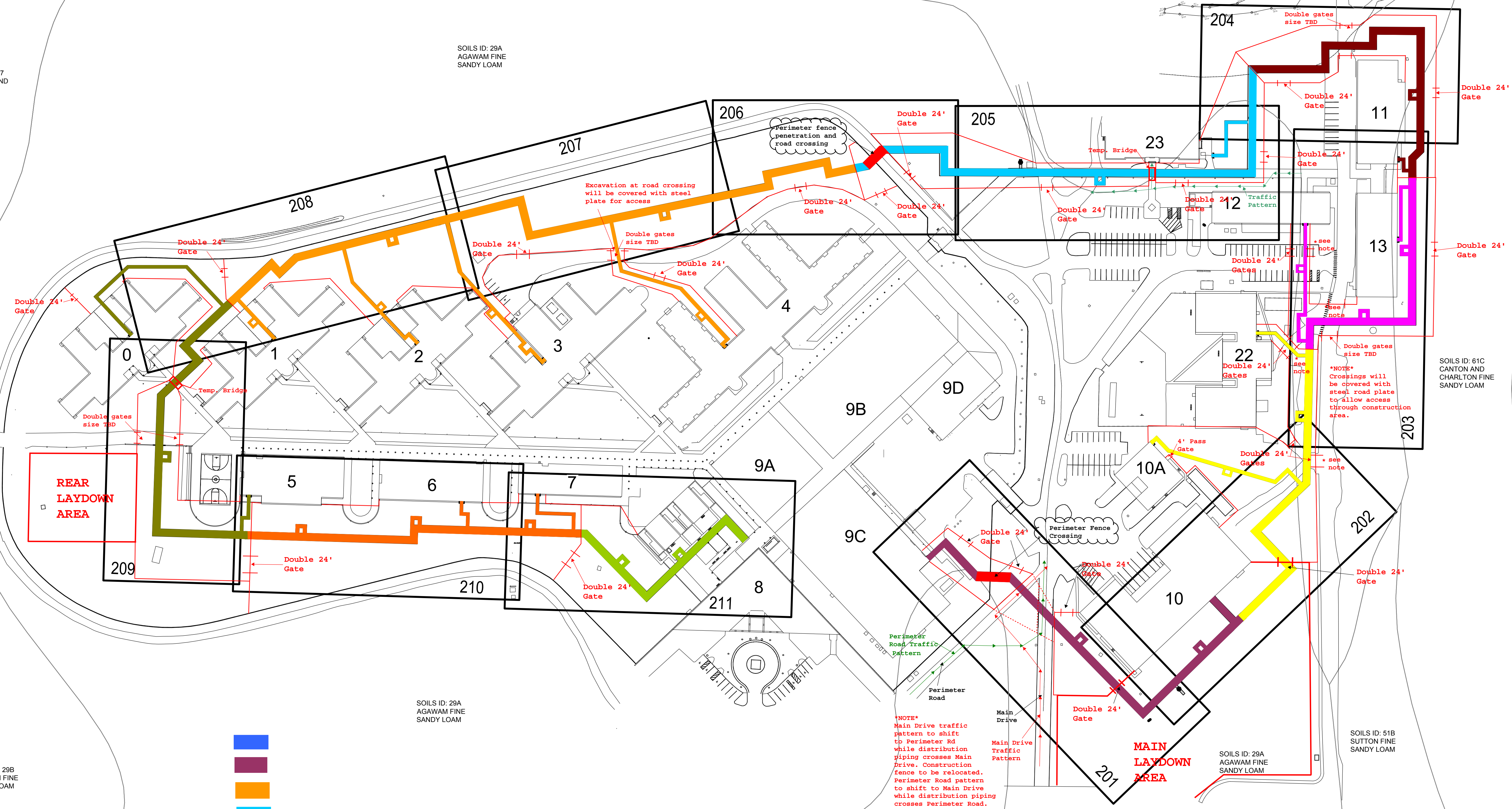
SOILS ID: 61C  
CANTON AND  
CHARLTON FINE  
SANDY LOAM

SOILS ID: 29A  
AGAWAM FINE  
SANDY LOAM

SOILS ID: 29B  
AGAWAM FINE  
SANDY LOAM

SOILS ID: 29A  
AGAWAM FINE  
SANDY LOAM

SOILS ID: 51B  
SUTTON FINE  
SANDY LOAM



1 DISTRIBUTION PIPING SITE INDEX PLAN  
SCALE: 1" = 80'

drawing title			STATE OF CONNECTICUT	
DISTRIBUTION PIPING SITE INDEX PLAN			DEPARTMENT OF ADMINISTRATIVE SERVICES	
REVISIONS				
mark	date	description	drawing prepared by	date
	11/07/17	SD SUBMISSION	WSP USA ONE PENN PLAZA NEW YORK, NY	9/19/2018
	02/27/18	DD SUBMISSION		scale 1" = 80'
	06/20/18	50% CD SUBMISSION		drawn by JMO
	09/19/18	90% CD SUBMISSION		approved by KJW
project			YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NANTIC, CT	drawing no. C200
CAD no. Site Plan Indexes.dwg			project no. 188824	



**INVITATION TO BID – YORK CORRECTIONAL CENTRAL PLANT AND DISTRIBUTION SYSTEM**

Sealed Bids for: **York Correctional Central Plant and Distribution System**, York Correctional Facility, 201 West Main Street, Niantic, CT 06357. The Owner is the State of Connecticut Department of Administrative Services (DAS). The Construction Manager at-Risk (CMR) is PDS Engineering & Construction, Inc.

**Sealed bids are invited and will be received in triplicate by the office of the Construction Manager, PDS Engineering & Construction, Inc., 107 Old Windsor Road, 2<sup>nd</sup> Floor, Bloomfield, Connecticut 06002 until 2:00 PM on Thursday, March 21, 2019, Attention: Mr. Randy Becker, Senior Construction Manager. Please park in the PDS parking lot. The bids will be publicly opened at 2:30 PM and read aloud.**

The work described in the Bid Documents is for replacement / renewal of the existing central plant at York Correctional Institution, replacement of the existing underground heating hot water and chilled water site distribution systems to all buildings across the site, and replacement of the existing heating hot water and chilled water distribution systems to air handling units inside each (occupied) building. The Master Schedule, Site Logistics Plan, and Building Logistics Plan are phased to maintain heating and cooling services to the facility and to minimize heating and cooling shutdowns.

The entire Work in this project consists of thirteen (13) Bid Packages for ten (10) CSI Divisions, however, two (2) of the Bid Packages, 23A Mechanical and 31A Site Preparation, are to be bid separately in advance for an Early Work Release to expedite mechanical piping and equipment submittals to meet the schedule, which has seasonal constraints, and to remove trees and prepare the site for secured temporary storage and construction trailers. **Therefore, eleven (11) Bid Packages are now advertised to be bid for the balance of the Work.** It is anticipated that the GMP Amendment will be awarded in May 2019 and Work will start in July 2019 including sequenced underground hydronic piping installation, sequenced selective demolition in occupied buildings, sequenced MEP installation of hydronic piping and controls to existing air handlers in the occupied buildings, and installation of new boilers, chillers, and cooling tower modifications in the Central Plant. This project will take approximately two years to complete. Bid Packages 1A and 9A are set-aside for M/WBE bidders. Bid Package 31B is set-aside for SBE bidders. **Bidders are requested to submit bids for their Bid Package on the Bid Proposal Form with specific enclosures and attachments.**

**BID PACKAGES:**

**Bid Package 1A – MOVING AND CLEANING (MWBE Set-Aside)**  
**Bid Package 3A – CONCRETE**  
**Bid Package 4A – MASONRY**  
**Bid Package 5A – STRUCTURAL STEEL & MISCELLANEOUS METALS**  
**Bid Package 7A – ROOFING & WATERPROOFING**  
**Bid Package 9A – GENERAL TRADES & CARPENTRY (MWBE Set-Aside)**  
**Bid Package 9B – PAINTING AND CAULKING**  
**Bid Package 9C – CEILINGS**  
**Bid Package 21A – FIRE SUPPRESSION**  
**Bid Package 26A – ELECTRICAL**  
**Bid Package 31B – SITEWORK: Excavation & Backfill/Paving (SBE set-aside)**

**To Obtain Plans and Specs** - Subcontractors (Bidders) may obtain **hard copy** sets of the Contract Documents on or after February 6, 2019 from Joseph Merritt & Company located at 650 Franklin Ave., Hartford, CT. Interested Bidders shall contact Joseph Merritt & Company at (860) 296-2500 in advance to arrange for pick up. Each Bidder shall provide their contact information and pay Joseph Merritt & Company for each set. Names and contacts of Subcontractors will be kept on a bidder's list.

The Contract Documents may be obtained **electronically** from the FTP site [www.isqft.com](http://www.isqft.com). For instructions, send an email request to [Andrew.Pasquini@pdsec.com](mailto:Andrew.Pasquini@pdsec.com). You will be sent an invitation with access code to download. You may also purchase electronic documents on a flash drive for Fifteen Dollars (\$15.00) from PDS Engineering & Construction, Inc., 107 Old Windsor Road, Bloomfield, CT 06002, ph: (860) 242-8586. All Subcontractors should review the entire set of Contract Documents to insure complete understanding of the requirements and scope of work to be done.

Subcontractors (Bidders) may view the Contract Documents at PDS Engineering & Construction, Inc., 107 Old Windsor Road, Bloomfield, CT, phone (860) 242-8586. Bidders may also view the Contract Documents at the offices of HEDCO / Business Resource Center, 15 Lewis St 3rd Floor #302, Hartford, CT 06103, ph: (860) 527-1100, and the Minority Construction Council, 151 New Park Avenue - Suite 121, Hartford, CT 06106, ph: (860) 882-0675.

For work to be performed with an estimated value in excess of Five Hundred Thousand Dollars (\$500,000.00), the Subcontractor shall be prequalified in the State of Connecticut Department of Administrative Services. Each bid shall be accompanied by a **Bid Bond** (AIA Document A310-2010) or certified check in an amount which shall be ten percent (10%) of any bid for work with an estimated value of at least Fifty Thousand Dollars (\$50,000.00). If the bidder is an SBE or M/WBE in the State of Connecticut, it may provide in lieu of a bid bond, a letter of credit in an amount equal to ten percent (10%) of the bid amount if the estimated value is less than One Hundred Thousand Dollars (\$100,000.00), and in an amount equal to twenty-five percent (25%) of the bid amount if the estimated value is One Hundred Thousand Dollars (\$100,000.00) or greater. (The Obligees are The State of Connecticut Department of Administrative Services and PDS Engineering & Construction, Inc.). The bidders shall possess experience with projects of a similar nature and scope.

Prior to execution of the Contract for Construction, for bids equal to or greater than One Hundred Thousand Dollars (\$100,000.00), the successful bidder shall submit a **Labor and Material Payment Bond** in an amount equal to the proposed contract price (100%). For bids equal to or greater than Twenty-Five Thousand Dollars (\$25,000.00), the successful bidder shall submit a **Performance Bond** in an amount equal to the proposed contract price (100%). If the successful bidder is an SBE or M/WBE in the State of Connecticut, it may provide in lieu of a Payment of Performance bond, a letter of credit in an amount equal to ten percent (10%) of the bid amount if the estimated value is less than One Hundred Thousand Dollars (\$100,000.00), and in an amount equal to twenty-five percent (25%) of the bid amount if the estimated value is One Hundred Thousand Dollars (\$100,000.00) or greater. (The Obligee is PDS Engineering & Construction, Inc.).

No Bids may be withdrawn for a period of ninety (90) days from the receipt of bid (Bid Opening).

It is understood that these **CONTRACT DOCUMENTS** are for bidding purposes only, and are not to be used for Construction purposes without the Engineer's written permission.

Documents which must accompany the bid:

- **Bid Proposal Form (Section 00 41 00).**
- **Certificate of Authority (Section 00 40 14).**
- **Department of Administrative Services Pre-qualification Certificate (Section 00 40 15).**
- **Department of Administrative Services Update Statement (Section 00 40 15).**
- **SBE, MBE, WBE or DisBE Certificate (As Applicable).**
- **Standard Bid Bond (Section 00 43 16) or certified bid security check for 10% of the bid amount (as described above).**
- **Named Subcontractor Bidder's Qualification Statement (Section 00 45 17).**
- **SEEC Form 10.**
- **Ethics Affidavit (Regarding State Ethics) – OPM Ethics Form 6** (for contracts with a value of \$500,000 or more).
- **Gift and Campaign Contribution Certification – OPM Ethics Form 1** (for contracts with a value of \$50,000 or more).
- **Consulting Agreement Affidavit – OPM Ethics Form 5** (for contracts with a value of \$50,000 or more).
- **Iran Certification – OPM Ethics Form 7** (for contracts with a value of \$500,000 or more).
- **Non-Discrimination Certification – Form A, B, C, D or E.**
- **Non-Collusion Affidavit (Section 00 45 19).**
- **Acknowledgement of Surety (Section 00 45 49).**
- **Contractors Wage Certification Form (Section 00 73 44).**
- **Unit Prices (As Applicable, Section 01 22 00).**

Bidders are advised that both the DEPARTMENT OF ADMINISTRATIVE SERVICES PREQUALIFICATION CERTIFICATE and UPDATE STATEMENT must accompany the bid proposal for projects estimated to exceed Five Hundred Thousand Dollars (\$500,000.00) (C.G.S. 4b-91 as amended). Failure to supply them with the bid will result in rejection of the bid.

Liquidated Damages: \$6,700.00 Per Calendar Day beyond Substantial Completion. \$4,400.00 Per Calendar Day beyond ninety (90) days after Substantial Completion date that the CMR fails to archive acceptance of the work.

The Contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the Contract as if they had been fully set forth in it. At the Contractor's request, the Client Agency shall provide a copy of these orders to the Contractor. The Contract may also be subject to Executive Order No. 7C of Governor M. Jodi Rell, promulgated July 13, 2006, concerning contracting reforms and Executive Order No. 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services, in accordance with their respective terms and conditions.

The CMR and its Subcontractors shall comply with the anti-discrimination requirements (Title VI, Civil Rights Act, 1964, PL 88-352, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act) and the prevailing State fair wage requirements (see C.G.S. 32-53(g)).

This contract is subject to the provisions of the Department of Construction Services Sexual Harassment Policy ("Policy") and, as such, the contract may be canceled, terminated, or suspended by CT DCS for violation of or noncompliance with said Policy. Said document is hereby incorporated herein by reference and made a part hereof as though fully set forth herein. This policy may be found at the Department of Construction Services Website at <http://www.ct.gov/dcs>, under Publications.

The CMR must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5. State law requires a minimum of twenty-five (25%) percent of the state-funded portion of the contract for award to subcontractors holding current certification from the Connecticut Department of Administrative Services ("DAS") under the provisions of CONN. GEN. STAT. § 4a-60g. (25% of the work with DAS certified Small Business Enterprises and 25% of that work with DAS certified Minority, Women and/or Disabled Business Enterprises). The CMR must demonstrate good faith effort to meet the 25% set-aside goals. In addition, the successful bidders must attend a CHRO training session for Set-Aside Plans, and comply with the Project's Affirmative Action Plan and CHRO goals for minority male and female worker utilization.

Any contract awarded on or after July 1, 2009 requires any mechanic, laborer, or worker who performs work in a classification listed on the prevailing wage rate schedule on any public works project is required to complete a ten (10) hour Federal OSHA safety and health course and provide proof of completion.

**Prevailing wages** are required on this project, in accordance with the schedule provided in the bid documents, pursuant to Connecticut General Statutes Section 31-53 (a) through (h), as amended.

Each contractor who is awarded a contract on or after October 1, 2002 shall be subject to provisions of the Connecticut State Statutes, Section 31-55a concerning annual adjustments to prevailing wages.

Wage Rates will be posted each July 1<sup>st</sup> on the Department of Labor website: [www.ctdol.state.ct.us](http://www.ctdol.state.ct.us). Such prevailing wage adjustment shall not be considered a matter for any contract amendment.

The wages paid on an hourly basis to any mechanic, laborer or workman employed upon the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such employee to any employee welfare fund, as defined in subsection (h) of Section 31-53 of the Connecticut General Statutes, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such employees to any such employee welfare fund shall pay to each employee as part of his wages the amount of payment or contribution for his classification on each pay day. The successful bidder shall comply with applicable state and local laws and requirements. Bidders shall be experienced and DAS-certified for the classification of work they are bidding. This project is not covered under a Project Labor Agreement and is open to all bidders.

**Pre-Bid Conference/Walk-through** - A mandatory pre-bid conference and walk-through for each specific Bid Package will be held **between March 11, 2019 and March 14, 2019** at the York Correctional Facility, Niantic, CT. Bidders need to attend the mandatory pre-bid conference and walk-through for their Bid Package(s) as scheduled: March 11, 8:30 AM – 31B; March 11, 1:00 PM – 21A & 26A; March 12, 8:30 AM – 3A & 4A; March 12, 1:00 PM – 5A; March 13, 8:30 AM – 9A; March 13, 1:00 PM – 7A; March 14, 8:30 AM – 1A & 9B; March 14, 1:00 PM – 9C.

**IMPORTANT:** Prior to the Pre-Bid Conference, all prospective bidders must submit a “Security Background Questionnaire” (found in Section 00 73 63 of the Project Manual) for each and every person that will be attending the pre-bid conference/walk-through to receive security clearance in advance. Fill out the top and bottom sections of this form (in bold boxes) with ALL requested personal information, signed, dated, and witnessed, then scanned and e-mailed to [DOC.Collect1@ct.gov](mailto:DOC.Collect1@ct.gov) by the **February 21, 2019 deadline**. All attendees must have security clearance, are required to properly register and wear PPE. Proper registration means that the attendee has signed his or her name to the official roster and listed the name and address of the company he or she represents on the official roster no later than the designated start time of the pre-bid conference. No attendee will be allowed to register after the advertised start time of the pre-bid conference. Bids submitted by contractors who have not properly registered and attended the pre-bid conference shall be rejected as non-responsive.

Questions regarding the work or bid shall be made in writing and directed via e-mail to: PDS Engineering & Construction, Inc., Attention Randy Becker, Project Manager ([randyb@pdsec.com](mailto:randyb@pdsec.com)). No phone calls please. **The last date for pre-bid questions is March 14, 2019.**

Owner reserves the right to reject **ANY AND ALL BIDS** or to waive any informality or irregularity in any **BIDS RECEIVED**. The CMR is authorized to waive minor irregularities which it considers in the best interest of the Project, provided the reasons for any such waiver are stated in writing by the CMR and made a part of the contract file.

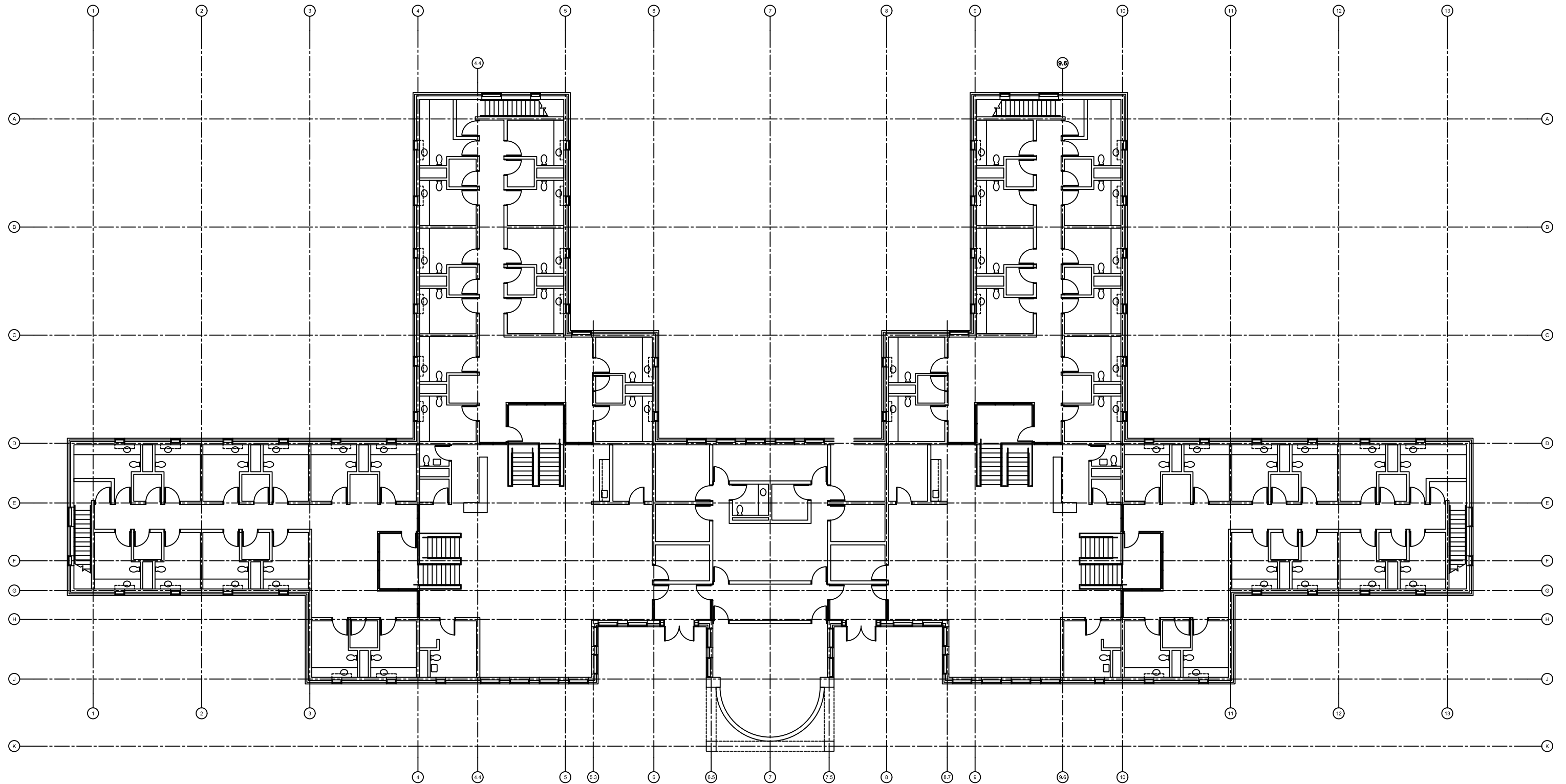
The Commissioner reserves the right to do any of the following without liability, including but not limited to: (a) waive technical defects in the bid proposal as he or she deems best for the interest of the State; (b) negotiate with a contractor in accordance with Connecticut General Statutes Section 4b-91; (c) reject any or all bids; (d) cancel the award or execution of any contract prior to the issuance of the “Notice To Proceed;” and, (e) advertise for new bids.

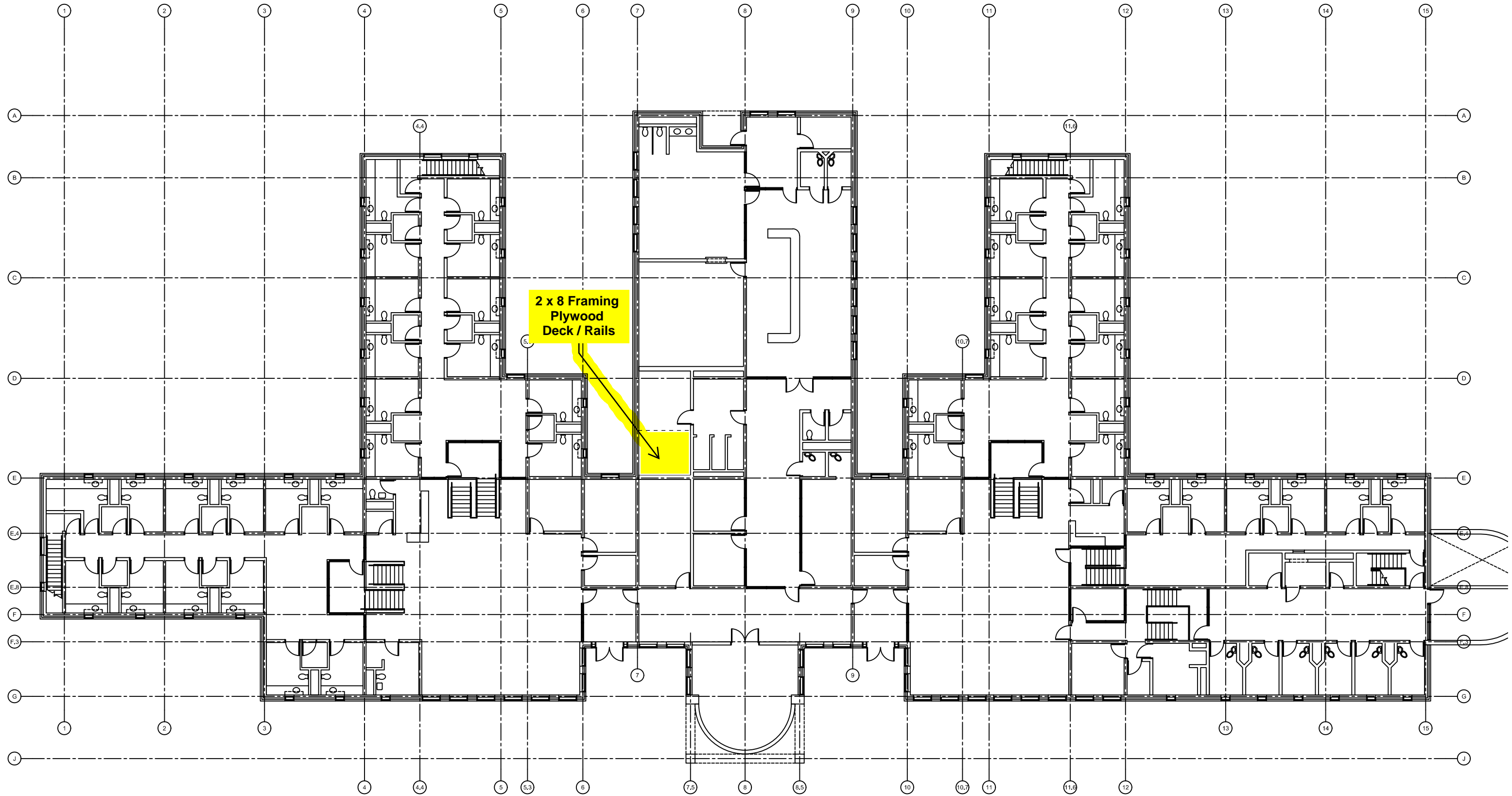
Bid results are posted on the CT DCS Website and State Contracting Portal in approximately two (2) days after the bid opening date.

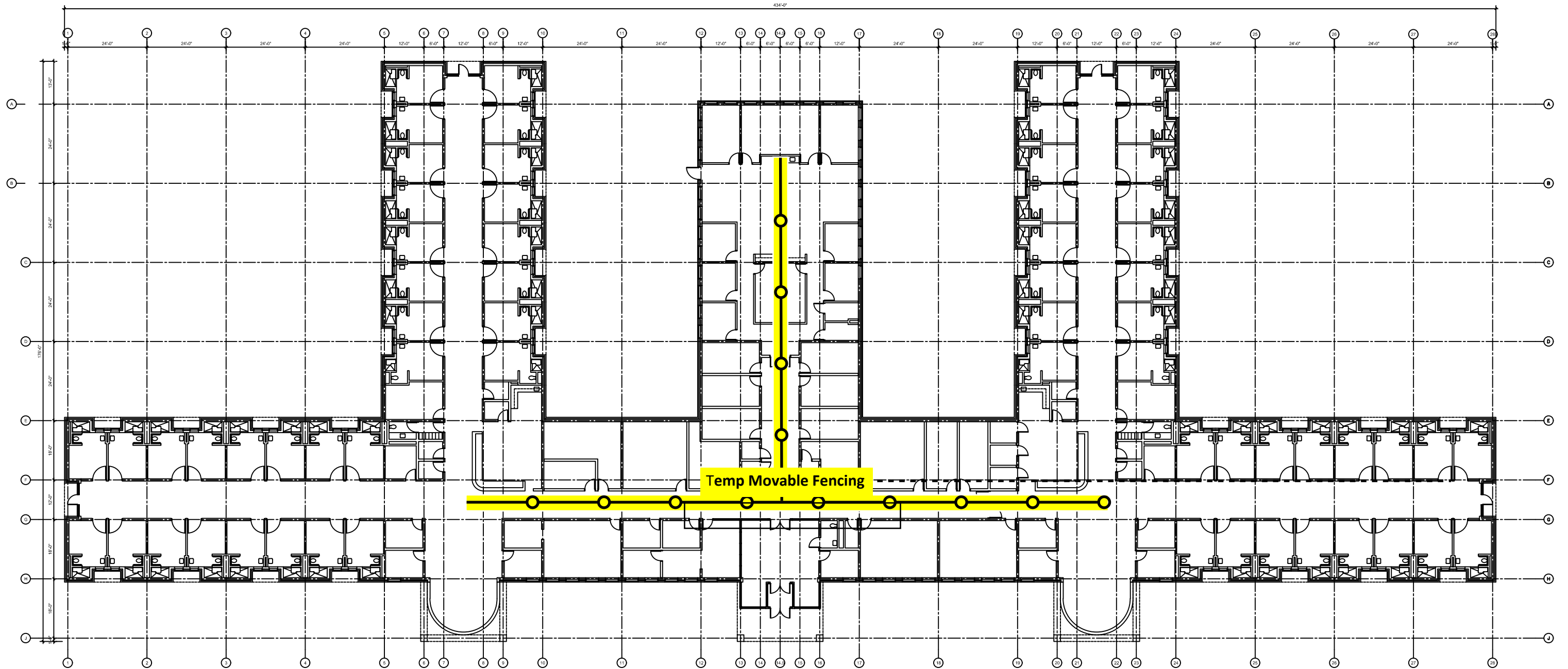
**END OF SECTION 00 11 16**

**"To be added to SECTION 00 31 13 - PROJECT MASTER  
SCHEDULE & SITE LOGISTICS PLAN - CMR"**

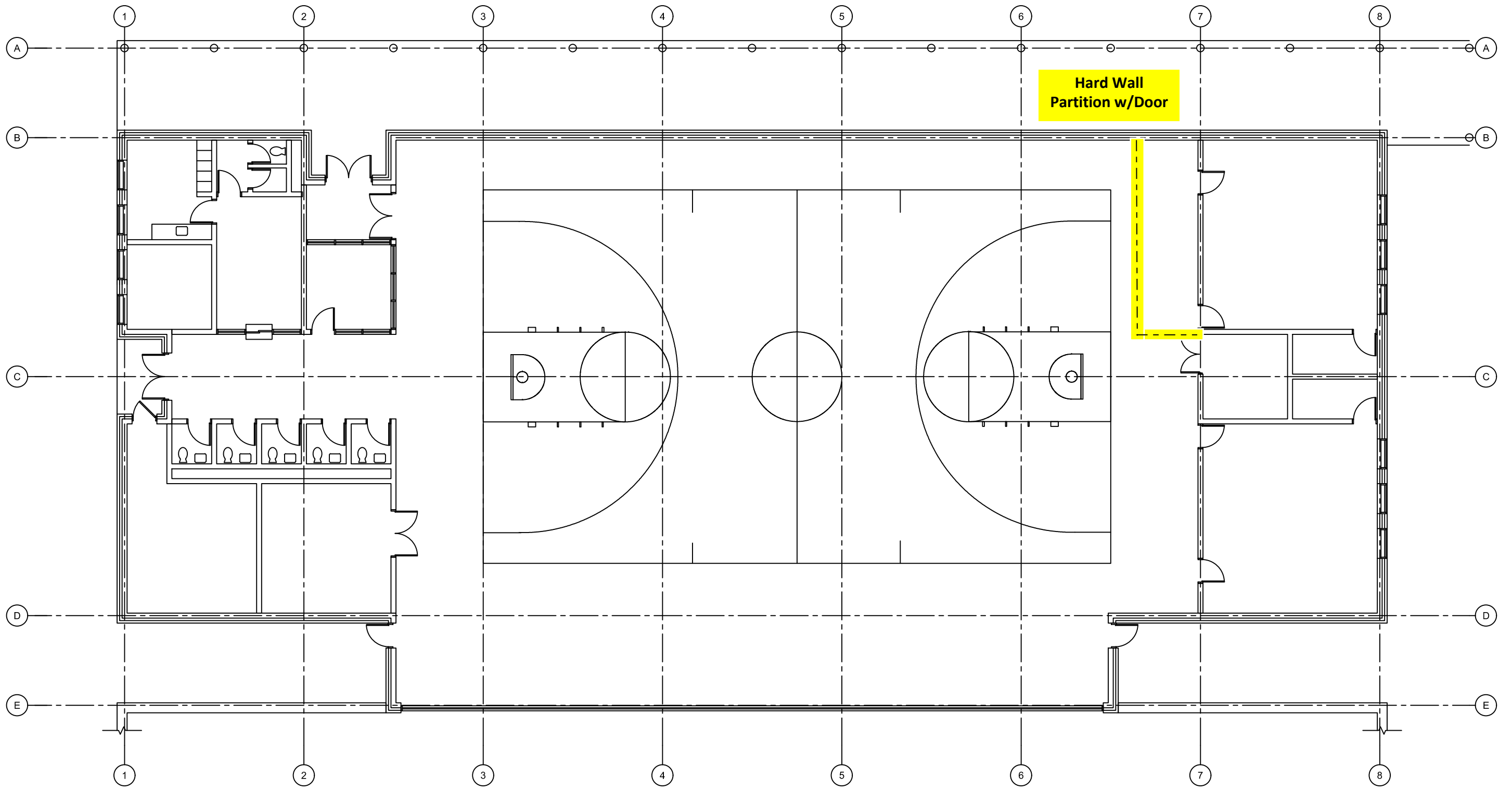
## **Building Logistics Plan**

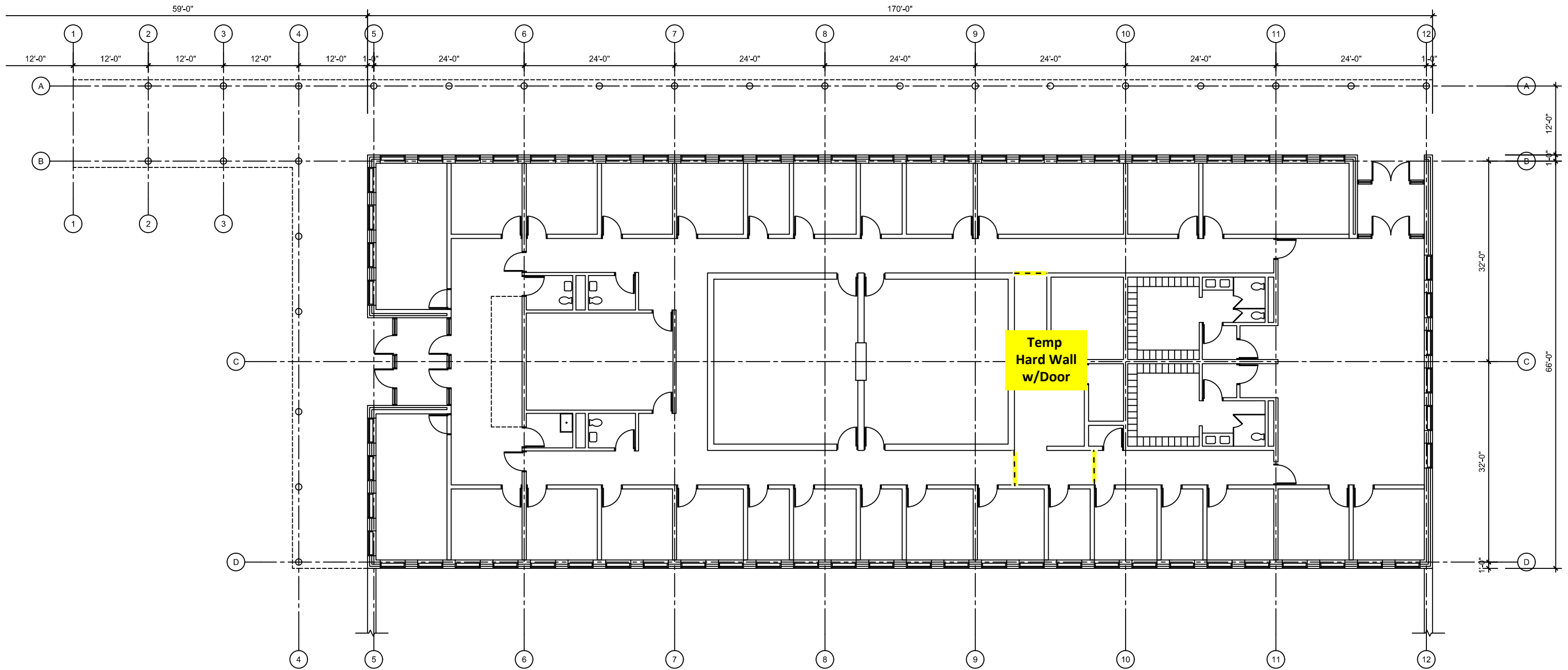


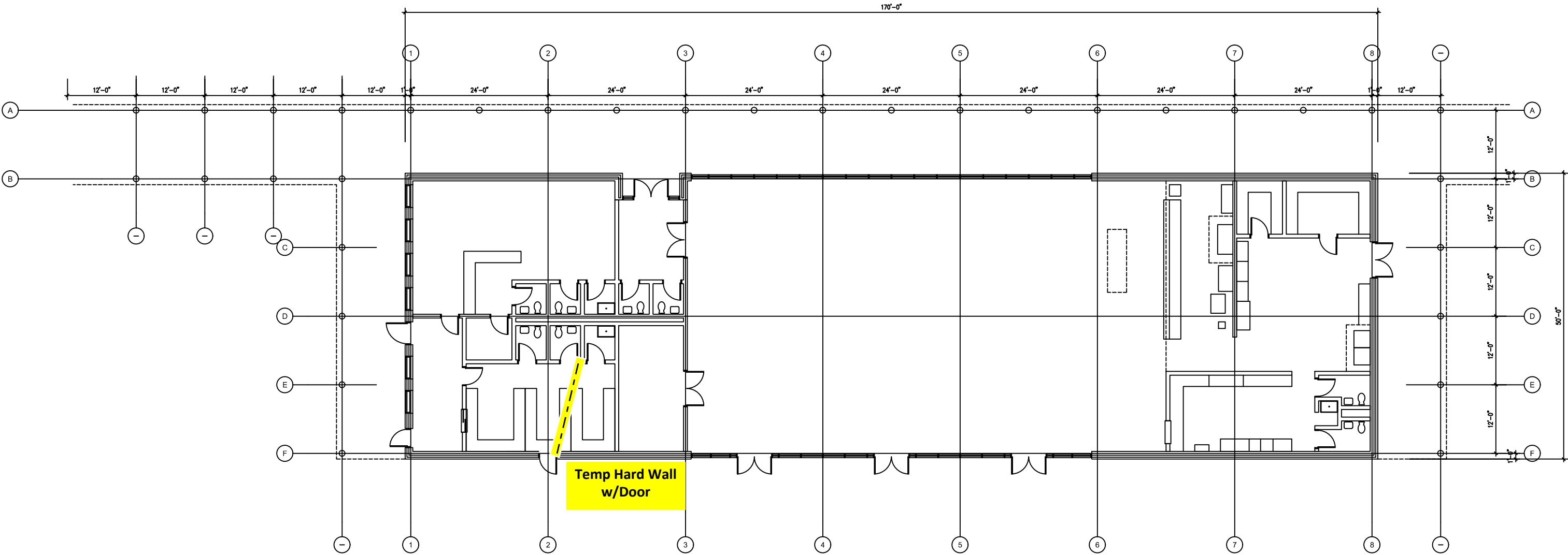


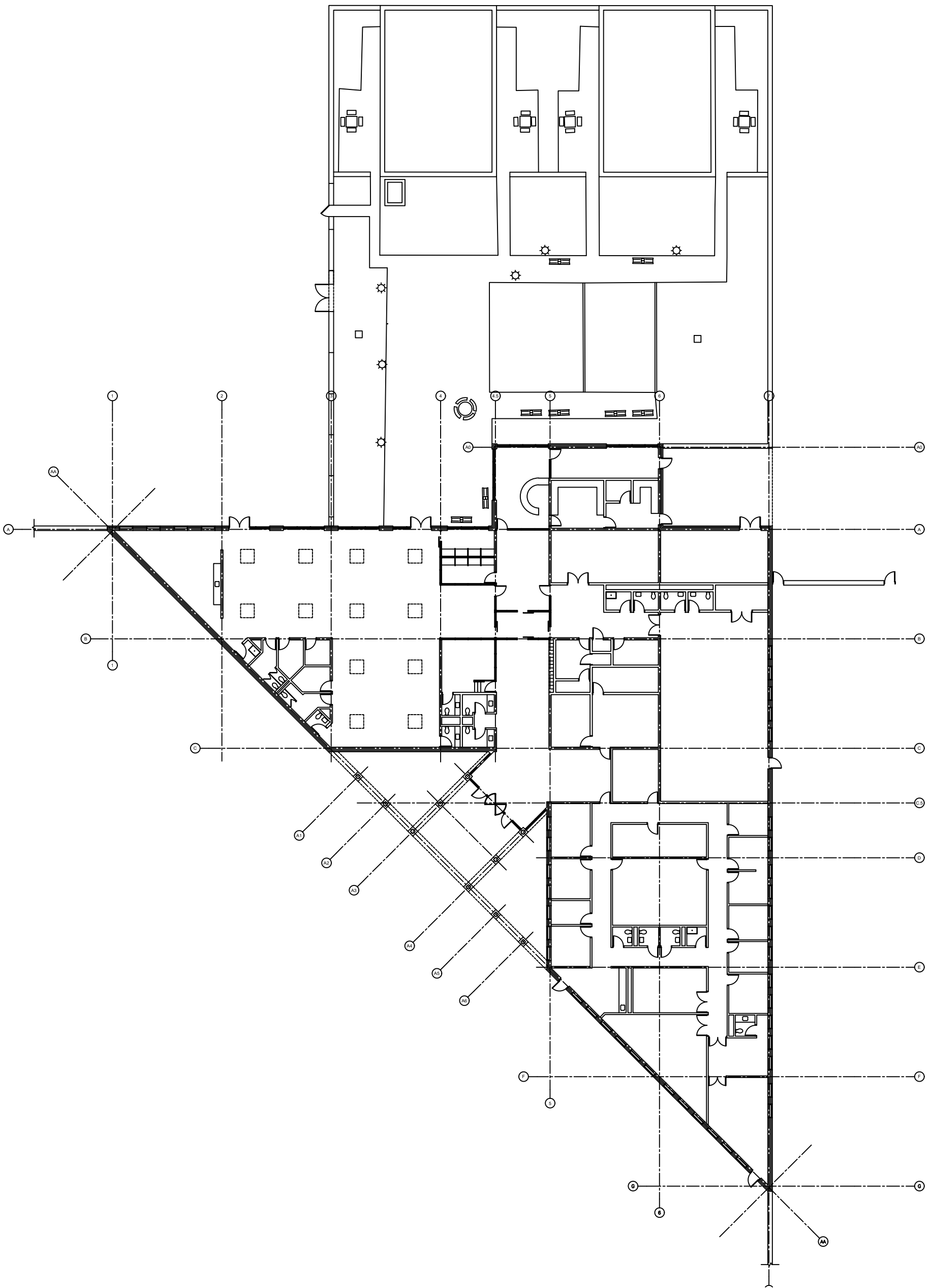


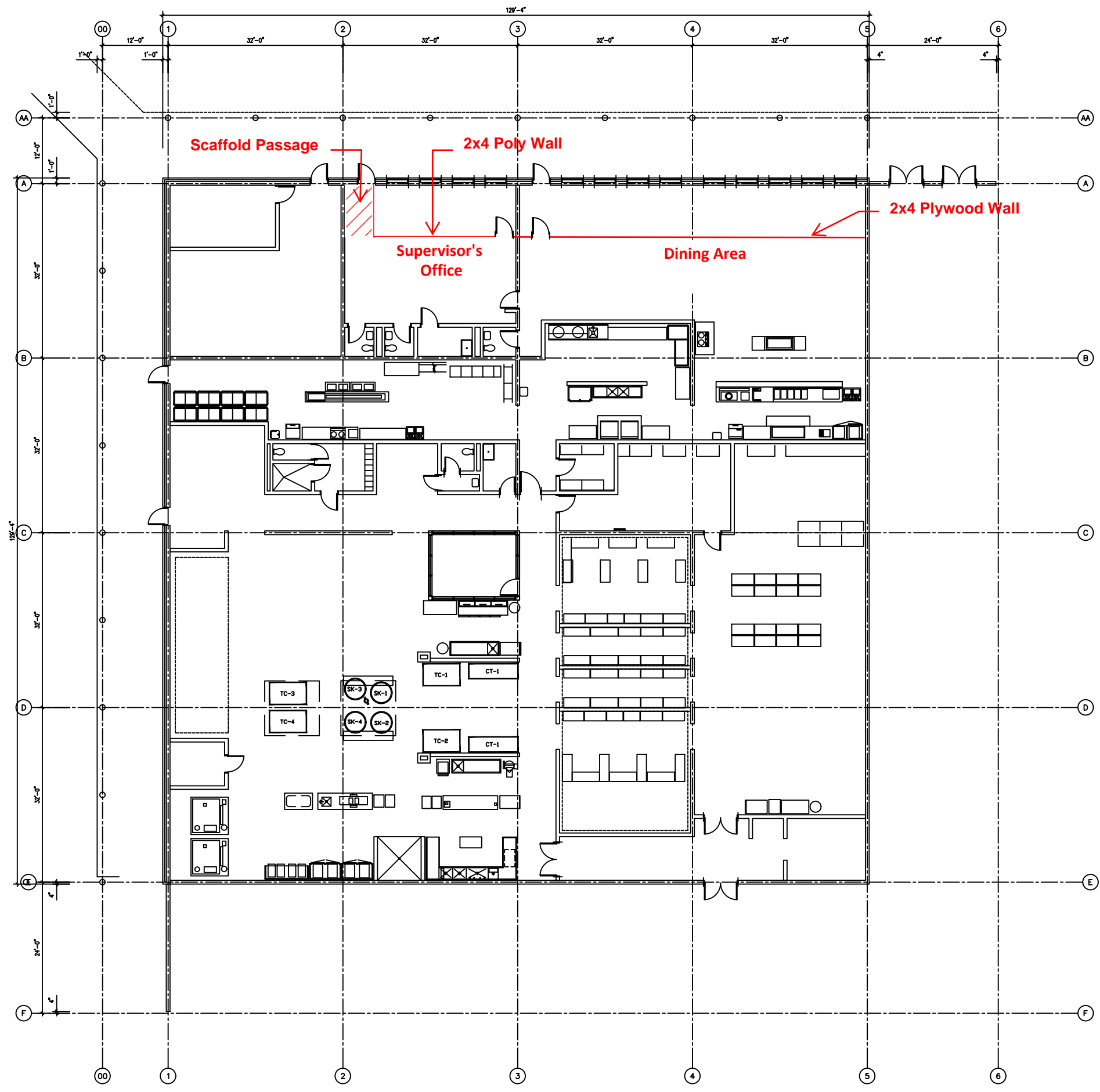


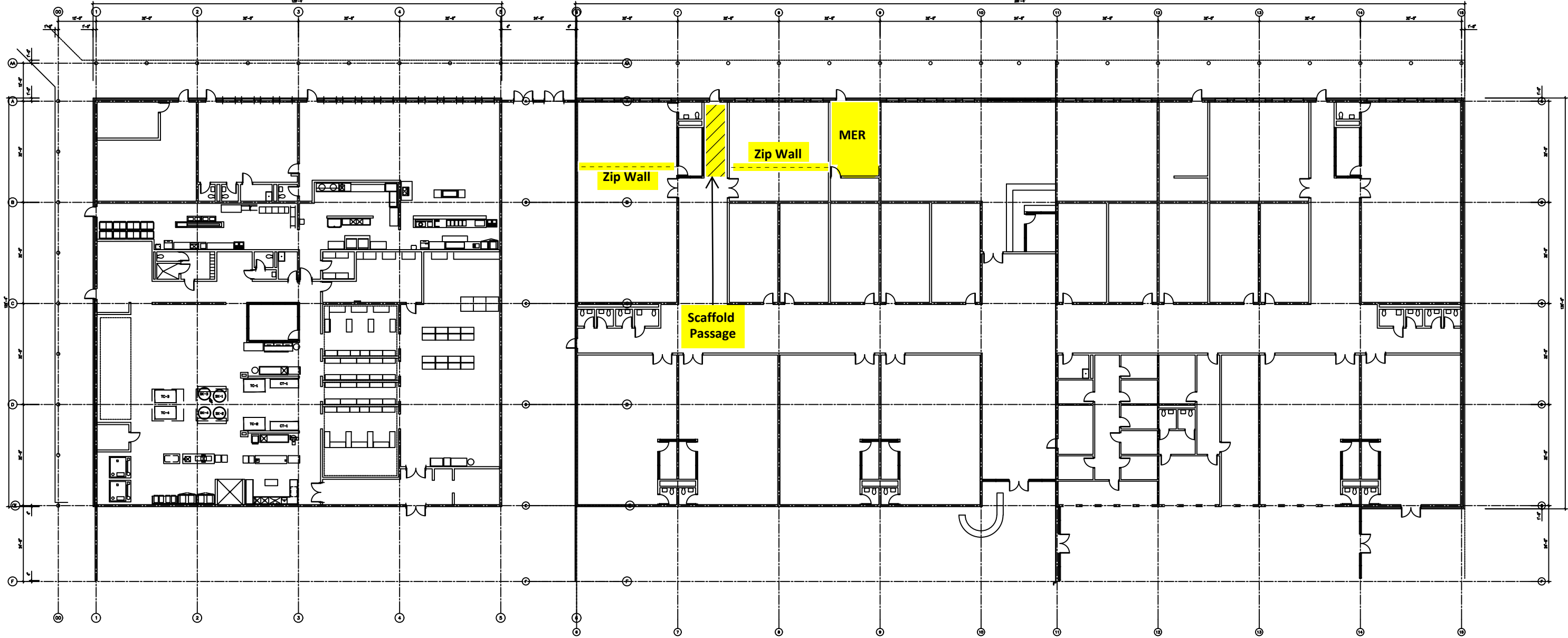


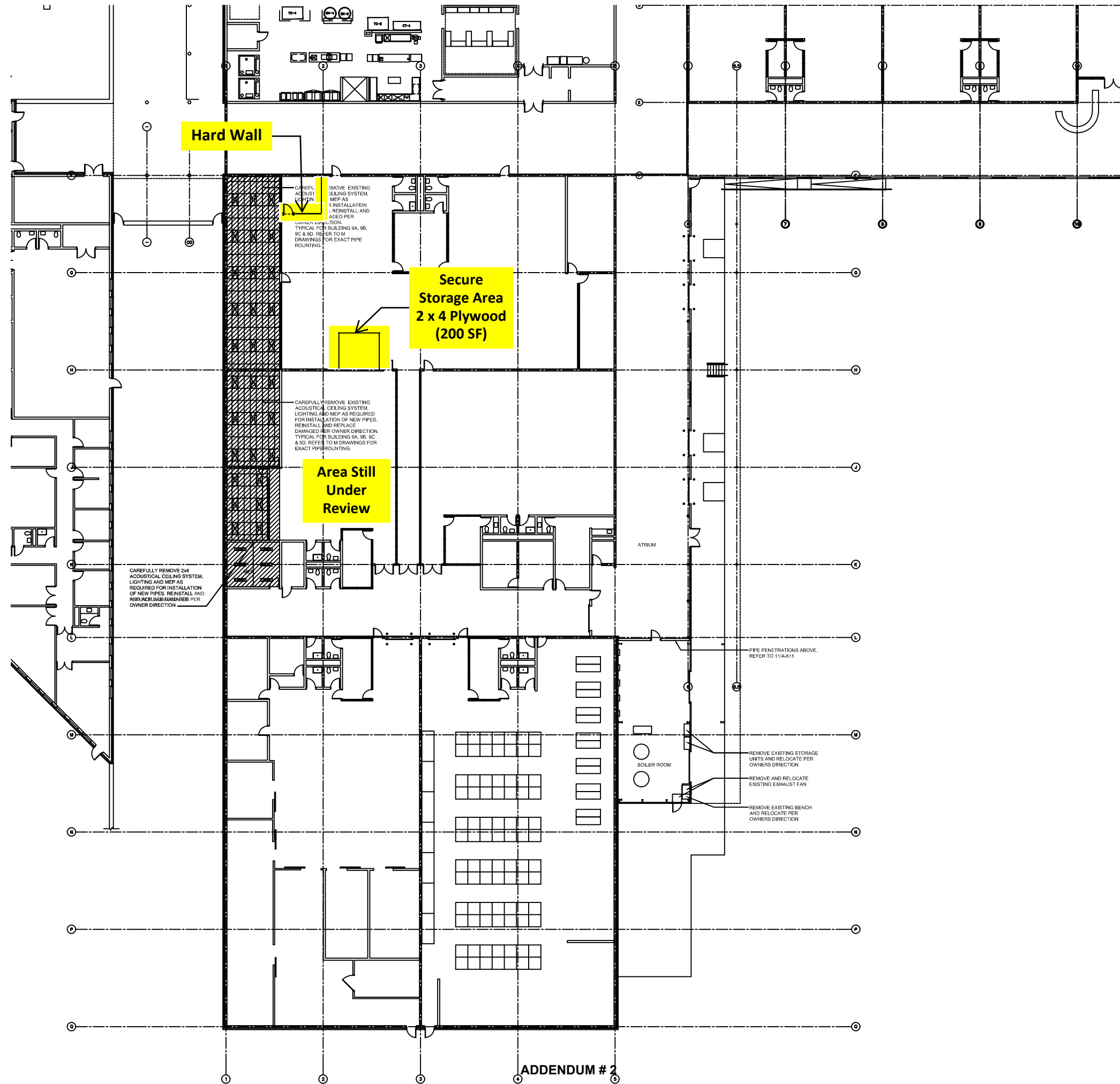












Hard Wall

CAREFULLY REMOVE EXISTING ACUSTICAL CEILING SYSTEM, LIGHTING AND MEP AS REQUIRED FOR INSTALLATION OF NEW PIPES. REINSTALL AND REPLACE DAMAGED PER OWNER DIRECTION. TYPICAL FOR BUILDING 9A, 9B, 9C & 9D. REFER TO M DRAWINGS FOR EXACT PIPE ROUTING.

Secure Storage Area  
2 x 4 Plywood  
(200 SF)

Area Still Under Review

CAREFULLY REMOVE 2x4 ACUSTICAL CEILING SYSTEM, LIGHTING AND MEP AS REQUIRED FOR INSTALLATION OF NEW PIPES. REINSTALL AND REPLACE DAMAGED PER OWNER DIRECTION.

CAREFULLY REMOVE EXISTING ACUSTICAL CEILING SYSTEM, LIGHTING AND MEP AS REQUIRED FOR INSTALLATION OF NEW PIPES. REINSTALL AND REPLACE DAMAGED PER OWNER DIRECTION. TYPICAL FOR BUILDING 9A, 9B, 9C & 9D. REFER TO M DRAWINGS FOR EXACT PIPE ROUTING.

ATRILUM

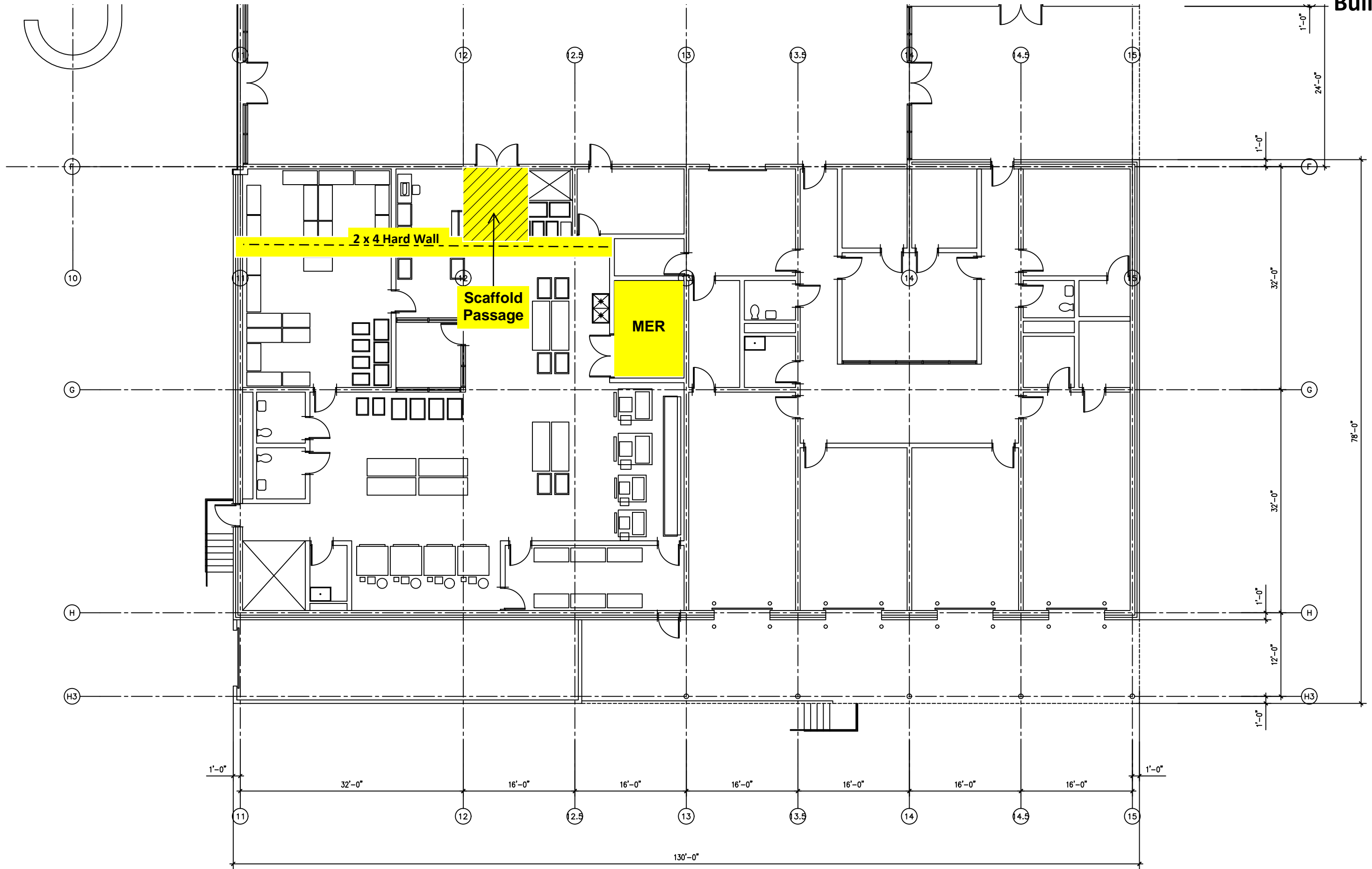
BOILER ROOM

PIPE PENETRATIONS ABOVE. REFER TO 11/A/S11

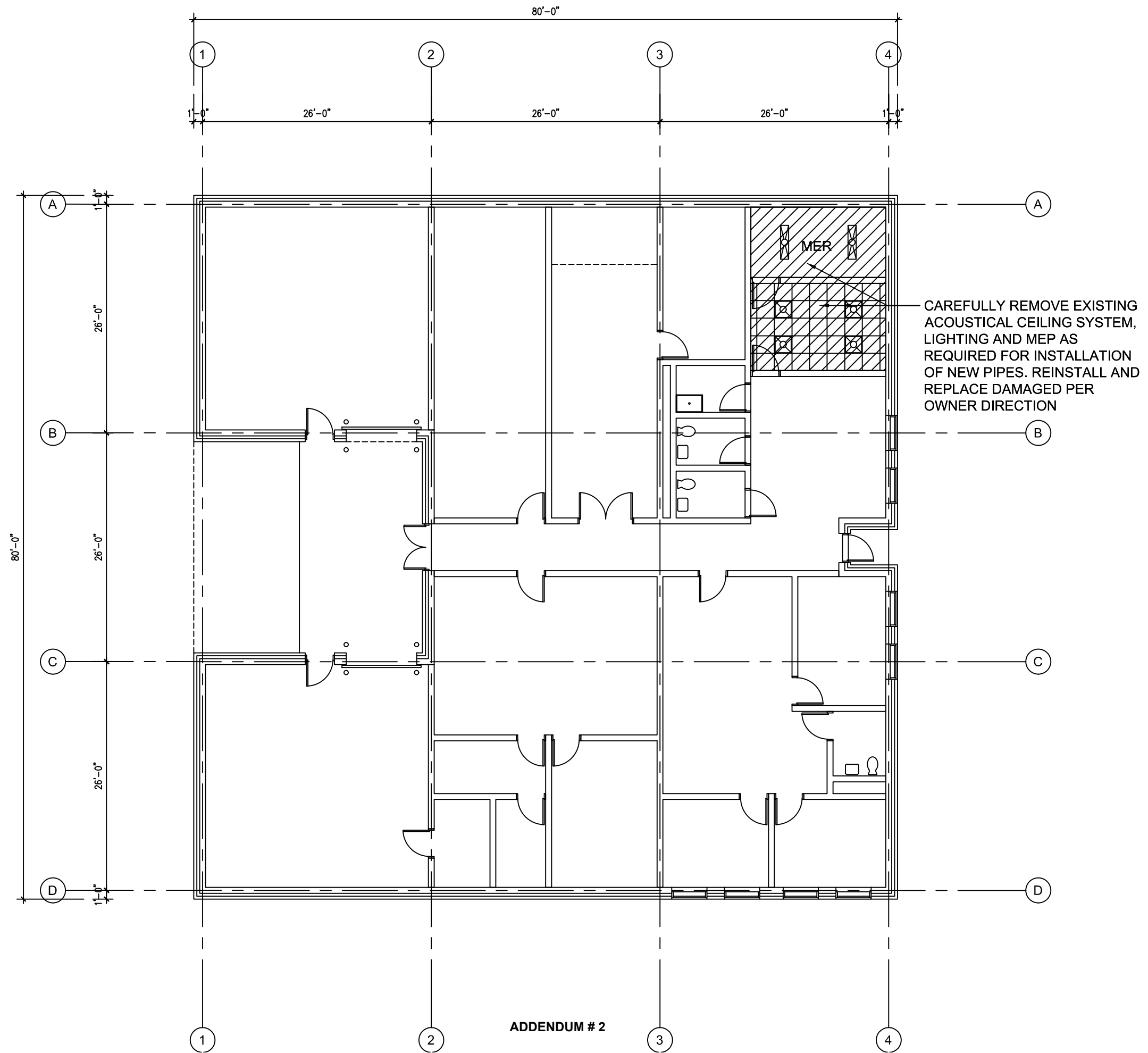
REMOVE EXISTING STORAGE UNITS AND RELOCATE PER OWNERS DIRECTION

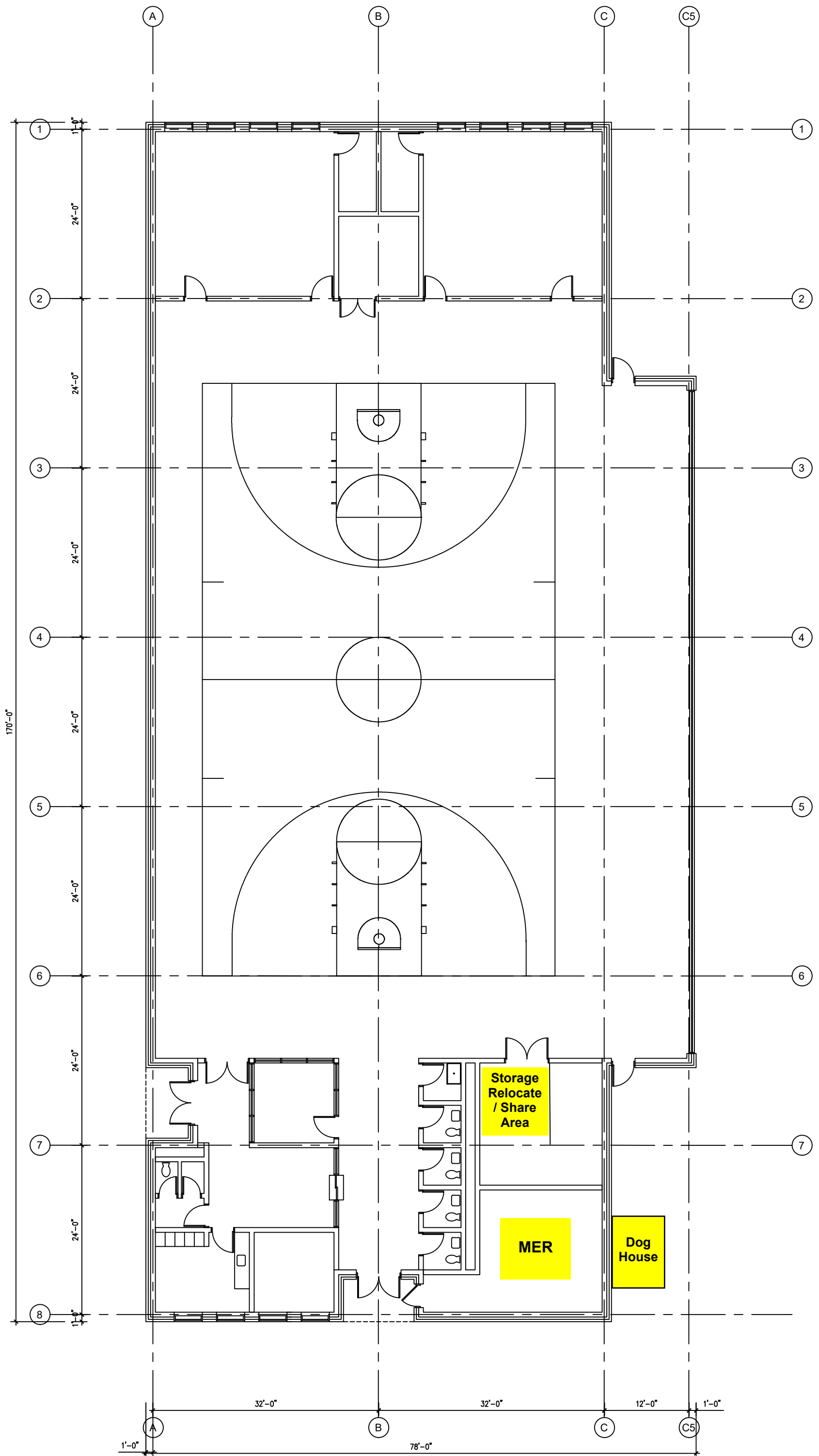
REMOVE AND RELOCATE EXISTING EXHAUST FAN

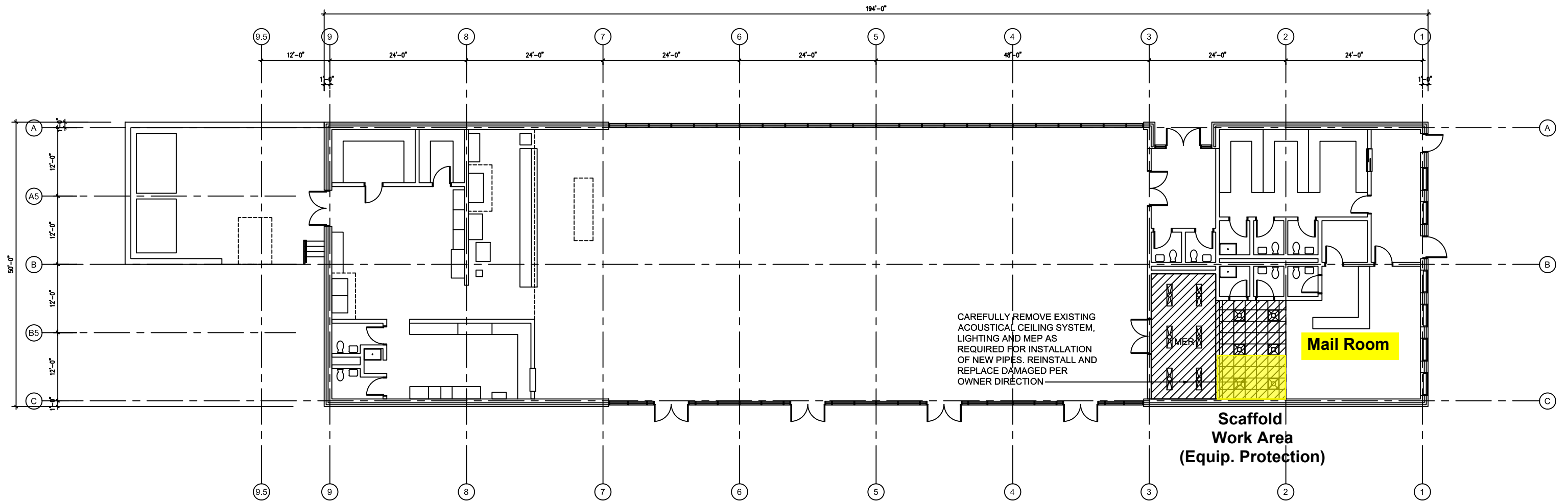
REMOVE EXISTING BENCH AND RELOCATE PER OWNERS DIRECTION

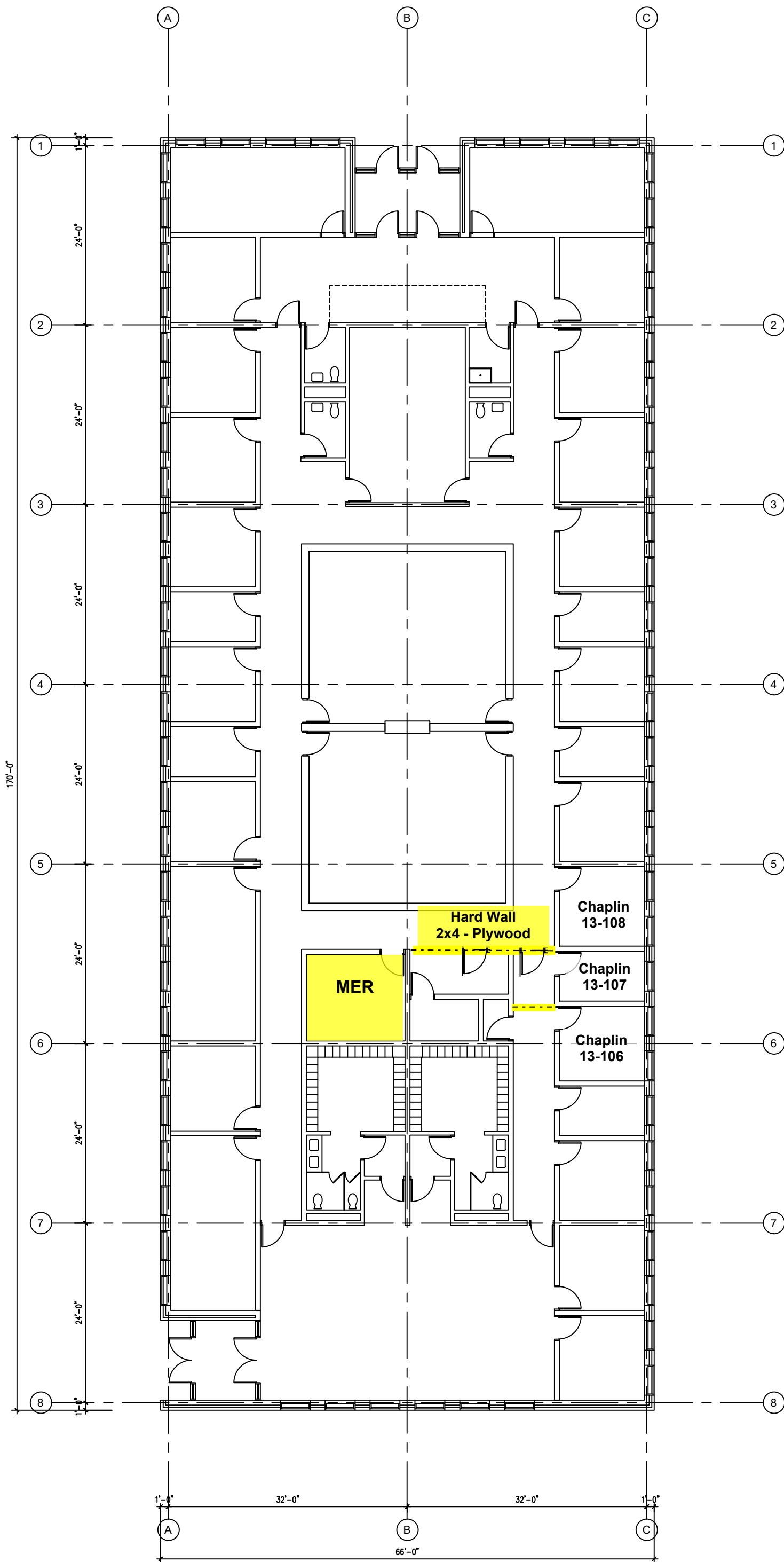












**BID PROPOSAL FORM**

**PROJECT:** YORK CORRECTIONAL CENTRAL PLANT AND DISTRIBUTION SYSTEM  
 YOK CORRECTIONAL FACILITY, 201 WEST MAIN STREET, NIAN TIC, CT  
 PROJECT NO.: BI-JA-465

**OWNER:** STATE OF CONNECTICUT, DEPARTMENT OF ADMINISTRATIVE SERVICES  
 DIVISION OF CONSTRUCTION SERVICES

**CMR:** PDS ENGINEERING & CONSTRUCTION, INC.  
 107 OLD WINDSOR ROAD, BLOOMFIELD, CT 06002

**BID DATE:** MARCH 21, 2019 **TIME:** 2:00 PM

**TO:** PDS ENGINEERING & CONSTRUCTION, INC.  
 ATTENTION: RANDY BECKER, SR. CONSTRUCTION MANAGER  
 107 OLD WINDSOR ROAD  
 BLOOMFIELD, CT 06002

Pursuant to and in compliance with the "Invitation to Bid", the undersigned,

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(Name of Subcontractor)

having visited the site, familiarized itself with the conditions present and carefully examined all Contract Documents (Invitation To Bid, Procurement Requirements, and the complete Drawings and Project Manual together with all Addenda) issued and received prior to closing time for receipt of bids as prepared by WSP USA Inc., their consultants, and PDS Engineering & Construction Inc., the Construction Manager, hereby offers and agrees as follows:

To provide all labor and overtime as needed to maintain schedule, project management, home office support, field supervision, materials, equipment and appurtenances required to diligently perform all Work in connection with the above referenced project to the satisfaction of the Engineer and its consultants, Construction Manager, and the Owner (CT DAS) for the Bid Package(s) listed below **(in bold)**, including the lump sum for the entire project, as follows:

\*Breakout price is included in the Lump Sum Bid Amount.

BID PACKAGE NUMBER	DESCRIPTION	LUMP SUM PRICE  (WRITTEN AND NUMBERS)
1A (M/WBE SET-ASIDE)	<b>MOVING &amp; CLEANING</b>	<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>

BID PACKAGE NUMBER	DESCRIPTION	LUMP SUM PRICE  (WRITTEN AND NUMBERS)
3A	CONCRETE	<hr/> <hr/> <hr/>
4A	MASONRY	<hr/> <hr/> <hr/>
5A	STRUCTURAL STEEL & MISC. METALS	<hr/> <hr/> <hr/>
7A	ROOFING & WATERPROOFING	<hr/> <hr/> <hr/>
9A (M/WBE SET-ASIDE)	GENERAL TRADES & CARPENTRY	<hr/> <hr/> <hr/>
9B	PAINTING & CAULKING	<hr/> <hr/> <hr/>

BID PACKAGE NUMBER	DESCRIPTION	LUMP SUM PRICE  (WRITTEN AND NUMBERS)
9C	CEILINGS	<hr/> <hr/> <hr/> <hr/>
21A	FIRE SUPPRESSION	<hr/> <hr/> <hr/> <hr/>
26A	ELECTRICAL	<hr/> <hr/> <hr/> <hr/>
31B (SBE SET-ASIDE)	SITework: EXCAVATION & BACKFILL / PAVING	<hr/> <hr/> <hr/> <hr/>

We further agree that this price is all-inclusive and that all Contract Documents have been reviewed and that every question, conflict or issue has been addressed to our satisfaction. Therefore, no change orders will be issued unless unforeseen conditions are encountered or the Owner or Owner's representatives revise the scope of the work. We understand that no time extensions will be granted for any reason. All applicable Allowances are included in the Base Bid price (see Allowances List and specific Bid Packages).

**ADDENDA**

A. This bid includes the Addenda listed below:

Addendum #	Dated

**PAYMENT & PERFORMANCE BONDS**

- B. This bid includes the 100% Payment & Performance bond cost listed below. (Payment bond is required for bids equal to or greater than \$100,000, and Performance bond is required for bids equal to or greater than \$25,000. In lieu of these bonds, an SBE or M/WBE may provide a letter of credit in an amount equal to ten percent (10%) of the bid amount if it is less than \$100,000, or twenty-five percent (25%) of the bid amount if it is equal to or greater than \$100,000).

<b>P&amp;P Bond Cost</b>

**BID SUPPLEMENTS**

- C. Supplemental pricing is proposed as follows: If not applicable, indicate N/A in the blank spaces below. For Supplements (add Alternates), provide the full add price below. A blank space indicates no additional cost for that Supplement. If the Supplement pricing is challenged, a detailed breakdown will be required at a later date, and the CMR and/or Architect shall either negotiate or provide fair pricing that shall be used for contract adjustments. (Refer to Bid Documents, Bid Packages, and/or Addenda for description of Supplements, if any).

Supplement #	Description	Lump Sum Price (WRITTEN AND NUMBERS)
1		<hr style="border: 0; border-top: 1px solid black;"/> <hr style="border: 0; border-top: 1px solid black;"/> <hr style="border: 0; border-top: 1px solid black;"/>
2		<hr style="border: 0; border-top: 1px solid black;"/> <hr style="border: 0; border-top: 1px solid black;"/> <hr style="border: 0; border-top: 1px solid black;"/>

**UNIT PRICES**

- D. Unit pricing is proposed as follows: Unit Prices shall remain valid for the life of project, including all costs for a complete installation/removal. Each Subcontractor shall provide unit pricing in the spaces provided on the Bid Form, as it relates to its Scope of Work. (All unit prices provided are for adds and/or deducts and are to include all overhead and profit. The deduct unit price will be the unit price less 10%). Refer to Specification Section 01 22 00, Unit Price List, Bid Packages, and/or Addenda for applicable Unit Prices. Attach additional pages, if necessary.

Unit Price #	Description	Price/Unit





Unit Price #	Description	Price/Unit

**LABOR RATES**

D. Provide applicable labor rates for all trades and labor classifications you will employ on this project in the spaces provided below. (Rates shall be valid for the life of the project, anticipating annual increases, and shall be inclusive of insurance, fringes, taxes & OH&P). A more detailed labor rate breakdown will be required from the awarded Subcontractors, which shall be used, once approved, for all change orders. Labor rates shall not include small tools, safety, travel, vehicle, parking, and bond.

Labor Classification/Trade	Straight Time	Time & one half	Double Time

**EQUIPMENT RATES**

E. Provide equipment rates for all major equipment you will potentially utilize on this project in the spaces provided below. Rates shall be valid for the life of the project and be inclusive of transportation, insurance, taxes, and fuel. All equipment rates are subject to CMR and Owner approval. Equipment rates are proposed as follows:

Equipment Type	Hourly Rate	Daily Rate	Weekly Rate	Monthly Rate



- A) Allow 200 man hours and \$10,000 in materials to furnish and install railings and other safety requirements as directed by the Construction Manager. Note: This cost is not to be used for Subcontract 9A's normal safety requirements as required by the Contract Documents.
  - B) Allow 200 man hours to repair damages by others noted on the punch list.
3. **BID PACKAGE 9B – Painting & Caulking Subcontract 9B is to carry the following Allowance in the Base Bid:**
- A) Subcontract 9B to carry an allowance of \$5,000 for touch up painting after the move in of the Owner's FF&E at the end of each phase, as directed by the CMR.
4. **BID PACKAGE 9C – Ceilings Subcontract 9C is to carry the following Allowance in the Base Bid:**
- A) Subcontract 9C to carry an allowance of 200 carpenter man hours and \$5,000 in materials to repair/replace ceilings as directed by the Construction Manager.
5. **BID PACKAGE 31B – Sitework: Excavation & Backfill / Paving Subcontract 31B is to carry the following Allowance in the Base Bid:**
- A) Allow \$8,000 to purchase, furnish, deliver, handle, install, and later remove and haul away one (1) slightly used **40-ft modified storage container (conex box) for use as a footbridge.**

**NOTES**

- H. **TIME OF COMPLETION:** We (the Bidder) agree that the Work of the Subcontract shall begin within three (3) days after execution of Subcontract Agreement. This includes the commencement of submittals, insurance certificates, schedule of values, detailed labor rate breakdown, CHRO set-aside plan, and other contractual matters. Scheduling, coordination, and completion of the work shall be in conformance with the Master Schedule, Site Logistics Plan, and other Contract Documents. We agree that the general sequence, timing, and duration of activities in the project's Master Schedule, Site Logistics Plan, and Building Logistics Plan are logical and feasible and that we are capable of meeting the scheduled dates contained therein, and will accelerate or increase manpower as necessary to maintain schedule at no additional cost to the Owner. We understand that it may be necessary for the Construction Manager to make changes to the schedule; however, the end date may not slip. Time being of the essence, we agree to accept liability for and to pay liquidated damages, as stipulated in the Contract Documents, and premiums for overtime for our own trades as well as other Subcontractors' trades impacted by our delays or lateness. Certain parts of the work will overlap construction due to time of year, sequence of construction activities, delivery of long-lead items, etc. Work may not be continuous.
- I. **BID ACCEPTANCE:** We agree that this proposal shall not be withdrawn for a period of ninety (90) calendar days after the bid date. We understand that the Owner and/or Construction Manager reserve the right to accept or reject any or all bids and to waive any informality on the bidding process.
- J. **CONTRACT EXECUTION:** Upon notification of acceptance of this proposal, we shall execute a formal Subcontract Agreement (PDS form) within three (3) days of the receipt of the agreement for signing. We shall furnish a 100% Performance Bond and Labor and Material Payment Bond in the full amount of the Contract on the bond forms provided in the Contract Documents, executed by an acceptable Surety Company registered to do business in the state of Connecticut and having an A.M. Best rating of A or higher.\*

\* Payment bond is required for bids equal to or greater than \$100,000, and Performance bond is required for bids equal to or greater than \$25,000. In lieu of these bonds, an SBE or M/WBE may provide a letter of credit in an amount equal to ten percent (10%) of the bid amount if it is less than \$100,000, or twenty-five percent (25%) of the bid amount if it is equal to or greater than \$100,000.

Upon approval of the CMR's GMP Proposal, and the issuance and execution of Amendment #1, a Subcontract shall be awarded to the recommended lowest responsible Bidder for this Bid Package. The dollar amount is included in the Lump Sum Base Bid on this Bid Proposal Form. This amount shall be considered 100% compensation for all of this Subcontractor's costs incurred for performing its scope of work. There is no guarantee that the CMR's GMP Proposal will be approved by the State.

- K. NON-COLLUSIVE BIDDING CERTIFICATION:** By submission of this bid each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his/her knowledge and belief:
1. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purposes of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
  2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the Bidder prior to the opening, directly or indirectly, to any other Bidder or to any competitor; and
  3. No attempt has been made or will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition. The foregoing statement subscribed by the Bidder and affirmed by such Bidder as true under the penalties of perjury and is made pursuant to the applicable section of the General Laws of the State of Connecticut as most recently amended.
  4. Submit Document 00 45 19 "Non-Collusion Affidavit" with the bid.

**L. OTHER REQUIREMENTS:**

It is understood that the Owner reserves the right to accept or reject any and all bids that the Owner deems to be in his best interest. Failure to submit all proper documentation with the bid or bids with exclusions or omissions may or may not be cause for rejection at the discretion of the Construction Manager.

By submission of this proposal, the undersigned acknowledges that they have reviewed the Procurement Requirements and Master Schedule, Site Logistics Plan, and Building Logistics Plan, and understands that these documents are included in each Bid Package, and agrees to provide sufficient staff and organization and to select subcontractors and suppliers to comply with all requirements.

SBE and M/WBE set-aside contractors may only bid on the Bid Packages that they have been pre-approved for, in accordance with their DAS certificate.

In accordance with Public Act 03-215 (an act concerning State construction contracts) and Public Act 04-141, for any contracts estimated in value to be greater than \$500,000, bidders must be pre-qualified for the classification of work that they are bidding on. Each Bidder shall provide a pre-qualification certificate issued by the State of Connecticut, Department of Administrative Services, which clearly shows their pre-qualification status. Each Bidder shall also complete the Department of Administrative Services Contractor Pre-qualification Update Statement and submit AIA Document A305, 1986 Edition "Contractor's Qualification Statement" provided with the Information Available to Bidders.

IT IS MANDATORY THAT BIDS ARE SUBMITTED ON THIS BID FORM IN TRIPLICATE. Those Bidders who are bidding on more than one Bid Package should submit their bids on separate Bid Forms. Envelopes shall be marked with the BID PACKAGE NUMBER on the front lower left corner. Bid submissions in fax or electronic format will NOT be accepted.

**M. TRADE CONTRACTOR EXPERIENCE STATEMENT**

1. The undersigned company has been in business under its present name for \_\_\_\_\_ years.
2. The undersigned company has had \_\_\_\_\_ years' experience in construction work similar to that described in the bid documents for this project.
3. List below three largest construction projects the undersigned company currently has under contract as of this date:

Contract Sum	Class of Work	% Complete	Name & Address of Owner

4. List below a minimum of three (3) similar projects the undersigned company has performed in the past five (5) years which are representative of this project and would qualify you for this work:

Contract Sum	Class of Work	% Complete	Name & Address of Owner

5. Provide the names of the Project Manager and Field Superintendent/Foreman the Contractor will use on this Project. On a separate sheet briefly summarize their experience.

Project Manager: \_\_\_\_\_

Field Superintendent/Foreman: \_\_\_\_\_

6. State the name of your insurance carrier and the A.M. Best & Company rating of your insurance carrier.

Insurance Carrier: \_\_\_\_\_

Rating: \_\_\_\_\_

7. State the general liability rate of your firm in the interstate and intrastate workers' compensation experience modification rate for your firm for the three (3) years.

General Liability rate: \_\_\_\_\_

Workers' Compensation Experience Modification Rate: \_\_\_\_\_

8. Has the undersigned company sought legal action or filed any claims against the State of Connecticut in the past five (5) years?

Yes \_\_\_\_\_ No \_\_\_\_\_

Project Name: \_\_\_\_\_ DAS Project No.: \_\_\_\_\_

Brief Description of Issue: \_\_\_\_\_

9. SBE or M/WBE Sub-subcontractor and Supplier Information.

A. List your proposed SBE or M/WBE sub-subcontractor, if any:

Company Name & Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Contact: \_\_\_\_\_

Subcontractor Trade: \_\_\_\_\_

Scope of Work: \_\_\_\_\_

DAS Certified: Yes \_\_\_\_\_ No \_\_\_\_\_

SBE \_\_\_\_\_ MBE \_\_\_\_\_ WBE \_\_\_\_\_ DBE \_\_\_\_\_

Value of Work \$ \_\_\_\_\_

B. List your proposed SBE or M/WBE supplier, if any:

Company Name & Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Contact: \_\_\_\_\_

Scope of Supply: \_\_\_\_\_

DAS Certified: Yes \_\_\_\_\_ No \_\_\_\_\_

SBE \_\_\_\_\_ MBE \_\_\_\_\_ WBE \_\_\_\_\_ DBE \_\_\_\_\_

Value of Work \$ \_\_\_\_\_

9. Are you affiliated with a Union? Yes \_\_\_\_\_ No \_\_\_\_\_ Union(s) \_\_\_\_\_

**N. ENCLOSURES:**

Included with this completed Bid Form are the following:

1. Bid Proposal Form (Section 00 41 00).
2. Certificate of Authority (Section 00 40 14).
3. Department of Administrative Services Pre-qualification Certificate (Section 00 40 15).

4. Department of Administrative Services Update Statement (Section 00 40 15).
5. SBE, MBE, WBE or DisBE Certificate (As Applicable).
6. Standard Bid Bond (Section 00 43 16) or certified bid security check for 10% of the bid amount. (Obligees are State of Connecticut Department of Administrative Services and PDS Engineering & Construction Inc. Set-aside SBE and M/WBE bidders may submit letters of credit in lieu of bonds).
7. Named Subcontractor Bidder's Qualification Statement (Section 00 45 17).
8. SEEC Form 10.
9. Ethics Affidavit (Regarding State Ethics) – OPM Ethics Form 6 (for contracts with a value of \$500,000 or more).
10. Gift and Campaign Contribution Certification – OPM Ethics Form 1 (for contracts with a value of \$50,000 or more).
11. Consulting Agreement Affidavit – OPM Ethics Form 5 (for contracts with a value of \$50,000 or more).
12. Iran Certification – OPM Ethics Form 7 (for contracts with a value of \$500,000 or more).
13. Non-Discrimination Certification – Form A, B, C, D or E.
14. Non-Collusion Affidavit (Section 00 45 19).
15. Acknowledgement of Surety (Section 00 45 49).
16. Contractors Wage Certification Form (Section 00 73 44).
17. Unit Prices (As Applicable, Section 01 22 00).

The undersigned hereby certifies that he/she is able to furnish all labor, material and equipment necessary to complete the work of the Bid Package(s) as directed and/or described in the Contract Documents and to work in harmony with all other elements of labor employed or to be employed on the work.

\_\_\_\_\_  
Bidder's Company Name

\_\_\_\_\_  
Individual

\_\_\_\_\_  
Business Address

\_\_\_\_\_  
Title

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Phone (required)

\_\_\_\_\_  
Fax (required)

\_\_\_\_\_  
Email address (required)

The Bidder is a/an (individual)(partnership)(corporation). Names and titles of other officers or partners are:

\_\_\_\_\_  
(for corporation, give the State of Incorporation and affix the corporate seal)



# PDS ENGINEERING & CONSTRUCTION, INC.

AGREEMENT BETWEEN CONTRACTOR AND SUBCONTRACTOR

107 Old Windsor Road  
Bloomfield, CT 06002  
Telephone (860) 242-8586

This Agreement made this \_\_\_\_\_ day of, \_\_\_\_\_  
Between the Contractor/CMR: **PDS ENGINEERING & CONSTRUCTION, INC.** and the  
Subcontractor: \_\_\_\_\_ Owner: \_\_\_\_\_  
Name \_\_\_\_\_ State of Connecticut  
Address \_\_\_\_\_ Department of Administrative Services DCS  
City, State, Zip \_\_\_\_\_ 450 Columbus Blvd., Suite 1201  
Phone \_\_\_\_\_ Hartford, CT 06103

Project: \_\_\_\_\_ Contractor / Construction Manager At-Risk: \_\_\_\_\_  
**York Correctional Central Plant and Distribution System, Project No. BI-JA-465** **PDS Engineering & Construction, Inc.**  
**201 West Main Street** **107 Old Windsor Road**  
**Niantic, CT 06357** **Bloomfield, CT 06002**

The Contractor (CMR) and Subcontractor agree as set forth below:

## Section No. 1 - THE CONTRACT DOCUMENTS

The Contract Documents for this Subcontract consist of this Agreement and any Exhibits attached hereto, the Agreement between the Owner and Contractor (also referred to as CMR) dated \_\_\_\_\_ (the Prime Contract), including the Conditions of the Contract between the Owner and Contractor (General Supplementary and other Conditions), Drawings, Specifications, all Addenda issued prior to execution of the Agreement between the Owner and Contractor, and all Modifications issued subsequent thereto.

### LIST OF ATTACHMENTS

- A: Standard Form of Agreement Between Owner and Construction Manager At-Risk (CMR) for GMP, DAS Division of Construction Services (Section 00 52 03) and Amendments.
- B: General and Supplementary Conditions (Section 00 72 23 and Section 00 72 23.1).
- C: Drawings/Plans dated 12/21/18 by WSP USA Inc. and its Consultants.
- D: Project Manual, dated 1/21/19, WSP USA Inc. and its Consultants.
- E: Procurement Requirements (Section 00 23 00).
- F: Project Schedule, dated 12/26/18, and subsequent updates (Section 00 31 13).
- G: Site Logistics Plan by PDS Engineering & Construction, Inc. (Section 00 31 13).
- H: Building Logistics Plan by PDS Engineering & Construction, Inc.
- I: Connecticut Department of Correction (CT DOC) Security Requirements (Section 00 73 63)
- J: Applicable Bid Package and Bid Proposal Form. No qualifications or exceptions!
- K: Addendum No. 1 & 2 and all other Addenda issued prior to Bid Date.
- L: Work Authorization Order (WAO) No. 1, as applicable.

All of the above documents are a part of this Subcontract and shall be available for inspection by the Subcontractor upon request. The Subcontractor agrees to be bound to the Contractor in accordance with the aforesaid documents in the same manner that the Contractor is bound to the Owner, and the Contractor agrees to be bound to the Subcontractor by said documents in the same manner as the Owner is bound to the Contractor.

In the event of a conflict between the terms and conditions of the contract between the Owner and the Contractor (CMR), which have been incorporated herein, and the terms and conditions of this document, the terms and conditions as determined by the Contractor, shall prevail.

The Subcontract Documents shall not be construed to create a contractual relationship of any kind (1) between the Architect/Engineer and the Subcontractor, (2) between the Owner and the Subcontractor, or (3) between any persons or entities other than the Contractor and Subcontractor.

**Section No. 2 - THE WORK**

**2.1 SCOPE.** The Subcontractor shall furnish all required trade labor, equipment, materials, tools, bonds, insurance, licenses, warranties, closeout documentation, transportation, layout, protection, incidental supplies, supervision, management, and services necessary to perform All Work associated with **Bid Package** \_\_\_\_\_ according to, but not limited to the Project Schedule, Procurement Requirements, the Drawings/Plans, Division(s) \_\_\_\_\_ of the Specifications, and all Attachments, Amendments, and Addenda listed herein as the Contract Documents, including those requirements set forth in Division One (1) General Requirements.

**SPECIFIC INCLUSIONS:** Bid Package \_\_\_\_\_; Bid Proposal Form submitted on \_\_\_\_\_; Addendum #1 dated 1/28/19; Addendum #2 dated \_\_\_\_\_; Addendum #3 dated \_\_\_\_\_; Addendum #4 dated \_\_\_\_\_.

**SPECIFIC EXCLUSIONS:** NONE

**Section No. 3 - PAYMENT**

**3.1 CONTRACT SUM.** The Contractor agrees to pay the Subcontractor for the satisfactory performance of the Subcontractor's Work the sum of **Amount dollars text** DOLLARS, ZERO CENTS (\$) **Amount Figures** in accordance with the terms and conditions contained herein. This price includes all applicable sales taxes including those levied on services and renovation work.

**PDS ACCOUNTING PURPOSES**

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**3.2 SCHEDULE OF VALUES.** The Subcontractor shall provide a schedule of values satisfactory to the Contractor and Owner no later than fifteen (15) days from date of execution of this Agreement. This Schedule shall be completed on AIA form G702 with separate line items for material, labor and equipment of each phase of the Work. If requested by the contractor this schedule shall be supported by sufficient evidence to validate its accuracy. Applications for progress payment will not be accepted until an approved Schedule of Values has been received.

**3.3 APPLICATION FOR PROGRESS PAYMENT.** All applications for progress payment must be submitted in duplicate using the PDS Billing Format (Attachment B), and supported by the Schedule of Values showing the amount complete on each item billed. Applications must be received in the Contractor's office no later than the twenty fifth (25th) day of the month for which payment is being requested otherwise application will not be processed until the following month. Subcontractors are advised not to request more monies than they actually are due to prevent rejection of application and delay payment.

In addition each application shall be accompanied by all documentation as required by the Prime Contract such as certified payrolls etc., and the Contractor's standard Waiver of Liens executed by the Subcontractor and each of its Sub-subcontractors, rented or leased equipment suppliers, and material suppliers who performed services or supplied materials in connection with the Work during the period preceding that covered by the application. The Contractor, at its sole discretion, may also require for payment any additional documentation it deems necessary to verify balances due to and proof of payments made to the Subcontractor's employees, Sub subcontractors, rented or leased equipment suppliers, and material suppliers who performed services or supplied materials in connection with the Work.

**3.4 PAYMENTS.** The Contractor will pay the Subcontractor its detailed breakdown as approved by the Owner or his authorized agent. All payments including retainage will be made within thirty 30 days after for which payment on behalf of the Subcontractor has been received from the Owner. For each progress payment made prior to completion of the Subcontractor's Work, the Contractor may withhold nine and one half percent (9.5%) as retainage from the payment otherwise due. However, if the Subcontractor fails to provide the required Waivers of Lien

or other required documentation, the Contractor may withhold all payments until such documentation is received. The Contractor at its discretion may issue, and the Subcontractor agrees to accept, as payment for this Contract, joint checks to the Subcontractor and any party having performed services or supplied materials in connection with the Work for the Subcontractor in the amount due such party for its work. It is expressly understood that payments to the Subcontractor are dependent, as a condition precedent, upon the Contractor receiving payments, including retainage, from the Owner. The Construction Manager, at its sole discretion, may issue payments toward the contract balance within 10 days of Owner approval of the monthly requisition at a 1.5% early pay discount.

**Section No. 4 - WARRANTY**

The Subcontractor shall warranty that he will repair and make good, at its own expense, any defects in workmanship or materials occurring in its Work within the period of eighteen months after the date of Substantial Completion of the project by the Architect/Engineer, Owner and the Contractor (CMR). This warranty shall be in addition to any and not in limitation of any other warranty or remedy required by law, the Owner-CMR Contract, the Specifications or by any other part of the Contract Documents. The longest and/or most stringent warranty requirements prescribed in the Contract Documents shall apply. Provide extended warranties as required.

**Section No. 5 - TIME OF COMMENCEMENT AND COMPLETION OF WORK**

**5.1 TIME IS OF THE ESSENCE.** It is the Subcontractor's responsibility to furnish and install the necessary Labor, materials and/or equipment to perform the Work to comply with the job schedule, and to complete the Work sufficiently in advance of dependent phases of the Work so as not to create any delay. Should the Subcontractor fall behind the schedule, he will take all necessary measures, such as supplying additional shifts, over time work, and additional men and equipment, to bring the Work within the allotted time of the schedule. All such measures shall be strictly at the Subcontractor's own expense. Additionally the Subcontractor shall be liable for any additional costs incurred by the Contractor including extended general conditions, acceleration or re-sequencing of other trades, temporary construction, etc. that are incurred as a result of the Subcontractor's failure to meet its schedule obligations.

**5.2 LIQUIDATED AND EXTENDED DURATION DAMAGES.** It is expressly agreed by and between the parties that time is and shall be considered of the essence with respect to this Subcontract on the part of the Subcontractor. Liquidated damages, provided for in the Prime Contract are \$6,700.00 per calendar day beyond the established Substantial Completion date and \$4,400.00 per calendar day beyond 90 days after the established Substantial Completion date that the CMR fails to achieve final Acceptance, and shall be assessed against the Subcontractor only to the extent they are assessed against the Contractor by the Owner and caused by the Subcontractor or any person or entity for whose acts the Subcontractor may be liable, and in no case for delays or causes arising outside the scope of this Subcontract. In addition to passing through Liquidated Damages Assessed by the Owner the Subcontractor shall also be liable for actual damages incurred by the Contractor during such delay caused by the Subcontractor. Actual damages include but are not limited to the additional costs for the Contractor's project staff both employee and subcontracted, equipment and services during the delay, any costs incurred by the Contractor to resolve damages and claims made by other Subcontractors due to the delay.

**5.4 NO DAMAGE FOR DELAY.** The Subcontractor expressly assumes the risk of all delays to the work, and waives all claims for damages or additional payment for delays to the work. The only exception shall be for damages for delays recoverable from the Owner in which case the Subcontractor shall be limited in its compensation for such damages to amounts specifically recovered for such claims made by the Subcontractor. It shall be the sole responsibility of the Subcontractor to bare all costs incurred in pursuit of such claims against the Owner.

**5.5 START AND COMPLETION DATES.** The Subcontractor agrees to complete the several portions and the whole Work herein sublet by the time or times following:

**COMMENCEMENT:** Start Date **COMPLETION:** End Date

The Subcontractor shall start the execution of its Work within three days after notice by the Contractor to begin work. The Subcontractor is cautioned that schedules and milestones are

subject to review revision, and in such event, such revisions will be made available for the Subcontractor's information at the Contractor's choice of locations including its home office, its field office or internet based software. It is the sole responsibility of the Subcontractor to attend project meetings, keep itself informed of any revisions and conform to any such revisions.

## **Section No. 6 - SAFETY**

**6.1 SAFE WORKING PRACTICES.** The Subcontractor shall take all reasonable safety precautions with respect to performance of this Subcontract, shall comply with all safety measures initiated by the Contractor and with the requirements of OSHA Safety and Health Standards (29 CFR 1926/1910) and all amendments, updates and modifications thereto and any other applicable Federal, state and local safety laws, ordinances, rules, or regulations.

**6.2 SAFETY INSPECTIONS.** The Subcontractor shall inspect daily the areas in which its employees are working, and give the Contractor immediate verbal notice of any condition beyond its control that the Subcontractor believes is hazardous to the safety or health of its employees and in any such event give the Contractor written notice within twenty four (24) hours after inspection. Subcontractor will be presumed to be satisfied with working conditions beyond its control in absence of such written notice and shall indemnify and hold the Contractor, Owner, Architect/Engineer and Owners Agents harmless from and against any and all loss, damage, claim, liability and/or expense, including costs and reasonable attorney's fees, incurred by the Contractor as a result of the Subcontractor's failure to report conditions that are alleged to be unsatisfactory, including but not limited to, claims made by any of the employees or other persons working under the Subcontractor.

**6.3 PERMANENT AND TEMPORARY SAFETY DEVICES.** The Subcontractor shall prior to its removal or deactivation of any permanent or temporary safety device, barrier, etc. notify the Contractor and any persons potentially affected by such a condition and shall post warning sufficient to prevent harm to anyone as a result of this condition. The Subcontractor shall as soon as practical there after reactivate, repair, replace or create new any permanent or temporary safety device, barrier, etc. to return the area to a safe condition. The Subcontractor shall under no circumstance cut or defeat a lockout/tagout device placed by others or otherwise leave an area in an unsafe condition.

**6.4 HAZARDOUS SUBSTANCES.** If hazardous substances of a type which an employer is required by law to notify its employees are being used on the site by the Subcontractor, the Subcontractor's Subcontractors or anyone directly or indirectly employed by them, the Subcontractor shall, prior to use of such substances on site, provide Material Safety Data Sheets or other written notification to the Contractor in sufficient time to permit compliance with such laws and shall notify all persons in the potential exposure zone from such substances of their use and any required personal protection necessary.

**6.5 COMPLIANCE WITH SAFETY REGULATIONS AND PROJECT SAFETY RULES.** The Connecticut Department of Correction (CT DOC) Security Requirements for Contract Forces on CT DOC Facilities (Section 00 73 63) shall apply to all construction personnel on site. In addition, the Construction Manager makes regular inspections of the project site for compliance with Government Safety Requirements, including OSHA and CONN-OSHA regulations, and PDS'/Subcontractor's Site-Specific Project Safety Plan. When a situation or action is viewed as not being in compliance, and the Construction Manager determines that it is in the best interest of safety or security, disciplinary action shall be taken. This is in addition to disciplinary actions taken by CT DOC. For Category I violations, the CT DOC shall be notified immediately and the individual shall be permanently removed from the project. For Category II violations, the Subcontractor shall be notified immediately and the individual shall be removed from the project for a minimum of 90 days. For Category III (minor) rules violations, a verbal warning will be given to the individual responsible. For second offense, a written warning will be given to the individual responsible and copied to the Subcontractor responsible. Immediate correction of the situation for the protection of people and property will be expected. For disciplinary actions, in addition to any OSHA fines, safety and work rule violations listed herein shall, at a minimum, constitute monetary fine(s) to be levied (per person, per violation, or per day) as described in the schedule below. The amount will be deducted from the Subcontractor's requisition at the sole discretion of the Construction Manager. All Subcontractor employees shall receive this information at orientation. The violation will be recorded in writing and discussed at weekly safety meetings. Funds will be

utilized to correct unsafe conditions or other unwanted conditions on the project, or otherwise used to enhance or promote safety.

Non-compliance with trenching regulations	\$1,000
Failure to replace a rail, barricade or safety device	\$1,000
Failure to provide and use adequate fall protection	\$1,000
Improper erection / use of scaffolding, including access and railing, firm foundation, etc.	\$1,000
Failure to protect floor openings or roof openings	\$1,000
Lockout/Tagout violation	\$1,000
Confined space violation	\$1,000
Other Severe safety violation	\$1,000
Excess debris, poor housekeeping, repeat offense	\$500
No protection of finished or in progress work, repeat offense	\$500
Work causing leaks or water damage, repeat offense	\$500
Unsafe use of heavy equipment	\$500
Uncertified lifting device	\$500
Unsafe Entry/Exit/Use of manlift	\$500
Non-compliance with Assured Ground Program	\$500
Other Major safety violation	\$500
Electrical cords on floor / Defective cord	\$200
Defective / unguarded power tool	\$200
Failure to protect public	\$200
Equipment violation	\$200
Improper use of ladders / unsecured/defective ladders	\$200
Improper storage of flammable materials / Unmarked cylinders	\$200
Non-compliance with HazCom Standards / Missing SDS	\$200
No written HazCom/Safety program	\$200
No written Job Hazard Analysis/Failure to comply	\$200
Non-compliance with Construction Waste Management Plan	\$200
Non-compliance with Indoor Air Quality Plan/HPB requirements	\$200
No safety harness	\$200
No Fire Watch/Extinguisher	\$200
Excess debris, poor housekeeping, first offense	\$200
No protection of finished or in progress work, first offense	\$200
Work causing leaks or water damage, first offense	\$200
Other Serious safety violation	\$200
Failure to use personal protection equipment (hard hats, work boots, proper clothing, eye and hearing protection)	\$100
No cutting / welding permit	\$100
No tool box meeting	\$100
No orientation	\$100
Improper material storage	\$100
Littering	\$100
Failure to clean up after oneself (break, lunch, etc.)	\$100
Tracking mud into building, onto roof or finished surfaces	\$100
On site traffic violation, driving too fast, improper parking	\$100
Smoking anywhere on site	\$100
Loud noise or yelling	\$100
Foul language	\$100
Radio or CD/MP3 player/Ipod, etc. in use on site	\$100
Cell phone / Camera in use on site	\$100
Failure to have representation at weekly safety meetings	\$100
Other Project Safety Rules violation	\$100
Other Minor safety violation	\$100

## Section No. 7- SUBCONTRACTORS INSURANCE REQUIREMENTS

**7.1** The Subcontractor shall purchase insurance from insurance companies rated A- or better by A.M. Best Companies and lawfully authorized to do business in State of Connecticut or the State that the Project is located. The insurance provisions set forth below are minimum requirements. In the event the General Contract or the General Supplementary and other Conditions specifies additional coverage's and/or amounts of coverage other than those set forth below and pertaining to the Subcontractor's work, then the Subcontractor shall provide the coverage's and/or amounts in accordance with the Project Requirements. **See the Prime Contract Article 8.1.7 for Subcontractor's minimum insurance requirements.** Such insurance will protect the Subcontractor from claims which may arise out of or result from the Subcontractor's operations under the Subcontract and for which the Subcontractor may be legally liable, whether such operations be by the Subcontractor or by a Sub-subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Subcontractor, and any Sub-subcontractors engaged by the Subcontractor, shall obtain the following insurance:

**7.1.2 Workers Compensation Insurance** - For all work performed pursuant to this Subcontract, Subcontractor shall maintain Workers' Compensation Insurance, including coverage for all executive officers, members of a limited liability company, sole proprietors and partners, in the amounts required by all applicable statutes, law, regulations or acts. Such Workers' Compensation Insurance must list on Item 3A. of the policy Information Page the Workers' Compensation Law of the state in which the work is being performed -CT, MA, etc." A Waiver of Subrogation endorsement (NCCI form WC 00 03 13 or its equivalent) that prohibits the insurance company from enforcing subrogation and recovery rights against the Owner, Architect/Engineer Owner's Agents the Contractor and anyone else as required under the Project Requirements shall be included. If work is to be performed over or adjacent to navigable waterways, the Workers' Compensation Insurance shall contain the United States Longshore and Harbor Workers' Act Endorsement (NCCI Form WC 00 01 06 or its equivalent).

**7.1.2.1 Employers' liability insurance** for damages because of bodily injury, occupational sickness or disease, or death of the Subcontractor's employees. Such insurance shall be written with the following minimum limits of liability:

- Bodily Injury by Accident \$500,000.00 Each Accident
- Bodily Injury by Disease \$500,000.00 Policy Limit
- Bodily Injury by Disease \$500,000.00 Each Employee

A waiver of subrogation endorsement (NCCI form WC 00 13 13 or its equivalent) that prohibits the insurance company from enforcing subrogation and recovery rights against the Owner, Architect/Engineer, Owner's Agents the Contractor and anyone else as required under the Project Requirements shall be included.

**7.1.3 Commercial general liability insurance** Shall be written on an "occurrence" basis for damages because of bodily injury, property damage, personal and advertising injury arising out of the Work and shall be provided using the ISO Commercial General Liability Coverage Part CG 00 01 or its equivalent and shall include:

- All operations and premises of the Subcontractor;
- All products and completed operations of the Subcontractor;
- Liability and/or responsibility assumed by the Subcontractor for bodily injury or property damage in this Subcontract;

If work is within 50 feet of railroad property, then Contractual Liability for Railroads coverage via CG 24 17 (or its equivalent); shall be included.

The following exclusions and limitations are prohibited and shall not be included in or endorsed to the Commercial General Liability Coverage Part CG 00 01:

- Insured versus insured exclusions;
- Removal of the subcontractor exception to Exclusion L. Endorsements CG 2294, 2295 or equivalents are not acceptable;

- Exclusions applicable to bodily injury to employees of any insured;
- Removal of the "insured contract" exception to the Employers' Liability Exclusion (Exclusion E);
- "Prior Work" or similar exclusionary wording;
- Exclusions applicable to unknown property damage commencing prior to the policy period (so-called "prior injury" exclusions) or similar exclusionary wording;
- Exclusions applicable to roofing, if the Work involves roofing;
- Exclusions applicable to residential, multi-family or other habitational projects, if the Work is to be performed on such a project;
- Exclusions applicable to the explosion (X), underground (U) or collapse (C) hazards;
- Exclusions applicable to earth subsidence or movement or similar exclusionary wording

Additional insured coverage shall be provided to the Owner, Contractor and anyone else as required under the Project Requirements and shall be for both on-going operations via ISO Form CG 2010 (July 2004 Edition or its equivalent) and completed operations via ISO Form CG 2037 (July 2004 Edition or its equivalent) Additional Insured coverage shall be provided to the Architect/Engineer using CG 20 32 (July 2004 Edition or its equivalent) -Coverage for the additional insureds shall be provided on primary basis and Subcontractor's insurance will not seek contribution from the additional insured's liability insurance on which the additional insured is a named insured using CG 20 01 or its equivalent. All additional insured endorsements shall be submitted for review and acceptance by Contractor

Commercial General Liability insurance shall provide the following minimum limits of liability and all coverage's shall be maintained during and for at least three years after final completion of the Subcontract:

- \$1,000,000 Each Occurrence Limit;
- \$1,000,000 Personal & Advertising Injury - Per Person or Organization Limit
- \$2,000,000 General Aggregate Limit - Per Project Basis
- \$2,000,000 Products-Completed Operations Aggregate Limit

**7.1.4 Automobile Liability insurance** for damages because of bodily injury, including death of a person or property damage arising out of ownership, maintenance, use or loading or unloading of any motor vehicle and/or trailer that the Subcontractor owns, hires, leases or borrows or any motor vehicle used on behalf of the Subcontractor. Automobile Liability insurance shall include:

(a) Any equipment that is subject to a compulsory or financial responsibility law or motor vehicle insurance law in the state in which the equipment is principally garaged;

- Owner, Contractor and anyone else as required under the Project Requirements as additional insured via ISO Form CA 20 48 or its equivalent.
- Pollution liability - Broadened Coverage for Covered Autos - CA 99 48 or its equivalent;
- If work is within 50 feet of railroad property, then Contractual Liability for Railroads coverage via ISO Form CA2070 (or its equivalent);
- Such coverage shall provide minimum limits of \$1,000,000 Each Accident - Combined Single Limit and shall be maintained for the life of the Subcontract.

**7.1.5 Umbrella Liability insurance** For damages because of bodily injury, property damage, personal and advertising injury with, at minimum, the same terms and conditions as the Employers' Liability, Commercial General Liability, and Automobile Liability insurance required by the Subcontract. In no event shall the Umbrella policy provide coverage that is more narrow coverage than the underlying Employers' Liability, Commercial General Liability and Automobile Liability Insurance.

Umbrella Liability insurance shall be written as excess of Subcontractor's Employers' Liability, Commercial General Liability and Automobile Liability Insurance and also shall be written to drop down and provide primary insurance, including coverage for defense, for the Subcontractor in the event that an aggregate limit has been exhausted.

Umbrella Liability insurance shall include the Owner, Architect/Engineer, Owner's Agents, Contractor and anyone else as required under the Project Requirements as additional insureds.

Such insurance shall provide the following minimum limits of liability and shall be maintained during and for at least three years after final completion of the Subcontract:

- \$5,000,000 Each Occurrence
- \$5,000,000 General Aggregate Limit
- \$5,000,000 Products-Completed Operations Aggregate Limit

This Umbrella Liability requirement may be reduced to state minimums at the sole discretion of the Contractor which such adjustment must be evidenced in writing from the Contractor.

**7.1.6 Pollution Liability insurance** if the Work involves the handling, abatement, clean-up or removal of any pollutants or hazardous material, including but not limited to asbestos, PCBs, contaminated soils, and lead-based paint.

Pollution Liability insurance shall be written with minimum limits of \$1,000,000 each claim and \$1,000,000 aggregate, and shall include:

- (a) Products and completed operations coverage;
- (b) Premises and Operations
- (c) Owner, Contractor and anyone else as required under the Project Requirements as additional insured's;

The minimum limits of liability shall be maintained during and for at least three years after final completion of the Subcontract and shall at all times include coverage for the Owner, Contractor and anyone else as required under the Contractor/Owner contract (Project Requirements) as additional insured as required above.

If the pollution liability insurance is written on a "claims-made" basis, the Subcontractor shall maintain pollution liability insurance as specified or provide an extending reporting period (tail) for a minimum of seven (3) years following final completion of work. A copy of the policy shall be provided to the Contractor if requested.

This Pollution Liability requirement may be waived at the sole discretion of the Contractor which such waiver must be evidenced in writing from the Contractor.

**7.1.7 Professional Liability Insurance** if the Work involves any design or engineering services.

Professional Liability insurance shall be written with minimum limits of \$1,000,000 each claim and \$1,000,000 aggregate, and shall include:

- (a) Actual or alleged negligent acts, errors or omissions committed by the subcontractor, its agents or employees, or by others for whom the Subcontractor is legally responsible arising out of providing professional design or engineering services;
- (b) Bodily injury, property damage and pollution claims arising from negligent performance of professional design or engineering services
- (c) If the policy is subject to an aggregate limit, replacement insurance shall be required if Contractor determines such aggregate will be exhausted and the associated costs shall be payable by the Subcontractor.
- (d) Deductible shall not exceed \$25,000 unless approved by the Contractor.
- (e) Policy retroactive date shall coincide with or precede the subcontractor's initial consultant services for the work.

The Subcontractor shall maintain professional liability insurance as specified or provide an extending reporting period (tail) for a minimum of five (5) years following final completion of work. A copy of the policy shall be provided to the Contractor if requested.

This Professional Liability Insurance requirement may be waived at the sole discretion of the Contractor which such waiver must be evidenced in writing from the Contractor.

**7.2 Certificates of insurance** and supporting additional insured endorsement acceptable to the Contractor including any additional coverage and/or amounts of coverage specified in Project Requirements, shall be filed with the Contractor prior to commencement of the Work. The insurance policies required by this Section 7 shall be amended to provide that coverage afforded under the policies will not be canceled or allowed to expire until **at least 30 days' prior written notice** has been given to the Contractor. The cancellation or expiration provision shall be shown on the certificates of insurance. If any of the foregoing insurance coverage is required to remain in force after final completion of the Subcontract,



additional certificates evidencing continuation of such coverage shall be submitted to the Contractor annually.

Subcontractor's insurance policies (except Workers' Compensation and Employers' Liability Insurance) shall state via endorsement or otherwise that these policies are primary to and will not seek contribution from any other insurance carried by, or for the benefit of the Contractor, Owner, Architect/Engineer, or any other party required to be named as an Additional Insured under this agreement. The Umbrella shall be amended to expressly state that that this Umbrella insurance shall apply first, before the liability insurance of the additional insureds, and further that the Umbrella insurer shall not seek contribution from the liability insurance of the additional insureds. The intent of this provision is to specifically require that the Subcontractor's primary and excess layers of insurance will respond first and completely, prior to any other insurance responding that is carried by, or for the benefit of the Contractor, Owner, Architect/Engineer, or any other party required to be named as an Additional Insured under this agreement.

**7.3 Waiver of Subrogation** Subcontractor hereby waives all rights of recovery from Contractor, Owner, Architect/Engineer and any other required party, including but not limited to rights of subrogation, with respect to any matter, claim, or suit that is required to be covered by insurance to be maintained by Subcontractor pursuant to this Agreement and the Prime Contract or for damages caused by fire or other perils covered by insurance obtained for or in place upon the Project. Subcontractor's insurance policies shall contain a waiver of subrogation in favor of Contractor, the Owner and the other required parties.

**7.4** Subcontractor shall require all its Sub-subcontractors to provide the same insurance as required of the Subcontractor in Section 7, including adding the Owner, Contractor and anyone else as required under the Project Requirements as additional insured's where required. As to the insurance required of its Sub-subcontractor, the Subcontractor agrees to obtain from the Sub-subcontractor's insurance company (or authorized agent) certificates of insurance as evidence of the required insurance. Such certificates of insurance shall be filed with and acceptable to the Contractor

**7.5** Failure of Subcontractor to provide the insurance set forth in this Section 7 or any proof of insurance as herein described may, at the option of the Contractor result in the Subcontract being terminated for cause, or in lieu of such action Contractor at its option shall have the right to maintain all said insurance for and in the name of the Subcontractor and Subcontractor agrees to pay for the cost thereof and the Contractor may deduct such cost from monies otherwise due the Subcontractor

**7.6 Indemnity.** Subject only to the limitations set forth below and to the fullest extent permitted by law, the subcontractor shall indemnify, and hold harmless, and defend the Owner, Contractor, Contractor's consultants, Architect/Engineer, Architect/Engineer's consultants and the agents and employees of any of them from and against any and all injuries, claims, damages, losses, expenses, fines penalties and liabilities including but not limited to personnel related cost, attorneys' and experts' fees, court costs, and all other claim-related expenses, directly or indirectly arising out of or resulting from, in whole or in part, the acts or omissions of the Subcontractor, its officers, directors, agents, employees or Subcontractors, in the performance of this Subcontract, regardless of whether such lien, claim, suit, judgement damage, sanction, loss or expense is caused in part by a party indemnified hereunder.

The subcontractor shall not be required by this agreement to indemnify a party for that portion of any loss that is directly attributable to the negligence of the party to whom indemnification is owed, except to the extent such indemnification is permitted by law. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this clause.

To the fullest extent permitted by law, the Subcontractor agrees to assume the defense of the Owner, Contractor, the Architect/Engineer the Architect/Engineer's consultants, and the agents and employees of any of them, in any claim, proceeding, lawsuit, and/or litigation arising out of any accident, incident, or occurrence that is caused by, connected with, arising out of, or resulting from the performance of the Subcontractor's work under this contract.

The Subcontractor agrees that the obligation to defend commences when a claim is made against the Owner, Contractor, Architect/Engineer Architect/Engineer's consultants, and/or the agents and employees of any of them, even if the Subcontractor disputes its obligation

to indemnify and hold harmless. The party being defended shall have the right to choose its own counsel. The Subcontractor agrees to pay for defense of the Owner, Contractor, Architect/Engineer's consultants, and the agents and employees of any of them with counsel chosen by the party to be defended, upon demand.

To the fullest extent permitted by law, the Subcontractor shall reimburse the Owner and the Contractor and the agents and employees of either of them, and any other party the Contractor is contractually required to indemnify, for any costs or expenses, including but not limited to attorney's fees, expended in seeking the Subcontractor's compliance with the above stated duties to defend, indemnity and hold harmless.

The Subcontractor's indemnity, hold harmless and defense obligations set forth in this agreement shall cover the claim while this contract is in force, shall extend to such claims occurring after this agreement expires or is otherwise terminated, and shall continue until such claim is adjudicated and any and all actions against the Owner and Contractor and the agents and employees of either of them are settled, terminated, dismissed or concluded.

**7.7 SELF-INSURANCE.** After award of the Subcontract but prior to the Start of the Subcontractor's work, the Contractor, at its sole option may notify the Subcontractor that it has chosen to self-insure the Subcontractor's Payment and Performance Bonds for an amount equal to the full value of the bonds provided by Subcontractor. The Contractor will return the physical bonds, release the Subcontractor from its Payment and Performance Bond obligations and reduce, by change order, the Subcontract sum by the invoice amount of the bonds. This self-insurance provision is subject to the terms of the Prime Contract.

## Section No. 8 - SUBMITTALS

**8.1 TIMELINESS OF SUBMISSIONS.** The Subcontractor shall promptly submit shop drawings, samples, brochures, etc. as required by the specifications for all materials to be incorporated into the project. Subcontractor is solely responsible for determining when its submissions should be made in order to perform its Work efficiently, expeditiously and in a manner that will not cause delay in the progress of the Work of the Contractor or other Subcontractors, but such submissions shall be made no later than the date requested by the Contractor. Rejection of a submittal not conforming to the specifications does not relieve the Subcontractor of its obligations to meet schedule deadlines. At the discretion of the Contractor, should expedited review be available at an additional cost to mitigate the schedule impact of late or rejected submittals, such costs shall be paid by the Subcontractor. All resubmissions are to be made no later than five working days from notification of rejection.

**8.2 FORM OF SUBMISSIONS.** The Subcontractor shall transmit all submittals to the Construction Manager/Contractor electronically per Section 00 23 00 Procurement Requirements. Physical samples, color charts, final O&M Manuals, etc. shall be submitted in the quantity designated per the specifications. Each submittal shall be accompanied by a completed Submittal Approval Form. No substitutions shall be made in the Subcontractor's Work unless permitted in the Contract Documents, and only then upon the Subcontractor first receiving all approvals required under the Contract Documents for substitutions. The Subcontractor shall indemnify the Contractor as a result of such substitutions, whether or not the Subcontractor has obtained approval. Any submitted items not conforming to the Plans & Specifications shall be clearly marked on the submitted documents as well as noted on a Request for Deviation Form. Electronic submittal software shall be utilized for the project and the Subcontractor shall be responsible for learning the proper use of the software and complying with submission process. No materials shall be incorporated in the project without written approval.

**8.3 AUTHORIZATION TO RELEASE ORDER INFORMATION.** The Subcontractor hereby releases all of its vendors, material suppliers, sub-subcontractors or other such entities that are providing labor, materials or services for use on the Project to provide any and all information requested by the Contractor regarding the labor, materials or services being provided including but not limited to; order and delivery dates, pricing, product specifications, credit and payment status and any correspondence to or from the Subcontractor regarding same.

## Section No. 9- SUBCONTRACTOR'S RESPONSIBILITIES

**9.1 INSPECTION PRIOR TO START.** Subcontractor has carefully examined all of the Subcontract Documents and shall inspect the site prior to commencing work and shall inform the Contractor in writing five days prior to its scheduled start of any defects, deficiencies, inconsistencies or ambiguities which it has detected in the Subcontract Documents, defects

or deficiencies in the workmanship of previous Subcontractors or any other conditions that will impair the Subcontractor's ability to perform its Work. Failure to so review or report any such defects, inconsistencies, ambiguities or deficiencies prior to the commencement of the Subcontractor's Work shall constitute a waiver of any claims by the Subcontractor for an adjustment of the Subcontract Sum or Subcontract Time.

**9.2 FIELD DIMENSIONS & LAYOUT.** Subcontractor is responsible for obtaining its own field dimensions required for the implementation of its Work. Subcontractor shall provide all layout for its Work and shall verify and be responsible for the correctness of all measurements. See Bid Packages for specific requirements. Start of work on site shall mean an acceptance of the accuracy of the plans and that actual site conditions are acceptable. Later claims that defects in the plans or discrepancies between actual and indicated dimensions caused cost over runs or require time extensions will not be allowed.

**9.3 ON SITE MATERIALS.** Subcontractor is required to protect its materials stored at the site to prevent theft or damages from moisture, rain, dirt, cold, snow, heat, sunlight and other harmful influences.

**9.4 COOPERATION.** Subcontractor shall cooperate with Contractor and other subcontractor's in the execution of its Work and the storage of its material. The Subcontractor shall take all necessary precautions to protect the work of others and shall be responsible for the correction of any damage done by the implementation of its Work. The Subcontractor is required to attend job meetings for coordination of its Work. When specifically notified to be present at a designated meeting, attendance by a representative is mandatory. The cost of any alterations that may be required as a result of poor coordination on part of the Subcontractor will be deducted from any money then due or thereafter to become due to the Subcontractor under this Contract.

If requested the Subcontractor shall cooperate with the Owner and CMR and permit the Owner, CMR or a designated auditor or representative to review and audit the Subcontractor's books and records in connection with any costs charged to the Project and included in the price of any change orders.

The Subcontractor shall furnish to the CMR in a timely fashion all information necessary for the preparation and submission of the reports required herein including the information required under 2.3.2.1.2 of the Prime Contract

**9.6 CLEAN-UP.** The Subcontractor shall clean up all waste and debris caused by Subcontractor's operations at the end of each day and shall deposit same as directed by the Contractor, it shall be the Subcontractor's responsibility to properly dispose of and remove from the site any materials that will not be removed by the Contractor's waste hauler because of hazardous composition or recyclability. In the event Subcontractor, after twenty four (24) hours written notice from Contractor, fails to take corrective action to insure removal of waste and debris resulting from Subcontractor's operations, Contractor shall without further notice to Subcontractor, undertake these obligations and back charge the cost of same to Subcontractor's account at the prevailing wage labor rate plus applicable overhead and materials.

**9.7 WORKMANSHIP.** The Subcontractor shall within twenty-four hours after receiving written notice from the Contractor to that effect, proceed to take down all portions of the Work and remove from the grounds or buildings all material, whether worked or unworked, which the Contractor, the Owner or his authorized representative shall condemn as unsound or improper or as in any way failing to conform to the drawings and specifications, and shall make good, at its own expense, all work damaged or destroyed thereby.

**9.8 PAYMENT FOR GOODS AND SERVICES.** Upon payment by the Contractor, the Subcontractor shall promptly pay its Subcontractors and suppliers the amounts to which they are entitled but in no event pay any amounts due any of its Sub-subcontractors whether for labor performed or materials furnished later than thirty (30) days after such Subcontractor received a payment from the CMR which encompasses labor or materials furnished by such Subcontractor. In the event the Contractor has reason to believe that labor, material or other obligations incurred in the performance of the Subcontractor's Work are not being paid, the Contractor may give written notice of a potential claim or lien to the Subcontractor and may take any steps deemed necessary to assure that progress payments are utilized to pay such obligations, including but not limited to the issuance of joint checks. If upon receipt of notice, the Subcontractor does not (i) supply evidence to the satisfaction of the Contractor that the moneys owing have been paid, or (ii) post a bond indemnifying the Owner, the Contractor, the Contractor's surety, if any, and the premises from a claim or lien, then the Contractor shall have the right to withhold from any payments due or to become due to the Subcontractor a reasonable amount to protect the Contractor from any and all loss, damage or expense including attorney's fees that may

arise out of or relate to any such claim or lien. Should there be insufficient funds remaining due under this contract to cover such costs then the Contractor may deduct all as necessary from any other contracts the Subcontractor may have with the Contractor or the Subcontractor shall pay the difference to Contractor including reasonable attorney's fees for collection.

**9.9 NON-DISCRIMINATION, AFFIRMATIVE ACTION AND GOOD FAITH EFFORTS** The Subcontractor agrees that it shall not discriminate in anyway against any protected class as defined by federal, state or local anti-discrimination laws. If required by the General Contract, the Subcontractor agrees to implement an affirmative action Set-Aside Plan acceptable to the regulating agencies of the project (CHRO). Should the General Contract have or be subject to specific goals, requirements, mandates or good faith efforts for the incorporation of disadvantaged enterprises, local hiring, minority hourly usage, apprentice hourly usage or similar purchasing and hiring regulations, than Subcontractor agrees to comply with all such regulations. Should any sanctions or fines be assessed by the owner or a regulating agency of the project for failure to meet such regulations due to failure of the Subcontractor then the Subcontractor shall be liable to the Contractor and the Owner for any losses which shall be deducted from the Subcontractor's balance due. Should there be insufficient funds remaining due under this contract to cover such costs then the Contractor may deduct all as necessary from any other contract the Subcontractor may have with the Contractor or the Subcontractor shall pay the difference to Contractor including reasonable attorney's fees for collection.

### **Section No. 10- TERMINATION.**

**10.1 FOR PERFORMANCE.** Should the Subcontractor at any time refuse or neglect to supply a sufficiency of properly skilled workmen, or of materials of the proper quality, fail to pay its material suppliers, Subcontractors or any other purchased services that were provided for the project or fail in any respect to prosecute the Work with promptness and diligence, or fail in the performance of any of the agreements herein contained, Contractor, shall be at liberty, after one days written notice to the Subcontractor, to provide any such labor or materials, and to deduct the cost thereof including reasonable overhead profit and attorney's fees from any money then due or thereafter to become due to the Subcontractor under this Contract or any other contract the Subcontractor may have with the Contractor; and if Contractor determines it necessary shall also be at liberty to terminate the employment of the Subcontractor for the said Work and to enter upon the premises and take possession, for the purpose of completing the Work included under this Contract, of all materials, tools and appliances thereon, and to employ any other person or persons to finish the Work, and to provide the materials therefore; and in case of such discontinuance of the employment of the Subcontractor, it shall not be entitled to receive any further payment under this Contract until the said Work shall be wholly finished, at which time, if the unpaid balance of the amount to be paid under this Contract shall exceed the expense incurred by the Contractor in finishing the Work including reasonable overhead profit and attorney's fees, such excess shall be paid by the Contractor to the Subcontractor; but if such expense shall exceed such unpaid balance the Contractor may deduct all as necessary from any other contract the Subcontractor may have with the Contractor or the Subcontractor shall pay the difference to Contractor. In the event of an emergency affecting the safety of persons or property, Contractor may proceed as above without written notice.

**10.2 FOR CONVENIENCE.** The Contractor may, at any time, at will and without cause, terminate this Subcontract in whole or part with the Subcontractor at any time solely for the convenience of the Contractor. The Subcontractor's sole remedy for such termination shall be payment for costs and reasonable profit for work already performed. Specifically excluded but not limited to are recovery of anticipated profits, settlement expenses and consequential damages.

### **Section No. 11 - CHANGES IN THE WORK**

**11.1** The Subcontractor may be ordered in writing by the Contractor, without invalidating this Subcontract, to make changes in the Work within the general scope of this Subcontract consisting of additions, deletions, or other revisions, including those required by modifications to the Prime Contract issued subsequent to the execution of this Agreement, with the Subcontract Sum and the Subcontract Time adjusted accordingly. The Subcontractor, prior to the commencement of such changed or revised Work, shall submit promptly to the Contractor written copies of a Claim for adjustment to the Subcontract Sum and Subcontract Time for such revised Work in a manner consistent with requirements of the Subcontract Documents.

**11.2 NOTIFICATION** The Subcontractor shall make all claims promptly to the Contractor for additional cost and extensions of time, or other causes within the lessor of **FIVE (5) WORKING** days after the occurrence of the event giving rise to such claims, and in any event before proceeding with the work which is the subject of the claim or for claims which will affect or become part of a claim which the Contractor is required to make under the Prime Contract within a specified time period or in a specified manner shall be made in sufficient time to permit the Contractor to satisfy the requirements of the Prime Contract. Such claims shall be received by the Contractor not less than two working days preceding the time by which the Contractor's claim must be made. Failure of the Subcontractor to make such a timely claim shall bind the Subcontractor to the same consequences as those to which the Contractor is bound. No claim shall be valid unless so made.

**11.3 COST OF CHANGES** For changes in the Work requested by the Contractor, the Contractor may, at its option, negotiate an adjustment of the Contract Price, using any one of the following methods:

(a) Negotiated lump sum adjustment calculated using markup percentages not to exceed those indicated below;

- Cost for field labor performed by crafts directly employed by Subcontractor up to foreman level (excluding Subcontractor's superintendent) Subcontractor's actual direct cost plus overhead and profit as allowed per Contract Documents.
- Cost for materials furnished by Subcontractor at Subcontractor's actual invoiced cost plus overhead and profit as allowed per Contract Documents.
- Cost for work performed by a Subcontractor to the Subcontractor, Subcontractor shall be allowed a maximum of six percent (6%) for overhead and profit.

Note allowances listed for overhead and profit shall not exceed those allowed for in the Prime Contract.

(b) Adjustment of unit prices in the Contract Documents.

**11.4 Authorization of Changes** No changes in cost, schedule, or scope of work shall be considered valid unless executed on a signed Contract Supplement Form. Specifically the Contractor (CMR) shall not be liable for any additional costs nor the Subcontractor relieved of any responsibilities that the Subcontractor claims were issued verbally or authorized by any other written form even if signed by a representative of the Contractor.

**11.5 Disputed Changes.** Should the Subcontractor's claim for a change in cost or time be denied in writing by the Contractor, Owner or Architect/Engineer the Subcontractor shall continue with the work in question without delay or adverse impact to the project schedule. If the Subcontractor intends to pursue its claim through dispute resolution then the Subcontractor must provide, within 5 days of its notice, a detailed labor and material cost break down of its intended claim amount. Additionally the Contractor may require the Subcontractor to provide daily labor records and materials use tickets which will be validated for accuracy and signed by both the Contractor and Subcontractor as a contemporaneous record of the labor and materials expended by the Subcontractor on the disputed work. The signature of the Contractor on such labor and material records shall not be used as a evidence that the contractor authorized additional money or time for the Subcontractor to perform the disputed work.

#### **Section No. 12 - SEVERABILITY**

Should any one or more provisions of this document be determined to be illegal or unenforceable by a court of competent jurisdiction, all other provisions shall remain effective.

#### **Section No. 13 - FAILURE TO ACT**

The failure on the part of the Contractor to act upon the breach of any portion of this Subcontract by the Subcontractor shall in no way constitute a waiver of the Contractor to at any time in the future act upon such default; nor shall such failure to act prevent the Contractor from acting in the event of any other or further breach by the Subcontractor. Any and all rights and remedies herein created for the Contractor shall be cumulative and the use of one remedy shall not be taken to exclude or waive the right to the use of another.

#### **Section No. 14 - MISCELLANEOUS**

Neither party to this Subcontract shall assign the Agreement without the written consent of the other nor shall the Subcontractor assign any moneys due or to become due to him hereunder without the previous written consent of the Contractor.

Should the Contractor be terminated by the Owner, the Owner at its sole option may take as an assignment the subcontract and require the Subcontractor to continue to perform under its subcontract.

This Subcontract constitutes the entire agreement between the parties hereto and shall not be changed or modified orally

This Subcontract shall be construed and interpreted according to the law of the state of Connecticut. Subcontractor hereby submits and consents to the jurisdiction of the courts of the State of Connecticut and shall not commence any legal proceeding against Contractor (CMR), Owner or Architect/Engineer other than in a court of competent jurisdiction in the State of Connecticut.

In Witness Whereof, they have hereunto set their hands the day and date first above written. In presence of:

\_\_\_\_\_  
WITNESS

\_\_\_\_\_  
Sub Name

\_\_\_\_\_  
DATE

\_\_\_\_\_  
PDS ENGINEERING & CONSTRUCTION, INC.

## **"To be added to SECTION 00 83 01- BID PACKAGES"**

### **BID PACKAGES Included:**

Bid Package 1A – Moving and Cleaning (MWBE Set-Aside)

Bid Package 3A – Concrete

Bid Package 4A – Masonry

Bid Package 5A – Structural Steel & Miscellaneous Metals

Bid Package 7A – Roofing & Waterproofing

Bid Package 9A – General Trades & Carpentry (MWBE Set-Aside)

Bid Package 9B – Painting and Caulking

Bid Package 9C – Ceilings

Bid Package 21A – Fire Suppression

Bid Package 26A – Electrical

Bid Package 31B – Sitework: Excavation & Backfill/Paving (SBE set-aside)

# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

**Bid Package #1A Moving & Cleaning (MWBE set-aside)**

1. The following scope of work is known as Bid Package #1A, including, but not limited to, all labor, supervision, materials, equipment, tools, storage containers, handling, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 1A will perform all the work described in Bid Package #1A. This includes completion of ALL Moving and Cleaning Work in this project, as further described herein.
3. Bid Package #1A includes all Moving and Cleaning, specifically related to moving and temporarily storing furniture and contents of rooms that get ceilings removed for construction activity or are in open construction areas, providing and removing temporary floor protection in all rooms and interior construction areas, final cleaning these rooms and areas afterwards, and re-installation of furniture and contents after construction activities are complete, in accordance with the Contract Documents prepared by WSP USA, its Consultants, the Master Project Schedule, Site Logistics Plan and Building Logistics Plans by the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 73 29	*Cutting and Patching	01/21/19
01 77 00	*Closeout Procedures	01/21/19
<b>Division 02</b>	<b>*Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19

\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).



- B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
- C. Work Authorization Order #1, CT DAS Division of Construction Services.
- D. Agreement Between Contractor and Subcontractor (The Subcontract).
- E. GMP Amendment(s), CT DAS Division of Construction Services.
- F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
- G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
- H. Any and all Addenda issued prior to bid date for this Bid Package.
- I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
- J. Division 00 Procurement and Contracting Requirements (ALL Sections).
- K. Division 01 General Requirements (ALL Sections).
- L. PDS Procurement Requirements Section 00 23 00.
- M. CT DOC Security Requirements Section 00 73 63.
- N. PDS Project Schedule, dated 1/17/19, and subsequent updates.
- O. Division 50 Project-Specific Available Information.
- P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
- Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
- R. Site Logistics Plan by PDS Engineering & Construction, Inc.
- S. Building Logistics Plan by PDS Engineering & Construction, Inc.

**SCOPE OF WORK: Subcontract 1A**

- 5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 1A is responsible for, the term "Contractor", "General Contractor", "Subcontractor", "Cleaning Contractor", "Construction Manager", "CMR", or "Others" shall mean "Subcontract 1A".
- 6. For reference, Subcontract 1A must be familiar with the **bid packages and scope of work for General Trades & Carpentry Subcontractor 9A, Painting & Caulking Subcontractor 9B, Ceilings**

**Subcontractor 9C, and Mechanical Subcontractor 23A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.

7. Subcontract 1A is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.
8. Subcontract 1A is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls, and Section 01 73 27 Cutting and Patching** as it applies to moving furniture, shelving, benches, tables, and room contents, salvageable items, damages, finishes, temporary storage, temporary protection, final cleaning, temporary power and temporary lighting (for its own work), cutting and patching, and anything else having to do with moving and/or cleaning activities.
9. Subcontract 1A is responsible for the **removal of furniture, shelving, benches, tables, contents and salvageable items** from all rooms and corridors where ceilings get removed and replaced, open atriums, and other building areas affected by construction activity, in accordance with the Contract Documents. Identify and record a list of damaged materials, no matter how slight, and notify the CMR of such damages prior to removal and storage.
10. Subcontract 1A is responsible for the **handling and temporary storage of the removed furniture, shelving, benches, tables, contents, and salvageable items** either inside a building in a designated location or in storage containers outside the building, as directed by the CMR, temporary protection of the stored furniture, and re-installation of the furniture, shelving, benches, and contents “as found” after construction activities and final cleaning are complete.

11. Subcontract 1A is responsible to carry a \$20,000 Allowance for the delivery, rental, and final pickup of **16-foot PODS storage containers**, as needed for each phase, for the purpose of temporary storage of the Owner's furniture, shelving, and contents that are removed from each room or space in question. Subcontract 1A is responsible for labor and materials for security, handling, and moving the PODS as necessary in its Base Bid (not part of the Allowance). Coordinate locations of all PODS with the DOC and CMR.
12. Subcontract 1A is responsible to furnish and install **Masonite tempered hardboard** for temporary flooring protection on finished floors in rooms, corridors, atriums or other building areas prior to construction activities, then to remove, re-use, or dispose of it at the completion of construction activities in any given room, corridor, atrium or other building area, and prior to final cleaning. Provide full sheets to cover the entire floor, overlap as needed to prevent cutting, and tape joints. Remove floor protection prior to final cleaning.
13. Subcontract 1A is responsible for **final cleaning** after the work in a room, corridor, atrium or other building area is complete, and after **general cleaning** was done by other PDS Subcontractors. Each trade Subcontractor is responsible for everyday continuous cleanup of their own trash and debris from demolition and construction activities, including food and beverage containers, paper, cardboard, plastic, wood, metals, dirt, concrete, masonry, etc. debris generated by its employees. Cleanup and disposal of trash and debris into dumpsters (provided by the CMR) will take place daily by each trade. Subcontractors shall provide their own labor and brooms, trash bags, cans, rags, vacuums, etc. for cleanup and disposal after they have removed their construction debris. As a general rule, for **final cleaning** of a room, corridor, atrium or other building area, any debris remaining that can be swept up by a broom or cleaned by a mop or vacuum belongs to Subcontract 1A.
14. Subcontract 1A shall employ **experienced workers** or professional cleaners for final cleaning. Clean each surface or unit to condition expected in a normal public building cleaning and maintenance program. Comply with manufacturers' written instructions.
15. **General cleaning** during construction is by the other trades.
16. Clean the two double-wide **project trailers** and two double-wide **construction trailers** weekly during the entire project, from July 2019 through September 2021. Remove rubbish, dust, clean floors, bathrooms, hard surfaces, etc.
17. **Final Cleaning prior to inspections** of rooms and corridors where ceilings have been removed and replaced, open atriums, and other building areas affected by construction, in accordance with **Section 01 77 00 Closeout Procedures Part 3.2B.2 Cleaning - Interior**, after work is complete, when directed to do so by the Construction Manager, includes, but is not limited to:

- a. Remove labels that are not permanent labels.
  - b. Final clean transparent materials, including mirrors and interior glass in doors and windows. Remove paint spots; wash and polish all interior glass, taking care not to scratch surfaces.
  - c. Clean all exposed interior hard-surfaced finishes to a dust-free condition, free of stains, film, and similar foreign substances. Restore reflective surfaces to their original condition. Wash resilient tile floors. Leave concrete floors broom clean. Vacuum carpeted surfaces.
  - d. Wash washable surfaces of mechanical and electrical devices and fixtures. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps, and exposed HVAC grilles, registers and diffusers.
  - e. Clean finish hardware.
  - f. Clean tile and other glazed surfaces.
  - g. Clean vinyl or rubber base.
  - h. Vacuum and/or dust walls, ceilings, lighting fixtures, ceiling diffusers and other wall and ceiling items.
  - i. Remove defacements, streaks, fingerprints, and pencil marks.
  - j. Remove waste, rubbish, tools, parts, machinery, surplus materials, and equipment (left over by the trades) from the rooms and areas in question.
18. **Clean exposed interior hard-surfaced finishes** to a dirt-free condition, free of stains, films, dust, fingerprints, grease, mortar droppings, excess caulk, adhesives, paint drips, and similar foreign substances. Restore reflective surfaces to their original condition. Clean drinking fountains, toilets and sinks to a sanitary condition, free of stains.
19. Remove debris and surface dust from **unoccupied spaces**, including mechanical and electrical rooms.
20. **Clean surfaces** of all cabinets, casework, display cases, millwork, lockers, fire extinguisher cabinets, door and window frames, stools and sills, ceiling tiles, visual display surfaces, doors and hardware, signs, etc. Remove and dispose of all remaining temporary protection, tape and stickers.
21. **Clean all kitchen surfaces** including floors, walls, overhead coiling grilles, accessories, and fixtures. Clean plumbing fixtures and food preparation surfaces to a sanitary condition, free of stains, including stains resulting from water exposure.
22. Subcontract 1A is responsible to **final clean all floor surfaces** in rooms and corridors where ceilings have been removed and replaced, open atriums, and other building areas affected by construction, after work is complete, when directed to do so by the Construction Manager.
- a.) For **VCT or resilient floors**, remove adhesive and other blemishes from exposed surfaces. Sweep and vacuum surfaces thoroughly. Wash surfaces thoroughly.

- b.) For **rubber flooring**, wall base, treads, risers, and landings, remove adhesive and other blemishes from exposed surfaces. For rubber stair treads, risers, and landings, sweep and vacuum surfaces thoroughly. Wash surfaces thoroughly.
  - c.) For **tile carpet** flooring, remove adhesive and other blemishes from exposed surfaces. Sweep and vacuum surfaces thoroughly. Vacuum **carpet** and similar soft surfaces, removing debris and excess nap. Shampoo if visible soil or stains remain.
  - d.) Sweep and damp-mop sealed or epoxy painted **concrete** floors in unoccupied or utility spaces.
  - e.) For **other** flooring types, remove adhesive and other blemishes from exposed surfaces. Clean surfaces thoroughly.
23. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Clean exposed wall-mounted and ceiling-mounted **MEP components and accessories**.
24. Subcontract 1A shall use “**green**” **low-emitting or zero VOC cleaning materials**. Submit cleaning products to the Construction Manager for approval by Owner in advance of any use.
25. Subcontract 1A shall comply with **safety standards for cleaning**. Do not burn waste materials. Do not bury debris or excess materials on Owner’s property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.
26. Subcontract 1A is responsible for a **one-time cleaning touch-up** after the Owner’s FFE and contents have been set in each room. Leave the rooms clean and ready for occupancy.
27. ALL Subcontractors are responsible to **clean up their work areas each day by the end of shift**. All trash shall be placed into dumpsters located in a designated laydown area. All tools and materials shall be put away at the end of shift. If any debris is left behind, such as dirt, dust, mud, debris from construction materials, soda cans, juice bottles, paper products, banding material, snippets of wire, etc., the Construction Manager will have the debris cleaned up by others (Subcontract 1A) and backcharge the Subcontractor(s) responsible for the mess, or proportionately backcharge all Subcontractors working in the area. This is a non-negotiable item.
28. **SCHEDULE** – Follow the project’s master schedule and Site Logistics Plan and Building Logistics Plans for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project’s master schedule. Work may or may not be continuous. Multiple mobilizations may be required.

29. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.
30. **ALLOWANCES** – Subcontract 1A is to carry the following Allowance in the Base Bid:
- A) Allow \$20,000 to rent, deliver, and pickup **16-foot PODS storage containers**, as needed for each phase and as directed by the CMR, for the purpose of temporary storage of the Owner's furniture, shelving, benches, contents, and salvageable items that are removed from each room or space in question.
31. **UNIT PRICES** – N/A.
32. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**



# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

**Bid Package #3A – Concrete**

1. The following scope of work is known as Bid Package #3A, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 3A will perform all the work described in Bid Package #3A. This includes completion of ALL Concrete Work in this project, as further described herein.
3. Bid Package #3A includes all Concrete Work, in accordance with the Contract Documents prepared by WSP USA, its Consultants, and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 73 29	*Cutting and Patching	01/21/19
<b>Division 02</b>	<b>*Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19
<b>Division 03</b>	<b>Concrete</b>	<b>01/21/19</b>
03 01 30	Maintenance of Cast-in-Place Concrete	01/21/19
03 30 00	Cast-In-Place Concrete	01/21/19
03 30 10	Site Cast-in-Place Concrete	01/21/19
<b>Division 07</b>	<b>Thermal and Moisture Protection</b>	<b>01/21/19</b>
07 12 11	Under Slab Vapor Barrier	01/21/19



07 21 00	*Thermal Insulation	01/21/19
07 92 00	*Joint Sealants	01/21/19

\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).
  - B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
  - C. Work Authorization Order #1, CT DAS Division of Construction Services.
  - D. Agreement Between Contractor and Subcontractor (The Subcontract).
  - E. GMP Amendment(s), CT DAS Division of Construction Services.
  - F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
  - G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
  - H. Any and all Addenda issued prior to bid date for this Bid Package.
  - I. Issue For Bid - Design Narrative Report dated 12/21/19 by WSP.
  - J. Division 00 Procurement and Contracting Requirements (ALL Sections).
  - K. Division 01 General Requirements (ALL Sections).
  - L. PDS Procurement Requirements Section 00 23 00.
  - M. CT DOC Security Requirements Section 00 73 63.
  - N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
  - O. Division 50 Project-Specific Available Information.
  - P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
  - Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
  - R. Site Logistics Plan by PDS Engineering & Construction, Inc.
  - S. Building Logistics Plan by PDS Engineering & Construction, Inc.





### SCOPE OF WORK: Subcontract 3A

5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 3A is responsible for, the term “Contractor”, “General Contractor”, “Subcontractor”, “Concrete Contractor”, “Construction Manager”, “CMR”, or “Others” shall mean “Subcontract 3A”.
6. For reference, Subcontract 3A must be familiar with the **bid packages and scope of work for Site Preparation Subcontract 31A, Sitework Subcontract 31B, Masonry Subcontract 4A, Structural Steel Subcontract 5A, General Trades Subcontract 9A, and Mechanical Subcontract 23A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination and sequencing of work.
7. Subcontract 3A is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.
8. Subcontract 3A is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls, and Section 01 73 27 Cutting and Patching** as it applies to Concrete Work, including furnishing all of the following: Subcontractor 3A’s drinking water, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, pumps, buggies, chutes, ladders, staging and scaffolding, environmental protection, fire extinguishers, barricades, temporary enclosures, temporary heating and ventilating, temporary shoring and support, insulation blankets to prevent concrete freezing, material and equipment handling, protection and storage,



temporary power and temporary lighting, water for concrete operations, water disposal in an approved manner (plunge pools, frac tanks, filters, hay bales, etc.) in both hot and cold weather, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Concrete Work.

9. **TYPICAL UNDERGROUND PIPING INSTALLATION SEQUENCE OF WORK** – At the beginning of each sequence, Site Preparation Subcontract 31A shall layout clearing limits, remove trees, install erosion and sedimentation controls, install temporary fencing, strip topsoil, remove stumps, and rough grade the site in accordance with the phasing in the project’s master schedule. The Surveyor hired by Sitework Subcontract 31B shall utilize the Engineer’s survey data, elevations, coordinates, and stationing shown on the Survey Drawings, Civil Drawings, and Site Piping Alignment Tables, to lay out all site underground piping, vaults, manholes, anchor blocks, buried conduits, pull boxes, etc., and provide offsets for the Work. Sitework Subcontract 31B shall then use these offsets for line and grade to excavate, export unsuitable soils, protect utilities, dewater, provide pipe sand bedding, and provide 3/8” pea stone under pipe joints. **Concrete Subcontract 3A** shall install anchor blocks and footings for access riser vaults. Sitework Subcontract 31B shall furnish and install the precast access riser vaults with 18” diameter openings, and precast manholes with 8” or 18” diameter booted openings and sand bedding. Subcontract 23A shall furnish, handle, and install the prefabricated insulated piping and valves in the excavated areas and structures in the loop and all the way to the buildings. Sitework Subcontract 31B shall backfill and compact the underground piping, with joints exposed, with sand bedding up to 4” above the pipe insulation, until the hydrostatic pressure testing and radiographic testing is complete and approved. Then they will backfill and compact everything up to 38” below Finish Grade so that Subcontract 23A can install the two (2) 4” Optical Fiber Cable (OFC) conduits with pull strings and specified pull boxes in accordance with Section 27 11 00 Communications Equipment, Civil Drawings, and Communication Drawings. Sitework Subcontract 31B shall then backfill and compact the OFC conduits. Subcontract 31A will return to move the temporary fence to the next sequence of work, spread topsoil, fine grade, and seed and/or mulch the disturbed areas to complete the sequence while the next sequence is being excavated by Sitework Subcontract 31B. All work and sequencing shall strictly comply with the project Master Schedule and Site Logistics Plan. **Subcontract 3A** shall provide and maintain a flexible workforce in the event QC tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR’s control.



10. **Sitework Subcontract 31B** is responsible to hire a local **Connecticut Licensed Land Surveyor** for the duration of the project and utilize the Engineer's digital survey data (provided through the CMR), including topography, elevations, coordinates, and stationing shown on the Survey Drawings, Civil Drawings, and Site Piping Alignment Tables, to **lay out all site underground piping, vaults, manholes, anchor blocks, buried conduits, pull boxes, sidewalks, foundations, footings, etc.**, and provide offsets and elevations for the Work. **Subcontract 3A** shall utilize these offsets and elevations for line and grade to layout its Work.
11. **Mechanical Subcontract 23A** is responsible to layout for and coordinate its concrete **equipment pads, equipment foundations, pump bases, and housekeeping pad sizes and locations** with Concrete Subcontract 3A and Sitework Subcontract 31B. Subcontract 23A shall furnish all embeds, anchor bolts, templates, layout drawings, and fasteners for its pad-mounted equipment as required.
12. **Subcontract 23A** is responsible to layout for and coordinate the **structural steel pipe supports** with Concrete Subcontract 3A, Structural Steel Subcontract 5A, and Sitework Subcontract 31B.
13. Subcontract 3A is responsible for **selective demolition and disposal of all interior concrete** as needed and in accordance with **Section 02 41 19 Selective Demolition** and as indicated on the Drawings to facilitate the new work. Remove and stack/consolidate all debris during selective demolition and move debris into designated dumpsters (furnished by the CMR) daily. Clean up areas daily.
14. Subcontract 3A will be responsible for all **concrete maintenance work** as specified, as needed, including specified **epoxy polymer sealers and crack fillers** applied to traffic-bearing surfaces, such as parking areas and walks, and **deteriorated or delaminated concrete** in buildings, such as **floor slab repair in Building 10**, in accordance with **Section 03 01 30 Maintenance of Cast-In-Place Concrete**, Civil Drawings, Mechanical Drawings, Structural Drawings, other Contract Documents, or as needed and directed by the CMR. Subcontract 3A must engage an experienced concrete maintenance firm that employs installers and supervisors who are trained and approved by the manufacturer to apply polymer sealers. Examine, test, and locate areas of deteriorated or delaminated concrete as specified. Prepare rebar by wire brushing. Comply with manufacturer's written instructions for surface preparation and product application. Provide protections and precautions. Perform all concrete maintenance work shown in the Drawings. All other concrete maintenance work shall be performed on a Unit Price basis.
15. Subcontract 3A is responsible for all **cast-in-place concrete work**, in accordance with **Section 03 30 00 Cast-In-Place Concrete**, Civil Drawings, Mechanical Drawings, Structural Drawings, and other Contract Documents including, but not limited to, equipment pads, equipment foundations, tank pads, pump bases, housekeeping pads, floor infills, sump pit infill, pipe support footings and foundations,



structural steel footings, all non-shrink grout for baseplates and equipment rails where required, etc. Subcontract 23A shall furnish all embeds, anchor bolts, templates, layout drawings, and fasteners for its pad-mounted equipment as required. Subcontract 5A shall furnish pipe support anchor bolts for Subcontract 3A to install. Precast concrete components and flowable fill are by others.

16. Subcontract 3A is responsible for all **site cast-in-place concrete work**, in accordance with **Section 03 30 10 Site Cast-In-Place Concrete**, Civil Drawings, Mechanical Drawings, Structural Drawings, and other Contract Documents including, but not limited to, anchor blocks, foundation footings for distribution piping isolation valve access riser vaults, concrete tube foundations and grade beams for pipe chases or “doghouses”, under slab vapor barrier, concrete sidewalks, CIP concrete curbs, caulk joints of exterior concrete, valve box aprons, retaining wall footings, security wall grade beam, access ramp wall footing, cooling tower foundation and temporary protection, bracing and support, loading dock slab, wall, and footing at Building 9C Boiler Room area, patios/slabs and patio/slab infills, pipe support footings and foundations, structural steel footings, all non-shrink grout for baseplates and equipment rails where required, etc.
17. Subcontract 23A shall furnish all **embeds, anchor bolts**, templates, layout drawings, and fasteners for its pad-mounted equipment as required. Subcontract 5A shall furnish pipe support anchor bolts and embed plates for anchor blocks for Subcontract 3A to install. Subcontract 5A shall furnish pipe bollards for Sitework Subcontract 31B to install and Subcontract 3A to fill with concrete. Precast concrete components and flowable fill are by others.
18. Subcontract 3A shall furnish and install all **concrete reinforcement and accessories**, including rebar, dowels, epoxy, pins, wire mesh, fibrous reinforcement, compressive filler, preformed joint filler, form release agent, formwork, joint sealants for concrete, Hilti HY Adhesive anchor system, bond breaker, chamfer, etc. for its Work.
19. Sitework Subcontract 31B is responsible for compacted subgrade and fine graded base course preparation.
20. Subcontract 3A shall furnish and install all non-shrink grout for baseplates and equipment rails where required, in accordance with **Section 03 30 10 Site Cast-In-Place Concrete**, Structural Drawings, and other Contract Documents.
21. Subcontract 3A is responsible to install all concrete **embedded items** furnished by other trades including miscellaneous steel, anchors, anchor bolts, sump covers, floor grille frames, inserts, sleeves, dove tail inserts, etc.
22. Subcontract 3A is responsible for **forming and placing all foundations**, footings and slabs, walls, stairs and ramps (including exterior), piers, shear walls, grade beams, pile caps, slabs on grade, slabs



on deck, elevator pit, haunches, etc. This includes all ready mix concrete, lightweight concrete, welded wire mesh, reinforcing steel and accessories, expansion joint filler, vapor barrier (in accordance with **Section 07 12 11 Under Slab Vapor Barrier**), all (horizontal) extruded polystyrene board insulation under slabs-on-grade (in accordance with **Section 07 21 00 Thermal Insulation**), and other miscellaneous items required to complete this scope of work.

23. Subcontract 3A is responsible for **sloping floors** to drains where called for.
24. Subcontract 3A is responsible to **provide all openings and install sleeves** (provided by others) in formwork for other trades.
25. Subcontract 3A is responsible for **welded wire mesh and reinforcing** within concrete only. Masonry reinforcing will be provided by Subcontract 4A.
26. Subcontract 3A is responsible for **rebar dowels** in haunches for new masonry walls. Ensure specified lap length and proper layout for Subcontract 4A's rebar.
27. Subcontract 3A is responsible for interior concrete **housekeeping pads and curbs**, and haunches and dowels for masonry walls.
28. Subcontract 3A is responsible to provide all specified concrete **ready mix** required to complete the work described herein. Concrete mix designs, including sources of materials and additives must be submitted for approval prior to start of work.
29. Subcontract 3A is responsible for unloading, receiving, storing on site, distributing and installing all **embedded items** provided by others.
30. Subcontract 3A is responsible to form and pour all **interior MEP equipment pads**, whether shown on drawings or not.
31. Subcontract 3A is responsible to install any **access panels or doors** in the cast in place concrete, furnished by other trades.
32. Subcontract 3A is responsible to drill and **epoxy rebar into existing concrete** and apply bonding agent.
33. Subcontract 3A is responsible for **cure and seal** hardener and dustproofing for new concrete floors.
34. Subcontract 3A shall include **drilling and dowelling and underpinning** concrete work.
35. Subcontract 3A is responsible to fill **slab control joints** with non-shrink epoxy.
36. Subcontract 3A is responsible to provide all the **necessary material** to complete the work described herein. Change orders for additional quantities of concrete will not be issued.
37. Subcontract 3A is responsible to provide **concrete pump, chutes, and/or buggies** or other means necessary to place concrete.



38. Subcontract 3A is responsible for **hot and cold weather concrete work**, including heating equipment, fuel, tenting, blankets, scaffolding and labor for temporary heat, and moving and storing heating equipment and tanks as they are needed on site due to changing jobsite conditions. Include appropriate mix designs for hot or cold weather concrete.
39. Subcontract 3A is responsible to install **anchor bolts and grout the leveling plates** provided by Subcontract 5A and pack grout under column base plates. Subcontract 3A is to furnish the grout.
40. Subcontract 3A is to construct a **wooden box** around each set of anchor bolts to protect from damage prior to steel pipe support erection.
41. Sitework Subcontract 31B is responsible for all **granite curbs and precast curbs**, as specified and as shown on Drawings.
42. Subcontract 3A is responsible to coordinate **footing elevations** with Survey, Civil, Architectural, Mechanical, and Structural Drawings.
43. Subcontract 3A is responsible to **rub** all new exposed concrete walls.
44. Subcontract 3A is responsible to furnish and install **joint sealants and fillers** in accordance with **Section 07 92 00 Joint Sealants** of the Specifications.
45. Subcontract 3A is responsible to furnish and install components for the **pipe chase “doghouse” mock-up** per Section 04 22 00 Part 1.6A, for Architect’s approval.
46. Subcontract 3A is responsible to furnish and install and maintain at all times **OSHA recommended rebar protection**. Flat headed rebar caps are to be used in lieu of mushroom type caps.
47. Subcontract 3A is responsible to maintain during concrete operations the fall protection required for the perimeter and all interior shaft and floor openings once the concrete work begins. Protection to include guard rails, toe kicks and planking in order to meet **OSHA requirements**. Subcontract 3A is responsible for maintaining this same protection until completion of this scope and safety is assumed by another subcontractor as determined by the Construction Manager.
48. Subcontract 3A is responsible to supply the **testing lab** with concrete redimix for sampling as required. No water shall be added to redimix on site. This will be cause for rejection.
49. Subcontract 3A is responsible to replace work that **fails inspection** and needs rework. This will be done at no cost to the Construction Manager or Owner. The cost of retesting will be paid for by Subcontract 3A. Additionally, the cost of the Construction Manager’s time to manage the rework and retests will be paid for by Subcontract 3A.
50. Concrete **truck wash outs** allowed in approved area only.
51. **SCHEDULE** – Follow the project’s master schedule and Site Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This





schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project's master schedule. Work may or may not be continuous.

52. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.
53. **ALLOWANCES** – N/A.
54. **UNIT PRICES** – Provide unit prices in the Bid Proposal Form for:
- A) 6" Equipment Pad, Reinforced (typ.). \_\_\_\_\_ per SF
  - B) 8" Equipment Pad, Reinforced (typ.). \_\_\_\_\_ per SF
  - C) 12" Equipment Pad, Reinforced (typ.). \_\_\_\_\_ per SF
  - D) 6" Concrete Sidewalk on 8" Compacted Granular Fill (typ.). \_\_\_\_\_ per SF
  - E) Footing Forms, contact area. \_\_\_\_\_ per SF
  - F) Footing Concrete, in place. \_\_\_\_\_ per CY
  - G) Wall Forms, contact area. \_\_\_\_\_ per SF
  - H) Wall Concrete, in place. \_\_\_\_\_ per CY
  - I) Reinforcing Steel Bars, in place. \_\_\_\_\_ per LB
  - J) Epoxy Polymer Sealer, in place. \_\_\_\_\_ per SF
  - K) Epoxy Polymer Crack Filler, in place. \_\_\_\_\_ per LF
  - L) Testing for Delaminated Concrete as specified. \_\_\_\_\_ per SF
  - M) Epoxy Polymer Concrete Repair, in place. \_\_\_\_\_ per SF
  - N) Rebar Prep for Concrete Repair, in place. \_\_\_\_\_ per LF
55. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**



# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

## Bid Package #4A Masonry

1. The following scope of work is known as Bid Package #4A, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 4A will perform all the work described in Bid Package #4A. This includes completion of ALL Masonry Work in this project, as further described herein.
3. Bid Package #4A includes all Masonry Work, in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 73 29	*Cutting and Patching	01/21/19
<b>Division 02</b>	<b>Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19
<b>Division 04</b>	<b>Masonry</b>	<b>01/21/19</b>
04 22 00	Concrete Unit Masonry	01/21/19
<b>Division 07</b>	<b>Thermal and Moisture Protection</b>	<b>01/21/19</b>
07 21 00	*Thermal Insulation	01/21/19
07 92 00	*Joint Sealants	01/21/19
<b>Division 08</b>	<b>*Openings</b>	<b>01/21/19</b>
08 31 13.53	*Security Access Doors and Frames	01/21/19





\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).
  - B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
  - C. Work Authorization Order #1, CT DAS Division of Construction Services.
  - D. Agreement Between Contractor and Subcontractor (The Subcontract).
  - E. GMP Amendment(s), CT DAS Division of Construction Services.
  - F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
  - G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
  - H. Any and all Addenda issued prior to bid date for this Bid Package.
  - I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
  - J. Division 00 Procurement and Contracting Requirements (ALL Sections).
  - K. Division 01 General Requirements (ALL Sections).
  - L. PDS Procurement Requirements Section 00 23 00.
  - M. CT DOC Security Requirements Section 00 73 63.
  - N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
  - O. Division 50 Project-Specific Available Information.
  - P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
  - Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
  - R. Site Logistics Plan by PDS Engineering & Construction, Inc.
  - S. Building Logistics Plan by PDS Engineering & Construction, Inc.

**SCOPE OF WORK: Subcontract 4A**



5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 4A is responsible for, the term “Contractor”, “General Contractor”, “Subcontractor”, “Masonry Contractor”, “Construction Manager”, “CMR”, or “Others” shall mean “Subcontract 4A”.
6. Subcontract 4A is responsible for **all Masonry Work** including, but not limited to, Masonry Selective Demolition, Window Removal, Masonry Infills at Window Openings, Masonry Wall Penetrations, Grouting and Steel Sleeve and Plate Installation, Louver Openings, Bond Beams, Precast Lintels, Door Jamb and Threshold Installation and Grouting, Wall Infills, Security Wall, Retaining Walls, and Masonry Expansion and Control Joints, etc. in accordance with the Contract Documents.
7. For reference, Subcontract 4A must be familiar with the **bid packages and scope of work for Concrete Subcontract 3A, Structural Steel Subcontract 5A, General Trades Subcontract 9A, Sitework Subcontract 31B, and Mechanical Subcontract 23A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.
8. Subcontract 4A is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.
9. Subcontract 4A is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls, and Section 01 73 27 Cutting and Patching** as it applies to Masonry Work, including furnishing all of the following: Subcontractor 4A’s drinking water, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, pumps, buggies, chutes, ladders, staging and scaffolding, environmental protection, fire extinguishers, barricades,



temporary enclosures, temporary heating and ventilating, temporary shoring and support, insulation blankets to prevent masonry freezing, material and equipment handling, protection and storage, temporary power and temporary lighting, water for masonry operations, water disposal in an approved manner (plunge pools, frac tanks, filters, hay bales, etc.) in both hot and cold weather, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Masonry Work.

10. Mechanical Subcontract 23A and Electrical Subcontract 26A are responsible to **layout and coordinate the square/rectangular wall openings** for louvers, piping, and ductwork **and round wall openings** for pipe, conduit and duct penetrations with Subcontract 4A and Structural Steel Subcontract 5A. Subcontract 23A and Subcontract 26A are responsible to core drill their round masonry wall openings for pipe, conduit and duct penetrations. Square or rectangular masonry openings for louvers, piping and ductwork shall be the responsibility of Subcontract 4A. In all cases, the steel sleeves will be provided by others for installation by Subcontract 4A.
11. All work and sequencing shall strictly comply with the project **Master Schedule** and **Site Logistics Plan**. Subcontract 4A shall provide and maintain a flexible workforce in the event QC tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.
12. Subcontract 4A is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **masonry work**, both interior and exterior, as required for the new piping, conduits, ductwork, gates, doors, walls, louvers, fans, mechanical equipment, etc. For example, where existing masonry walls, pipes, or other embedded items have been removed, patch existing floor and install hydraulic cement fill material as required for a level floor condition. Patch and repair masonry wall penetrations where existing duct or pipes are removed or relocated, including wall penetrations above ceilings. Existing openings to be exposed in finish work shall be patched and repaired flush and of the same material as the surrounding surface.
13. Subcontract 4A is responsible for all **Selective Demolition for masonry infills and repairs** in accordance with **Section 02 41 19 Selective Demolition**, Civil Drawings, Mechanical Drawings, Architectural Drawings, Structural Drawings, and other Contract Documents, including window removal and disposal, selective demolition of retaining walls, sitewalls, security walls, and all other masonry demo indicated.
14. Subcontract 4A is responsible for **all Masonry Work** on this project, including all labor, materials and equipment to furnish and install concrete masonry units, decorative split-face concrete masonry units,



steel reinforcing bars, joint reinforcement, ties, anchors, rigid insulation, flashings, pre-formed control joint gaskets, bond breaker strips, control joints, expansion joints, mortar, grout, precast concrete lintels, installation of steel lintels and sleeves (provided by others), opening prep, grouting door frames and thresholds, verification of existing bond beams, new bond beams where required, masonry repairs and infills, modifications to interior, exterior and site walls, cleaning, etc. in accordance **Section 04 22 00 Concrete Unit Masonry** and the Civil Drawings, Mechanical Drawings, Architectural Drawings and Details, and Structural Drawings and Details, and other Contract Documents.

15. Subcontract 4A shall pay particular attention to details shown on Architectural Drawings and Structural Drawings that show typical **interior and exterior wall infills**, typical **wall penetrations with steel sleeves** grouted or foamed in place, and **steel pipe supports** that get anchored into grouted CMU walls. Subcontract 23A shall furnish steel sleeves for Mechanical penetrations, Subcontract 26A shall furnish steel sleeves for Electrical penetrations, and Subcontract 5A shall furnish steel lintels and pipe support steel.
16. Subcontract 4A shall install the **steel sleeves** (provided by others) and shall furnish and install the specified **expandable concrete grout** (and **expansive foam** at non-rated walls) between the steel sleeves and the masonry.
17. Subcontract 4A shall **grout hollow cells, and drypack**, as needed for anchoring steel at penetrations, pipe supports under louvers, fastening steel or other items to CMU walls, etc., as indicated on the Drawings, and shall also **grout door frames and thresholds** as required.
18. Subcontract 4A shall furnish and install the specified **2" rigid insulation** for exterior wall infills, in accordance with **Section 07 21 00 Thermal Insulation**.
19. Subcontract 4A shall furnish and install the specified **joint sealants and compressible joint filler for masonry joints** as required for watertight construction, in accordance with **Section 07 92 00 Joint Sealants** and Contract Drawings. Subcontract 4A is responsible for all joint sealants in control and expansion joints in unit masonry, within or abutting masonry walls. Before installation, field mockups and preconstruction adhesion and compatibility testing is required.
20. Subcontract 4A is responsible to establish **all line and grade** work for the performance of their work and shall coordinate with Subcontracts 3A, 5A, 9A, 23A, 31B and other respective Subcontractors on the site. Subcontract 31B will provide control lines and grade.
21. Subcontract 4A is responsible to **unload, store, protect from loss and damage, then distribute and install** all materials associated with this bid package.
22. Subcontract 4A is responsible for **storing materials off site** until such time as they are needed on site and for storing and moving materials on site due to changing jobsite conditions as needed.



23. Subcontract 4A is responsible for taking and verifying field **as built conditions and dimensions** as required for the performance of this scope of work.
24. Subcontract 4A is responsible for **holding opening dimensions based on approved shop drawings** at the direction of the Construction Manager.
25. Subcontract 4A is responsible to furnish and install all **masonry patching, replacement, repair, cleaning, backup and infill** work due to selective demolition activities performed by Subcontract 4A or MEP trades per the Contract Documents. All work will be toothed-in to the existing adjacent masonry. No salvaged CMU will be provided or used. Follow all keynotes associated with masonry work on the Drawings.
26. Subcontract 4A is responsible to construct **mock-ups** as requested for Architect's approval.
27. Subcontract 4A is responsible to **shore any areas** that are a result of or required to facilitate the Masonry work. Engineered calculations and plans stamped by a Connecticut P.E. is required for all shoring.
28. Subcontract 4A is responsible to furnish and install **temporary egress walkways and ramps** as necessary to maintain emergency egress thru its construction area. Subcontract 4A is responsible for maintaining this same protection until completion of this scope and safety is assumed by another Subcontractor as determined by the Construction Manager.
29. Subcontract 4A is responsible for any **patching and infill of existing masonry** where selective demolition has taken place to restore masonry as needed along the limits of demolished masonry. Furnish and install new masonry units, grout, mortar and reinforcement as specified. Match adjacent surface condition where demolition activities have occurred. Tothing-in is required by Contract Documents. Recess repairs may be possible at the discretion of the Architect on a case by case basis. (See Architectural Drawings for locations).
30. Subcontract 4A is responsible to **demo and remove masonry for openings** that require lintels for renovations and new work, including new openings for doors, windows, louvers, etc. Subcontract 4A shall tooth-in, patch, repair, anchor, install lintels and finish all such masonry openings. (Lintels will be provided by Subcontract 5A. Subcontract 4A is responsible to receive, inventory and store lintels on the job site). Subcontract 4A shall coordinate the lintel schedule with Subcontract 5A noting required sizes and lengths for all masonry openings. Subcontract 4A shall coordinate the demo of existing masonry walls for new openings and safe installation of lintels. Subcontract 4A shall provide engineered temporary shoring as required until wall is structurally sound by itself.
31. Subcontract 4A is responsible to **tooth-in, patch, repair, infill, and finish** all masonry recesses and openings where existing fire extinguishers, access panels, screws, fasteners, ducts, louvers, vents,



- pipng, mechanical and electrical equipment, backboxes, lights, devices, panels, etc. were or are to be removed or new masonry openings by MEP Subcontracts.
32. Subcontract 4A will be responsible for **providing access**, (ie. use of lifts and an operator) for the test lab technicians or inspectors to perform their onsite masonry sampling and inspections.
  33. Subcontract 4A is responsible to furnish and install embedded **sheet metal flashing, membrane flashing**, through-wall flashing, under coping flashing, and manufactured reglets installed in masonry joints as specified and as shown on drawings.
  34. Subcontract 4A is responsible to furnish and install all **expansion, control and seismic joint** assemblies in or abutting all masonry walls. Form open joint full depth and of width indicated, but not less than 1/2 inch for installation of sealant and backer rod specified in **Section 07 92 00 Joint Sealants**. Backer rod and joint sealants for masonry and door frames in masonry is by Subcontract 4A.
  35. **Penetration Firestopping** per **Section 07 84 13** for through wall penetrations shall be by the MEP trades.
  36. Subcontract 4A is responsible for installing all **security access doors and frames** and make provisions for recessed boxes as required in masonry walls in accordance with **Section 08 31 13.53 Security Access Doors and Frames** of the Specifications whether shown on the Drawings or not. The Security Access Doors and Frames will be provided by the respective trades.
  37. Subcontract 4A will supply the **testing lab** with mortar, grout, CMUs, etc. for testing as required. Subcontract 4A is responsible to replace work that fails inspection and needs rework. This will be done at no cost to the Construction Manager. The cost of retesting will be paid for by Subcontract 4A additionally, the cost of the Construction Manager's time to manage the rework and retests will be paid for by Subcontract 4A.
  38. Subcontract 4A is responsible for **hot and cold weather** masonry work, including cooling and heating equipment, materials, fuel, tenting, scaffolding and labor for temporary heat, and moving and storing heating equipment and tanks as they are needed on site due to changing jobsite conditions.
  39. Subcontract 4A is responsible to grout solid and then **maintain plumbness and squareness of door frames** during set time of masonry. Hollow Metal Masonry Door Frames will be supplied by others and installed by Subcontract 4A, including the metal door frame for the sitewall gate. Backer rod and joint sealants for masonry and door frames in masonry is by Subcontract 4A.
  40. Subcontract 4A is responsible to receive, unload, inventory, store, handle, and install the new **hollow metal frames** that are designated for new and existing masonry openings. Subcontract 9A and Subcontract 4A are responsible to provide qualified representatives to inspect all of the masonry door frames upon delivery. If any of the frames are found to be incorrectly fabricated or damaged, they will





notify the Construction Manager in writing that day. Subcontract 9A then agrees to within three (3) days to either man the job for repairing the frame, or arrange to replace the frame within ten (10) calendar days.

41. Subcontract 4A shall **grout solid** new hollow metal frames installed in existing masonry openings as well as masonry on either side of doorways.
42. Subcontract 4A will be responsible for unloading and storing on site, distributing and then installing the **loose steel lintels** in all masonry openings as required. The loose steel lintels will be provided by Subcontract 5A.
43. Subcontract 4A is responsible to provide and install any **bracing** needed for CMU walls and then remove bracing when it is no longer needed.
44. Subcontract 4A is responsible to furnish and install components for the **pipe chase “doghouse” mock-up** per Section 04 22 00 Part 1.6A, for Architect’s approval.
45. Subcontract 4A is responsible to provide and install all **reinforcing steel** required within the interior and exterior masonry walls. Subcontract 3A shall furnish and install dowels in new concrete haunches and footings for new masonry walls. Layout of dowels for masonry is by Subcontract 4A.
46. Subcontract 4A shall **sort and load masonry debris** and other debris generated by masonry work into designated dumpsters as required by the Construction Manager. Dumpsters shall be furnished by the CMR.
47. Subcontract 4A is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. No hazardous materials abatement is included in your scope of work.
48. **SCHEDULE** – Follow the project’s master schedule and Site Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project’s master schedule. Work may or may not be continuous.
49. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate



Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.

50. **ALLOWANCES** – N/A.

51. **UNIT PRICES** – Provide unit prices in the Bid Proposal Form for:

A) Replacement of existing decorative split-face block \_\_\_\_\_ per SF.

B) Re-pointing of existing decorative split-face block \_\_\_\_\_ per SF.

C) Replacement of existing CMU \_\_\_\_\_ per SF.

D) Re-pointing of existing CMU \_\_\_\_\_ per SF.

E) Cleaning of existing masonry \_\_\_\_\_ per SF.

52. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**





# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

## Bid Package #5A Structural Steel & Miscellaneous Metals

1. The following scope of work is known as Bid Package #5A, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 5A will perform all the work described in Bid Package #5A. This includes completion of ALL Structural Steel and Miscellaneous Metals Work in this project, as further described herein.
3. Bid Package #5A includes all Structural Steel and Miscellaneous Metals Work, in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 73 29	*Cutting and Patching	01/21/19
<b>Division 02</b>	<b>Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19
<b>Division 05</b>	<b>Metals</b>	<b>01/21/19</b>
05 12 00	Structural Steel Framing	01/21/19

\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).



- B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
- C. Work Authorization Order #1, CT DAS Division of Construction Services.
- D. Agreement Between Contractor and Subcontractor (The Subcontract).
- E. GMP Amendment(s), CT DAS Division of Construction Services.
- F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
- G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
- H. Any and all Addenda issued prior to bid date for this Bid Package.
- I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
- J. Division 00 Procurement and Contracting Requirements (ALL Sections).
- K. Division 01 General Requirements (ALL Sections).
- L. PDS Procurement Requirements Section 00 23 00.
- M. CT DOC Security Requirements Section 00 73 63.
- N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
- O. Division 50 Project-Specific Available Information.
- P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
- Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
- R. Site Logistics Plan by PDS Engineering & Construction, Inc.
- S. Building Logistics Plan by PDS Engineering & Construction, Inc.

#### **SCOPE OF WORK: Subcontract 5A**

- 5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 5A is responsible for, the term "Contractor", "General Contractor", "Subcontractor", "Steel Contractor", "Construction Manager", "CMR", or "Others" shall mean "Subcontract 5A".
- 6. Subcontract 5A is responsible for **all Structural Steel and Miscellaneous Metals Work** including, but not limited to, furnish and install all tube steel posts, angles, and channels for steel framing for pipe chase "doghouses", tube steel header and "doors" for sitewall door/gate, anchor bolts and leveling



plates for structural steel columns, anchors and through-bolts for wall mounted supports, steel tube and column supports, structural steel framing for pipe supports, vertical pipe supports, truss pipe anchor supports, Atrium pipe anchor support framing, Boiler Room Steel framing, roof decking, cuts through roof decking for steel posts and pedestals and stacks, loose lintels, bollards with reflective tape, roof stair, reinforcing plates, threaded rods, joist hangers, openings in steel for pipes, wide flange skid beams for new cooling tower, with expansion anchors, relocate wide flange skid beams for existing cooling towers, with expansion anchors, Building 10 stack roof opening frames, structural pipe support frames, gusset plates, welding, demolition of existing ladders and handrails, steel plates, posts, columns and beams for pipes under louver assembly and through exterior wall in Building 8, etc., in accordance with **Section 05 12 00 Structural Steel Framing**, Architectural Drawings and details, Structural Drawings and details, and other Contract Documents.

7. Steel Subcontract 5A is responsible to **field measure, fabricate, furnish and install the tube steel header and the sitewall door/gate**. Subcontract 9A is responsible to **furnish only the metal door frame for the sitewall door/gate**, which shall be installed by Masonry Subcontract 4A. Subcontract 9A is responsible to **furnish and install the detention door hardware for the sitewall door/gate**. Coordinate all materials and installation with Subcontracts 4A and 9A.
8. For reference, Subcontract 5A must be familiar with the **bid packages and scope of work for Concrete Subcontract 3A, Masonry Subcontract 4A, Roofing & Waterproofing Subcontract 7A, General Trades Subcontract 9A, and Mechanical Subcontract 23A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.
9. Subcontract 5A is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and



procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.

10. Subcontract 5A is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls, and Section 01 73 27 Cutting and Patching** as it applies to Structural Steel and Miscellaneous Metals Work, including furnishing all of the following: Subcontractor 5A's drinking water, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, pumps, buggies, chutes, ladders, staging and scaffolding, environmental protection, fire extinguishers, barricades, temporary enclosures, temporary heating and ventilating, temporary shoring and support, welding blankets, welding screens, material and equipment handling, protection and storage, temporary power and temporary lighting, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Structural Steel and Miscellaneous Metals Work.
11. Mechanical Subcontract 23A and Electrical Subcontract 26A are responsible to **layout and coordinate the square/rectangular wall openings** for louvers, piping, and ductwork **and round wall openings** for pipe, conduit, and duct penetrations, and all pipe supports, with Subcontract 5A. Subcontract 23A and Subcontract 26A are responsible to core drill their round masonry wall openings for pipe, conduit and duct penetrations. Square or rectangular masonry openings for louvers, piping and ductwork shall be the responsibility of Masonry Subcontract 4A. In all cases, the steel sleeves will be provided by others for installation by Subcontract 4A.
12. All work and sequencing shall strictly comply with the project **Master Schedule and Site Logistics Plan**. Subcontract 5A shall provide and maintain a flexible workforce in the event QC tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.
13. Subcontract 5A is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **structural steel and miscellaneous metals work**, both interior and exterior, as required for the new piping, supports, frames, pedestals, cut holes in steel roof decking for pipes, supports, pedestals, curbs, drains, sumps, expansion joints, etc., roof steel and decking for new and/or modified penetrations, steel roof decking over existing holes in roofs from boiler stacks and chiller relief pipes etc., wall framing associated with relocated exhaust fan, conduits, ductwork, gates, doors, railings, ladders, platforms, louvers, fans, mechanical equipment, etc.



14. Subcontract 5A is responsible for all **Selective Demolition for structural steel and miscellaneous metals** in accordance with **Section 02 41 19 Selective Demolition**, Civil Drawings, Mechanical Drawings, Architectural Drawings, Structural Drawings, and other Contract Documents, including removal, reinforcement, cutting or modifications to existing steel to facilitate installation of new steel, and selective demolition of ladders, railings, platforms and other steel items, as indicated on the Drawings, with the exception of the Cooling Tower.
15. Subcontract 5A is responsible to **furnish only: anchor bolts to be embedded in concrete**, templates, leveling plates, embedded plates, etc. for installation by Concrete Subcontract 3A. These items are to be delivered to the job site prior to the start of concrete operations. Refer to all Architectural, Structural and other Drawings for notes and information regarding structural steel. Subcontract 5A shall furnish and install **anchor bolts and through-bolts for masonry walls**.
16. Subcontract 5A is responsible for all **engineered shop drawings** and detailing, field measuring, field verification of structural elements, samples, and all coordination necessary for this scope of work.
17. Subcontract 5A is responsible to **unload, store, protect from damage, then distribute and install** all materials associated with this bid package.
18. Subcontract 5A is responsible for **storing materials off site** until such time as they are needed on site and for storing and moving materials on site due to changing jobsite conditions as needed.
19. Subcontract 5A is responsible to **establish all line and grade** for the performance of their work and shall field verify all dimensions prior to fabrication and installation of work. Sitework Subcontract 31B is responsible to provide the control line and grade for site piping, and Subcontract 23A is responsible for all other piping and mechanical layout. Coordinate dimensions with Civil, Mechanical, Architectural and Structural Drawings.
20. Subcontract 5A is responsible for **structural steel pipe support framing**. Mechanical Subcontract 23A is responsible for **pipe supports shown on Drawings M901 and M901.1**.
21. The Structural Drawings **contain notes, charts, details, code references and specifications** that should complement the Specification Section in the Project Manual. In case of a conflict between specifications, the more stringent or more expensive requirements shall apply.
22. Unless otherwise stated, all exterior steel members shall be **hot-dip galvanized**. Touch-up coating during field construction as required. All interior steel members shall be **shop primed** and painted to match existing steel. Primer for interior steel to be finish painted by Subcontract 9B shall be compatible with finish paint specified in **Section 09 91 23 Interior Painting**. Subcontract 5A is responsible for surface prep, shop priming, and field touch-up of primer for all structural steel and metal fabrications.



23. Subcontract 5A is responsible to furnish and install **all structural steel** required to frame and support the new MEP piping and equipment, ductwork, roof openings, wall openings, door, window and louver openings, beam connections, column connections, bent plates, bracing, etc., in accordance with **Section 05 12 00 Structural Steel Framing** of the Specifications and the Contract Drawings.
24. Subcontract 5A is responsible to furnish and install all **temporary engineered shoring** required to perform its work. Shoring design requires calculations and shop drawings stamped by a Connecticut P.E. Remove shoring only after it is safe to do so, as determined by the CMR.
25. Subcontract 5A is responsible to **coordinate all structural steel work** with all other Subcontractors having work adjacent to or connecting to the structural steel. This subcontractor will review and sign off on the MEP coordination drawings for Buildings 8, 9 and 10.
26. Subcontract 5A shall obtain **connection requirements** of any components that attach to the structural steel and incorporate those requirements into the structural steel shop drawings.
27. Subcontract 5A is responsible to **retrofit and reinforce existing structural steel and open web joists** to remain as necessary and as shown on Drawings.
28. Subcontract 5A, within 10 days prior to the start of steel erection, for each section of work, will **field check** the installation of anchor bolts, leveling plates, and bearing plates and other structural steel embedded items. Any deviations will be brought to the attention of the Construction Manager so that corrections can be made in ample time so as not to delay the start of structural steel erection.
29. Subcontract 5A is responsible to furnish and install all **steel roof decking** for pipe chases “doghouses”, new and/or modified penetrations, and over existing holes in roofs from boiler stacks and chiller relief pipes, roof drains, etc., including all associated accessories, to provide a complete system whether detailed and shown on drawings or not.
30. Subcontract 5A shall furnish and install **structural steel supports and metal decking or steel plates** as needed in roof openings in existing buildings where ducts, vents, piping, mechanical and electrical equipment have been removed.
31. Subcontract 5A is responsible to furnish and install **clip angles or other structural support** around columns or under other cut ends to hold up unsupported ends of deck.
32. Subcontract 5A is responsible to furnish and install complete **safety systems** as required by OSHA for its work. This requirement applies at all perimeter edges, interior shafts, and stairwell openings for fall protection, in accordance with all federal OSHA regulations. Subcontract 5A is to maintain this fall protection on a daily basis until the structural steel work is complete. Subcontract 5A will remove the safety cable system and stanchions at a later date as directed by the Construction Manager.





33. Subcontract 5A is responsible to coordinate with the MEP trades to furnish, install structural **framed openings**. Sizes and locations to be provided by MEP subcontractors. Framed openings to be installed through roof deck or walls.
34. Subcontract 5A is responsible to coordinate with all other subcontractors to provide and install all framed openings and **reroute bridging**, if necessary, to allow ducts and other penetrations through the structural framing, metal decking, and masonry walls.
35. Subcontract 5A is responsible for **reinforcing** of the existing beams and columns as shown on the Drawings.
36. Subcontract 5A is responsible for **reinforcing the existing steel pipe crossing platforms** (approximately 3 feet high or less) in Buildings 1 and 2, to add steps on both sides, and railings and bracing as needed to make them safe to use.
37. Subcontract 5A is responsible to fabricate and deliver all **loose lintels** required as specified for doors, windows, MEP openings and Architectural openings, including hot-dip galvanized lintels locations at the exterior walls. Submit a complete Lintel Schedule for all such openings. Coordinate lintel schedule with Subcontract 4A. Subcontract 4A is responsible to receive, inventory and store lintels on the job site.
38. Subcontract 5A will be responsible for **providing access**, (ie. use of lifts and an operator) for the test lab technicians to perform their onsite steel inspections.
39. Subcontract 5A will replace work that **fails inspection and needs rework**. This will be done at no cost and the cost of retesting will be paid for by this Subcontractor. Additionally the cost of the Construction Manager's time to manage the retests will be paid for by this Subcontractor.
40. Subcontract 5A will be responsible to **pre-punch holes or drill** the structural steel and angle supports for attachment of wood blocking. Locations to be as shown on the drawings or instructed through coordination with the Subcontracts 7A and 9A.
41. Subcontract 5A will be responsible to **shop weld bolts** or threaded studs for the attachment of the wood blocking. Locations to be as shown on the drawings or instructed through coordination with the Subcontracts 7A and 9A.
42. Subcontract 5A is responsible to furnish and install **dunnage and supports** for rooftop Mechanical and Electrical Equipment.
43. Subcontract 5A is responsible to furnish and install the **beam to CMU connection** clip angles attached to the structural steel or metal deck and bolted to the masonry walls as needed or shown on Drawings. Furnishing and installation of the anchors into the masonry wall is by subcontract 5A.



44. Subcontract 5A shall provide and install the **masonry anchors** on beams and columns. Locations shall be coordinated with Subcontract 4A. If Subcontract 4A provides any additional anchors beyond what is shown on the drawings, subcontract 5A shall weld them on to the steel.
45. Subcontract 5A is responsible to furnish and install steel framing and supports for overhead coiling doors and other **large openings**.
46. Subcontract 5A is responsible to furnish and install **steel ladders** and accessories. Note that the ladders, railings, and platforms for the Cooling Towers shall be removed and replaced by Mechanical Subcontract 23A as part of their equipment package.
47. Subcontract 5A is responsible to furnish all **anchor bolts** and accessories associated with this scope of work.
48. Subcontract 5A is responsible to furnish and install all **miscellaneous** steel and miscellaneous galvanized steel and accessories in accordance with the Drawings and Specifications.
49. Subcontract 5A is responsible to furnish and deliver all grating, plates, trench drain embed angles and grates or covers, and any miscellaneous steel items embedded in the concrete required for this scope of work. The concrete embedded items are required to be on site at the start of concrete operations.
50. Subcontract 5A is responsible to furnish and install **pipe sleeves or core drill** for railings, as approved by the Architect.
51. Subcontract 5A is responsible to submit a **blocking coordination drawing** showing their blocking requirements. Subcontract 5A will review in the field and coordinate the installation of the in-wall blocking. The in-wall blocking will be the responsibility of Subcontract 9A. Missing or improperly located blocking due to incorrect coordination will be corrected by Subcontract 9A and back charged to Subcontract 5A.
52. Subcontract 5A is responsible to furnish and install components for the **pipe chase “doghouse” mock-up** per Section 04 22 00 Part 1.6A, for Architect's approval.
53. Subcontract 5A shall pay particular attention to details shown on Architectural Drawings and Structural Drawings that show typical **interior and exterior wall infills**, typical **wall penetrations with steel sleeves** grouted or foamed in place, and **steel pipe supports** that get anchored into grouted CMU walls. Subcontract 23A shall furnish steel sleeves for Mechanical penetrations, Subcontract 26A shall furnish steel sleeves for Electrical penetrations, and Subcontract 5A shall furnish steel lintels and pipe support steel.
54. Subcontract 5A is responsible to establish **all line and grade** work for the performance of their work and shall coordinate with Subcontracts 3A, 7A, 9A, 23A, 31B and other respective Subcontractors on the site. Subcontract 31B will provide control lines and grade.





55. Subcontract 5A is responsible to **unload, store, protect from loss and damage, then distribute and install** all materials associated with this bid package.
56. Subcontract 5A is responsible for taking and verifying field **as built conditions and dimensions** as required for the performance of this scope of work.
57. Subcontract 5A is responsible for **holding opening dimensions based on approved shop drawings** at the direction of the Construction Manager.
58. Subcontract 5A is responsible to **shore any areas** that are a result of or required to facilitate the Structural Steel work. Engineered calculations and plans stamped by a Connecticut P.E. is required for all shoring.
59. Subcontract 5A is responsible to furnish and install **temporary egress walkways and ramps** as necessary to maintain emergency egress thru its construction area. Subcontract 5A is responsible for maintaining this same protection until completion of this scope and safety is assumed by another Subcontractor as determined by the Construction Manager.
60. Subcontract 5A is responsible for **hot and cold weather** steel work, including cooling and heating equipment, materials, fuel, tenting, scaffolding and labor for temporary heat, and moving and storing heating equipment and tanks as they are needed on site due to changing jobsite conditions.
61. Subcontract 3A is responsible to install **anchor bolts and grout the leveling plates** provided by Subcontract 5A and pack grout under column base plates. Subcontract 3A is to furnish the grout.
62. Subcontract 5A shall **sort and load steel debris** and other debris generated by steel work into designated dumpsters as required by the Construction Manager. Dumpsters shall be furnished by the CMR.
63. Subcontract 5A is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. Pay attention to **Section 50 20 00 Environmental Assessment Information**, which contains the **Soil Management Plan**, and **Section 50 40 00 Subsurface Geotechnical Report**. These documents are provided for your information. No hazardous materials abatement is included in your scope of work.
64. **SCHEDULE** – Follow the project’s master schedule and Site Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or



claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project's master schedule. Work may or may not be continuous.

65. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.
66. **ALLOWANCES** – N/A.
67. **UNIT PRICES** – N/A.
68. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**



# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

## Bid Package #7A Roofing & Waterproofing

1. The following scope of work is known as Bid Package #7A, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 7A will perform all the work described in Bid Package #7A. This includes completion of ALL Roofing and Waterproofing Work in this project, as further described herein.
3. Bid Package #7A includes all Roofing and Waterproofing in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 77 00	*Closeout Procedures	01/21/19
<b>Division 02</b>	<b>*Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19
<b>Division 06</b>	<b>*Wood, Plastics and Composites</b>	<b>01/21/19</b>
06 10 00	*Rough Carpentry	01/21/19
<b>Division 07</b>	<b>Thermal and Moisture Protection</b>	<b>01/21/19</b>
07 13 26	Self-Adhering Sheet Waterproofing	01/21/19
07 14 16	Cold Fluid-Applied Waterproofing (Roofing)	01/21/19
07 21 00	*Thermal Insulation	01/21/19



07 27 15	Non-Bituminous Self-Adhering Sheet Air Barriers	01/21/19
07 53 23	Ethylene-Propylene-Diene-Monomer (EPDM) Roofing	01/21/19
07 62 00	Sheet Metal Flashing and Trim	01/21/19
07 71 00	*Roof Specialties	01/21/19
07 72 00	Roofing Accessories	01/21/19
07 72 53	Snow Guards	01/21/19
07 92 00	*Joint Sealants	01/21/19
<b>Division 10</b>	<b>Specialties</b>	<b>01/21/19</b>
10 84 00	Bird Control	01/21/19

\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).
  - B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
  - C. Work Authorization Order #1, CT DAS Division of Construction Services.
  - D. Agreement Between Contractor and Subcontractor (The Subcontract).
  - E. GMP Amendment(s), CT DAS Division of Construction Services.
  - F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
  - G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
  - H. Any and all Addenda issued prior to bid date for this Bid Package.
  - I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
  - J. Division 00 Procurement and Contracting Requirements (ALL Sections).
  - K. Division 01 General Requirements (ALL Sections).
  - L. PDS Procurement Requirements Section 00 23 00.
  - M. CT DOC Security Requirements Section 00 73 63.
  - N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
  - O. Division 50 Project-Specific Available Information.



- P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
- Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
- R. Site Logistics Plan by PDS Engineering & Construction, Inc.
- S. Building Logistics Plan by PDS Engineering & Construction, Inc.

#### **SCOPE OF WORK: Subcontract 7A**

- 5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 7A is responsible for, the term “Contractor”, “General Contractor”, “Subcontractor”, “Roofing Contractor”, “Construction Manager”, “CMR”, or “Others” shall mean “Subcontract 7A”.
- 6. Subcontract 7A is responsible for **all Roofing and Waterproofing Work** including, but not limited to, roofing and AVB for all pipe chase “doghouses”, removal and replacement of Building 8 Canopy roof, all roof repairs/patching as indicated for structural steel pipe supports, roof stair, and new and existing MEP openings, in accordance with **Division 07 Specifications**, Architectural Drawings and details, Structural Drawings and details, and other Contract Documents, and bird control systems in accordance with **Section 10 84 00**, Architectural Drawings and details, and other Contract Documents.
- 7. For reference, Subcontract 7A must be familiar with the **bid packages and scope of work for Masonry Subcontract 4A, Structural Steel & Miscellaneous Metals Subcontract 5A, General Trades Subcontract 9A, and Mechanical Subcontract 23A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.
- 8. Subcontract 7A is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction



Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.

9. Subcontract 7A is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls, and Section 01 73 27 Cutting and Patching** as it applies to Roofing and Waterproofing Work, including furnishing all of the following: Subcontractor 7A's drinking water, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, ladders, staging and scaffolding, environmental protection, fire extinguishers, barricades, temporary enclosures, temporary heating and ventilating, temporary shoring and support, material and equipment handling, protection and storage, temporary power and temporary lighting, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Roofing and Waterproofing Work.
10. Mechanical Subcontract 23A and Electrical Subcontract 26A are responsible to **layout and coordinate the square/rectangular wall openings** for louvers, piping, and ductwork **and round wall openings** for pipe, conduit, and duct penetrations, and all pipe supports that affect roofing work with Subcontract 7A. Subcontract 23A and Subcontract 26A are responsible to core drill their round masonry wall openings for pipe, conduit and duct penetrations. Square or rectangular masonry openings for louvers, piping and ductwork shall be the responsibility of Masonry Subcontract 4A. In all cases, the steel sleeves will be provided by others for installation by Subcontract 4A.
11. All work and sequencing shall strictly comply with the project **Master Schedule and Site Logistics Plan**. Subcontract 7A shall provide and maintain a flexible workforce in the event QC tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.
12. Subcontract 7A is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **roofing and waterproofing work**, as required for the new piping, supports, frames, roof stair, pedestals, boots, reglets in masonry, supports, curbs, drains, sumps, expansion joints, etc., new and/or modified penetrations, steel roof decking over existing holes in roofs from boiler stacks and chiller relief pipes etc., Subcontract 5A shall furnish and install steel decking.
13. Subcontract 7A is responsible for all **Selective Demolition of Building 8, 9A & 9C roofing and roof expansion joints**, in accordance with **Section 02 41 19 Selective Demolition, Architectural Drawings A248.1, A248.2** and other Architectural Drawings, Structural Drawings, and other Contract



Documents, including removal, handling, disposal into designated dumpsters, protection, reset and reuse existing metal coping, and any other selective demolition of roofing required on this project.

14. Subcontract 7A is responsible for all **shop drawings and submittals** including plans and elevations, sections, details, attachments to other work, samples, with FM Global Forms 2688 Checklist For Roofing System for each roofing system, based on field measurements and field verification of structural elements, and all coordination necessary for this scope of work. Submit a set of approved shop drawings along with the completed FM Global Forms 2688 to FM Global for review and acceptance prior to material purchase and roofing installation.
15. Subcontract 7A is responsible to **unload, store, protect from damage, then distribute and install** all materials associated with this bid package.
16. Subcontract 7A is responsible for **storing materials off site** until such time as they are needed on site and for storing and moving materials on site due to changing jobsite conditions as needed.
17. The Architectural Drawings and Structural Drawings **contain notes, charts, details, code references and specifications** that should complement the Specification Sections in the Project Manual. In case of a conflict between specifications, the more stringent or more expensive requirements shall apply.
18. Subcontract 7A is responsible to furnish and install **all roofing and waterproofing** including, but not limited to, Building 8, 9A & 9C re-roof, all pipe chase “doghouse” roofs, roof penetration flashing, roof patching, metal flashings and copings, roof insulation, roofing accessories, and air-vapor barrier in accordance with **Division 07 Thermal and Moisture Protection** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
19. Subcontract 7A is responsible to furnish and install **all self-adhering sheet waterproofing** in accordance with **Section 07 13 26 Self-Adhering Sheet Waterproofing** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
20. Subcontract 7A is responsible to furnish and install **all cold fluid-applied waterproofing** in accordance with **Section 07 14 16 Cold Fluid-Applied Waterproofing (Roofing)** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
21. Subcontract 7A is responsible to furnish and install **all rigid roof thermal insulation for pipe chase “doghouses”** in accordance with **Section 07 21 00 Thermal Insulation** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
22. Subcontract 7A is responsible to furnish and install **all self-adhering, vapor-permeable, non-bituminous sheet air barriers** in accordance with **Section 07 27 15 Non-Bituminous Self-Adhering Sheet Air Barriers** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.





23. Subcontract 7A is responsible to furnish and install **all adhered EPDM roofing system and tapered polyiso roof insulation** in accordance with **Section 07 253 23 Ethylene-Propylene-Diene-Monomer (EPDM) Roofing** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
24. Subcontract 7A is responsible to furnish and install **all roof details** including, but not limited to, walkways pads, membrane flashing, sealants, expansion joints, exhaust stack curbs, etc. in accordance with **Drawing A520**.
25. Subcontract 7A is responsible to furnish and install **all roofing sheet metal flashing and trim** including, but not limited to, formed roof-drainage sheet metal fabrications, formed low-slope roof sheet metal fabrications, copings, roof-edge specialties, etc. in accordance with **Section 07 62 00 Sheet Metal Flashing and Trim** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings. Salvage and re-use metal trim and copings where indicated.
26. Subcontract 7A must strictly adhere to the **Performance Requirements** and **Warranty Requirements** listed in **Section 07 53 23 EPDM Roofing** and **Section 07 62 00 Sheet Metal Flashing and Trim**.
27. Subcontract 7A is responsible to flash-in **all roof specialties** including, but not limited to, roof curbs, equipment supports, pipe supports, roof walkways, etc. furnished by others in accordance with **Section 07 72 00 Roof Accessories** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
28. Subcontract 7A is responsible to furnish and install **all aluminum, pad-type, flat-mounted snow guards** in accordance with **Section 07 72 53 Snow Guards** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
29. Subcontract 7A is responsible to furnish and install **all joint sealants** in accordance with **Section 07 92 00 Joint Sealants** as it pertains to this scope of work as required to provide a complete and warranted roofing system. This shall also include joint sealants at all areas where the work of Subcontract 7A intersects or abuts the work of any other materials installed by other Subcontracts. Before installation, field mockups and preconstruction adhesion and compatibility testing is required.
30. Subcontract 7A is responsible to furnish and install **all electrified tape (solar powered) bird deterrent systems** and **all stainless steel wire bird deterrent systems** in accordance with **Section 10 84 00 Bird Control** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings. Prepare field mockups prior to installation of bird control systems for Architect's approval.
31. Subcontract 7A is responsible to **coordinate all roofing and waterproofing work** with all other Subcontractors (i.e. 4A, 5A, 9A, 23A) having work adjacent to or connected to the roofs or other waterproofed surfaces.





32. Subcontract 7A shall obtain **connection requirements** of any components that attach to the roofs or walls and incorporate those requirements into the roofing shop drawings.
33. Subcontract 7A is responsible to furnish and install all **wood roof blocking, roof nailers and rooftop equipment support blocking** in contact with the roof deck required for roofing, flashing, trim, steel railing posts, frames, dunnage, MEP equipment curbs, pipe/conduit/ductwork supports, and any other appurtenance on the roof in accordance with all Contract Documents and Drawings in accordance with **Section 06 10 00 Rough Carpentry**. All wood shall be fire-retardant-treated as specified. Refer to all Architectural, Structural and other Drawings for notes and information regarding miscellaneous rough carpentry. Additional compensation will not be made for blocking required, but not shown on the Contract Drawings. Framing, metal roof deck, and exterior plywood or gypsum sheathing not in contact with the roof deck is by others.
34. Subcontract 9A is responsible to furnish and install all wood and CFMF framing and blocking components for pipe chase “doghouses” that are not in contact with the roof deck.
35. Steel Subcontract 5A is responsible to furnish and install all **steel roof decking** for pipe chases “doghouses”, new and/or modified penetrations, and over existing holes in roofs from boiler stacks and chiller relief pipes, roof drains, etc., including all associated accessories.
36. Steel Subcontract 5A shall furnish and install **structural steel supports and metal decking or steel plates** as needed in roof openings in existing buildings where ducts, vents, piping, mechanical and electrical equipment have been removed.
37. Steel Subcontract 5A is responsible to furnish and install **clip angles or other structural support** around columns or under other cut ends to hold up unsupported ends of deck.
38. Subcontract 7A is responsible to furnish and install complete fall arrest or fall prevention **safety systems** as required by OSHA for its work. This requirement applies at all perimeter edges and roof openings for fall protection, in accordance with all federal OSHA regulations. Subcontract 7A is to maintain this fall protection on a daily basis until the roofing work is complete. Subcontract 7A will remove the safety cable system and stanchions at a later date as directed by the Construction Manager. Subcontract 7A is responsible to include patching the roof at the locations where perimeter fall protection safety cable stanchions were removed.
39. Subcontract 7A is responsible to insure all openings in roofs are protected with OSHA approved fall prevention covers or guard rail protection as required until permanent rooftop equipment, breechings, or roof accessories are installed over openings.
40. Subcontract 7A is responsible to coordinate with the MEP trades all structural **framed openings** through roofs. Sizes and locations to be provided by MEP subcontractors.



41. Subcontract 7A is responsible to **coordinate with all other subcontractors** all roof penetrations such as structural framing and pedestals, tie-down anchor points, ducts, pipes, conduits, and other penetrations through the metal decking.
42. Subcontract 7A will replace work that **fails inspection and needs rework**. This will be done at no cost and the cost of retesting will be paid for by this Subcontractor. Additionally the cost of the Construction Manager's time to manage the retests will be paid for by this Subcontractor.
43. Steel Subcontract 5A will be responsible to **pre-punch holes or drill** the structural steel and angle supports for attachment of wood blocking. Locations to be as shown on the drawings or instructed through coordination with the Subcontracts 5A and 9A.
44. Subcontract 7A is responsible to furnish and install roofing and waterproofing components for the **pipe chase "doghouse" mock-up** per Section 04 22 00 Part 1.6A, for Architect's approval.
45. Subcontract 7A shall pay particular attention to details shown on **Architectural Drawings A248.1 and A248.2**, and other Architectural Drawings and Structural Drawings that show **re-roofing** of Buildings 8, 9A & 9C, **typical roofing details, exterior wall infills**, and typical **roof and wall sections of pipe chase "doghouses"**.
46. Subcontract 7A is responsible to establish **all line and grade** work for the performance of their work and shall field verify all dimensions prior to fabrication and installation of work. Coordinate dimensions with Civil, Mechanical, Architectural and Structural Drawings and with Subcontracts 3A, 4A, 5A, 9A, 23A, 31B and other respective Subcontractors on the site. Subcontract 31B will provide control lines and grade.
47. Subcontract 7A is responsible for taking and verifying field **as built conditions and dimensions** as required for the performance of this scope of work.
48. Subcontract 7A is responsible for **holding opening dimensions based on approved shop drawings** at the direction of the Construction Manager.
49. Subcontract 7A is responsible to furnish and install **temporary weathertight protection** as necessary to prevent water from entering buildings under construction. This will be needed where roofing is being removed or to be patched at roof openings and penetrations.
50. Subcontract 7A is responsible for **hot and cold weather** roofing and waterproofing work, including heating equipment, materials, fuel, tenting, scaffolding and labor for temporary heat, and moving and storing heating equipment and tanks as they are needed on site due to changing jobsite conditions.
51. Subcontract 7A shall **sort and load debris** generated by roofing and waterproofing work into designated dumpsters as required by the Construction Manager. Dumpsters shall be furnished by the CMR.



52. Subcontract 7A is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. These documents are provided for your information. No hazardous materials abatement is included in your scope of work.
53. Subcontract 7A will be responsible to coordinate with all the other trade subcontractors the removal and replacement /repair of the roof. During the removal and replacement phase of the roofs, water must be prevented from entering the existing building. If any water does enter the existing building during this work, Subcontract 7A must remove it immediately and install weathertight temporary protection. Subcontract 7A shall provide a minimum of \$1,000,000 pollution liability insurance.
54. Subcontract 7A is responsible to cut in reglets into walls where required for the installation of flashings and expansion joints.
55. Subcontract 7A is responsible to clean the roof at the completion of each sequence/phase, to include washing if required. Subcontract 7A is responsible to clean off all materials and debris from the roof before, during and after roof repairs, infills or installation of the new roof. Protect the roof materials from foot traffic and damage. Other trades are responsible to protect the membrane when working on the roof. After roofing work is complete, leave the roof free of dirt and loose screws, flashing, paper, etc. to the satisfaction of the Construction Manager.
56. Subcontract 7A is responsible to coordinate all roofing work with all other Subcontractors having work adjacent to or connecting to the roofs. This subcontractor will review and sign off on the MEP coordination drawings.
57. **SCHEDULE** – Follow the project’s master schedule and Site Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project’s master schedule. Work may or may not be continuous.
58. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.



59. **ALLOWANCES** – N/A.

60. **UNIT PRICES** – N/A.

61. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**

# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

**Bid Package #9A General Trades & Carpentry (MWBE set-aside)**

1. The following scope of work is known as Bid Package #9A, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 9A will perform all the work described in Bid Package #9A. This includes completion of ALL General Trades and Carpentry Work in this project, as further described herein.
3. Bid Package #9A includes all General Trades and Carpentry Work, in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 77 00	*Closeout Procedures	01/21/19
<b>Division 02</b>	<b>*Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19
<b>Division 05</b>	<b>*Metals</b>	<b>01/21/19</b>
05 40 00	Cold-Formed Metal Framing	01/21/19
<b>Division 06</b>	<b>*Wood, Plastics and Composites</b>	<b>01/21/19</b>
06 10 00	*Rough Carpentry	01/21/19
06 16 00	Sheathing	01/21/19
<b>Division 07</b>	<b>*Thermal and Moisture Protection</b>	<b>01/21/19</b>



07 42 13.19	Insulated Metal Wall Panels	01/21/19
07 62 00	*Sheet Metal Flashing and Trim	01/21/19
07 84 43	Joint Firestopping	01/21/19
07 91 00	Preformed Joint Seals	01/21/19
07 92 00	*Joint Sealants	01/21/19
<b>Division 08</b>	<b>Openings</b>	<b>01/21/19</b>
08 06 00	Schedules for Openings	01/21/19
08 31 13.53	Security Access Doors and Frames	01/21/19
08 34 63	Detention Doors and Frames	01/21/19
08 71 63	Detention Door Hardware	01/21/19
<b>Division 09</b>	<b>Finishes</b>	<b>01/21/19</b>
09 22 16	Non-Structural Metal Framing	01/21/19
09 29 00	Gypsum Board	01/21/19

\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).
  - B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
  - C. Work Authorization Order #1, CT DAS Division of Construction Services.
  - D. Agreement Between Contractor and Subcontractor (The Subcontract).
  - E. GMP Amendment(s), CT DAS Division of Construction Services.
  - F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
  - G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
  - H. Any and all Addenda issued prior to bid date for this Bid Package.
  - I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
  - J. Division 00 Procurement and Contracting Requirements (ALL Sections).
  - K. Division 01 General Requirements (ALL Sections).



- L. PDS Procurement Requirements Section 00 23 00.
- M. CT DOC Security Requirements Section 00 73 63.
- N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
- O. Division 50 Project-Specific Available Information.
- P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
- Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
- R. Site Logistics Plan by PDS Engineering & Construction, Inc.
- S. Building Logistics Plan by PDS Engineering & Construction, Inc.

#### **SCOPE OF WORK: Subcontract 9A**

5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 9A is responsible for, the term “Contractor”, “General Contractor”, “Subcontractor”, “General Trades Contractor”, “Carpenter”, “Construction Manager”, “CMR”, or “Others” shall mean “Subcontract 9A”.
6. Subcontract 9A is responsible for **all General Trades and Carpentry Work** including, but not limited to, all CFMF wall and roof framing, exterior wall sheathing, insulated metal wall panels and accessories, preformed joint seals, doors, frames and hardware, wall blocking, wall flashing and trim, drip edge, and sealants associated with the pipe chase “doghouses” (metal panel enclosures); selective demolition of existing metal wall panels and preparation and installation of new matching metal wall panels at Building 9C for relocated wall fan; selective demolition of existing gypsum board assemblies as required and installation of new gypsum board assemblies; temporary walls, temporary floor above the ceiling in one room in Building 3, walkways, railings, barricades, access ways and enclosures for construction, and temporary protection as required, in accordance with the Specifications, Architectural Drawings and details, Structural Drawings and details, and other Contract Documents.
7. For reference, Subcontract 9A must be familiar with the **bid packages and scope of work for Concrete Subcontract 3A, Masonry Subcontract 4A, Structural Steel & Miscellaneous Metals Subcontract 5A, Roofing Subcontract 7A, Ceiling Subcontract 9C, and Mechanical Subcontract 23A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.
8. Subcontract 9A is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on





site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.

9. Subcontract 9A is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls, and Section 01 73 27 Cutting and Patching** as it applies to General Trades and Carpentry Work, including furnishing all of the following: Subcontractor 9A's drinking water, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, ladders, staging and scaffolding, zipwalls, fire-rated poly, environmental protection, fire extinguishers, barricades, temporary enclosures of metal studs and fire-retardant-treated plywood and lumber, temporary heating and ventilating, temporary shoring and support, material and equipment handling, protection and storage, temporary signage, temporary power and temporary lighting, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with General Trades and Carpentry Work.
10. Subcontract 9A is responsible for all **Temporary Construction Measures** necessary to facilitate all construction activities **inside the occupied buildings**, including, but not limited to, furnish, install, move, and remove all staging and scaffolding, zipwalls, barricades, temporary doors and windows, temporary walls and enclosures (metal studs and fire-retardant-treated plywood and lumber), relocation of the temporary "rolling fence" (furnished by Subcontract 31A) inside Building 9, etc., and all other temporary construction measures as needed to segregate construction workers from DOC staff and inmates, in accordance with PDS' **Building Logistics Plan**.





11. Mechanical Subcontract 23A and Electrical Subcontract 26A are responsible for **round core-drilled wall openings** for pipe, conduit, and other wall penetrations in the “doghouses”. Square or rectangular masonry openings for louvers, piping and ductwork shall be the responsibility of Masonry Subcontract 4A. In all cases, the steel sleeves will be provided by others for installation by Subcontract 4A. Trim for piping and conduit penetrations in metal wall panels shall be by Subcontract 9A.
12. All work and sequencing shall strictly comply with the project **Master Schedule, Site Logistics Plan, and Building Logistics Plan**. Subcontract 9A shall provide and maintain a flexible workforce in the event QC tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR’s control.
13. Subcontract 9A is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **general trades and carpentry work**, as required for the construction. Patch and repair GWB walls, soffits, ceilings, and penetrations where existing conduits, duct or pipes are removed or relocated, including wall penetrations above ceilings. Existing openings to be exposed in finish work shall be patched and repaired flush and of the same material as the surrounding surface.
14. Subcontract 9A is responsible for all **Selective Demolition** necessary to facilitate all general trades and carpentry work including, but not limited to, removal of existing metal wall panels and cutting wall panels in preparation for installation of new matching metal wall panels at Building 9C for relocated wall fan, and selective demolition of existing gypsum board assemblies as required, in accordance with **Section 02 41 19 Selective Demolition, Architectural Drawings A248.1, A248.2, A511** and other Architectural Drawings, Structural Drawings, Mechanical Drawings, and other Contract Documents, including removal, handling, and disposal into designated dumpsters, protection, cleanup, etc.
15. Subcontract 9A is responsible to **unload, store, protect from damage, then distribute and install** all materials associated with this bid package.
16. Subcontract 9A is responsible for **storing materials off site** until such time as they are needed on site and for storing and moving materials on site due to changing jobsite conditions as needed.
17. The Architectural Drawings and Structural Drawings **contain notes, charts, details, code references and specifications** that should complement the Specification Sections in the Project Manual. In case of a conflict between specifications, the more stringent or more expensive requirements shall apply.
18. Subcontract 9A is responsible to furnish and install **all exterior non-load-bearing wall framing (CFMF)** in accordance with **Section 05 40 00 Cold-Formed Metal Framing** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.



19. Subcontract 9A is responsible to submit **delegated design calculations and shop drawings** prepared and sealed by a Connecticut Professional Engineer for the **Cold-Formed Metal Framing** specified in **Section 05 40 00**.
20. Roofing Subcontract 9A is responsible to furnish and install all **wood blocking that is not in contact with the roof deck** required for carpentry work in accordance with all Contract Documents and Drawings in accordance with **Section 06 10 00 Rough Carpentry**. Roofing Subcontract 7A is responsible to furnish and install all wood roof blocking, roof nailers and rooftop equipment support blocking that is in contact with the roof deck and required for roofing, flashing, trim, steel railing posts, frames, dunnage, MEP equipment curbs, pipe/conduit/ductwork supports, and any other appurtenance on the roof. All wood shall be fire-retardant-treated as specified. Refer to all Architectural, Structural and other Drawings for notes and information regarding miscellaneous rough carpentry. Additional compensation will not be made for blocking required, but not shown on the Contract Drawings. Structural steel, metal roof decking, and roofing systems are by others.
21. Steel Subcontract 5A is responsible to furnish and install all **steel roof decking** for pipe chases “doghouses”, including all associated accessories.
22. Subcontract 9A is responsible to furnish and install **all exterior wall sheathing (Dens-Glass Gold) and fasteners** for pipe chases “doghouses” in accordance with **Section 06 16 00 Sheathing** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
23. Subcontract 9A is responsible to furnish and install **all foamed-insulation-core metal wall panels** in accordance with **Section 07 42 13.19 Insulated Metal Wall Panels** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings. Match existing metal siding panels. Provide new matching panels even where indicated to be salvaged and reused.
24. Subcontract 9A is responsible to furnish and install **all sheet metal flashing and trim** for non-masonry walls and non-masonry wall openings including, but not limited to, bottom flashings and accessories for pipe chase “doghouses”, in accordance with **Section 07 62 00 Sheet Metal Flashing and Trim** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
25. Subcontract 9A must strictly adhere to the **Performance Requirements** and **Warranty Requirements** listed in **Section 07 62 00 Sheet Metal Flashing and Trim**.
26. Subcontract 9A is responsible to furnish and install **all preformed, foam joint seals** for pipe chase “doghouses” in accordance with **Section 07 91 00 Preformed Joint Seals** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
27. Subcontract 9A is responsible to furnish and install **all joint sealants** in accordance with **Section 07 92 00 Joint Sealants** and **joint firestopping** in accordance with **Section 07 84 43 Joint Firestopping** as



it pertains to this scope of work as required to provide a complete and warranted weathertight system. This shall also include joint sealants at all areas where the work of Subcontract 9A intersects or abuts the work of any other materials installed by other Subcontracts. Before installation, field mockups and preconstruction adhesion and compatibility testing is required. Joint firestopping includes joints in or between fire-resistance-rated constructions and joints in smoke barriers.

28. Subcontract 9A is responsible for installing all **security access doors and frames** in gypsum board assemblies in accordance with **Section 08 31 13.53 Security Access Doors and Frames** of the Specifications whether shown on the Drawings or not. The Security Access Doors and Frames will be provided by the respective trades.
29. Subcontract 9A is responsible to furnish and install **all detention doors, frames and hardware** for Doors 101 through 115 in pipe chase “doghouses” in accordance with **Section 08 06 00 Schedules for Openings, Section 08 34 63 Detention Doors and frames, and Section 08 71 63 Detention Door Hardware** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
30. Subcontract 9A is responsible to **furnish only the metal door frame for the sitewall door/gate**, which shall be installed by Masonry Subcontract 4A. Subcontract 9A is responsible to **furnish and install the detention door hardware for the sitewall door/gate**. Steel Subcontract 5A is responsible to field measure, fabricate, furnish and install the tube steel header and the sitewall door/gate. Coordinate all materials and installation with Subcontracts 4A and 5A.
31. Subcontract 9A is responsible to carefully **inspect all door frames** upon delivery and again prior to installation.
32. Subcontract 9A is responsible for **on-site handling and distribution**, and **temporary protection** of frames until painting.
33. Subcontract 9A shall **accept the door frames** once stored on site in the designated area(s) and shall install all frames for Doors 101 through 115.
34. Subcontract 9A is responsible for any costs associated with **straightening or aligning the frames** once installed.
35. Subcontract 9A is responsible to replace and reinstall any **missing door silencers** after painting is completed.
36. Subcontract 9A is responsible to **coordinate all general trades and carpentry work** with all other Subcontractors (i.e. 3A, 4A, 5A, 7A, 23A) having work adjacent to or connected to this scope of work. s.
37. Subcontract 9A shall obtain **connection requirements** of any components that attach to the walls and soffits and incorporate those requirements into the carpentry shop drawings.



38. Subcontract 9A is responsible to furnish and install **all non-load-bearing steel framing systems for interior partitions, suspension systems for interior ceilings and soffits, and grid suspension systems for gypsum board ceilings** in accordance with **Section 09 22 16 Non-Structural Metal Framing** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
39. Subcontract 9A is responsible to furnish and install **all interior gypsum board assemblies**, soffits, trim, joint treatment, accessories, and protection in accordance with **Section 09 29 00 Gypsum Board** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings.
40. Subcontract 9A will replace work that **fails inspection and needs rework**. This will be done at no cost and the cost of retesting will be paid for by this Subcontractor. Additionally the cost of the Construction Manager's time to manage the retests will be paid for by this Subcontractor.
41. Subcontract 9A is responsible to furnish and install all CFMF wall and roof framing, exterior wall sheathing, insulated metal wall panels and accessories, preformed joint seals, doors, frames and hardware, wall blocking, wall flashing and trim, drip edge, sealants, etc. components for the **pipe chase "doghouse" mock-up** per Section 04 22 00 Part 1.6A, for Architect's approval.
42. Subcontract 9A is responsible to establish **all line and grade** work for the performance of their work and shall field verify all dimensions prior to fabrication and installation of work. Coordinate dimensions with Civil, Mechanical, Architectural and Structural Drawings and with Subcontracts 3A, 4A, 5A, 7A, 23A, 31B and other respective Subcontractors on the site. Subcontract 31B will provide control lines and grade.
43. Subcontract 9A is responsible for taking and verifying field **as built conditions and dimensions** as required for the performance of this scope of work.
44. Subcontract 9A is responsible for **holding opening dimensions based on approved shop drawings** at the direction of the Construction Manager.
45. Subcontract 9A is responsible for **hot and cold weather** general trades and carpentry work, including heating equipment, materials, fuel, tenting, scaffolding and labor for temporary heat, and moving and storing heating equipment and tanks as they are needed on site due to changing jobsite conditions.
46. Subcontract 9A shall **sort and carpentry, gypsum board**, and other debris generated by general trades and carpentry work into designated dumpsters as required by the Construction Manager. Dumpsters shall be furnished by the CMR.
47. Subcontract 9A is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the



CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. These documents are provided for your information. No hazardous materials abatement is included in your scope of work.

48. Subcontract 9A is responsible to **clean the finished work** at the completion of each sequence/phase, to include washing if required. Subcontract 9A is responsible to clean off all materials and debris from the metal siding and doors. Protect the finishes from damage. After each sequence/phase is complete, leave the area free of dirt, loose screws, flashing, etc. to the satisfaction of the Construction Manager.
49. **TYPICAL UNDERGROUND PIPING INSTALLATION SEQUENCE OF WORK** – At the beginning of each sequence, Site Preparation Subcontract 31A shall remove trees, install erosion and sedimentation controls, install temporary fencing, strip topsoil, remove stumps, and rough grade the site in accordance with the phasing in the project's master schedule and Site Logistics Plan. **The Surveyor hired by Sitework Subcontract 31B** shall utilize the Engineer's survey data, elevations, coordinates, and stationing shown on the Survey Drawings, Civil Drawings, and Site Piping Alignment Tables, to **lay out all site underground piping, vaults, manholes, anchor blocks, buried conduits, pull boxes, etc.**, and provide offsets for the Work. Subcontract 31B shall then use these offsets to **excavate, export unsuitable soils, protect utilities, dewater, provide sand pipe bedding, and provide 3/8" pea stone under pipe joints**. Concrete Subcontract 3A shall install anchor blocks and footings for access riser vaults. Subcontract 31B shall furnish and install the **precast access riser vaults** with 18" diameter openings, and **precast manholes** with 8" or 18" diameter booted openings and sand bedding. Subcontract 23A shall furnish, handle, and install the prefabricated insulated piping and valves in the excavated areas and structures in the loop and all the way to the buildings. Subcontract 31B shall **backfill and compact** the underground piping, with sand bedding up to 4" above the pipe insulation, with joints exposed until the hydrostatic pressure testing and radiographic testing is complete and approved. Then they will **backfill and compact everything up to 38" below Finish Grade** so that Subcontract 23A can install the two (2) 4" Optical Fiber Cable (OFC) conduits with pull strings and specified pull boxes in accordance with **Section 27 11 00 Communications Equipment**, Civil Drawings, and Communication Drawings. Subcontract 31B shall then **backfill and compact the OFC conduits**. Subcontract 31A will return to move the temporary fence to the next sequence of work, spread topsoil, fine grade, and seed and/or mulch the disturbed areas to complete the sequence **while the next sequence is being excavated** by Subcontract 31B. All work and sequencing shall strictly comply with the project master schedule and Site Logistics Plan. Subcontract 9A shall provide and maintain a flexible workforce in the event QC tests fail, work falls behind schedule, CT DOC shuts down





the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.

50. All **indications and notations on the Drawings** which apply to one area, component, or condition shall apply to all other similar areas, components, or conditions unless clearly indicated otherwise.
51. Subcontract 9A is responsible to **repair any imperfections** in the drywall and taping after the prime coat of paint is applied by Subcontract 9B and prior to application of second coat of paint to the satisfaction of the Architect, Construction Manager and Owner at no additional cost.
52. Subcontract 9A is responsible to provide and install **drywall control joints** in GWB walls and soffits as specified and/or as shown on the Drawings. In addition to locations shown on the Drawings, install per manufacturer's recommendations, Building Code, and/or Architect's field direction.
53. Subcontract 9A is responsible to **repair any cracks** in the drywall and taping after the acoustic ceiling grid is installed by Ceilings Subcontract 9C and prior to application of final coat of paint to the satisfaction of the Architect, Construction Manager and Owner at no additional cost.
54. **SCHEDULE** – Follow the project's Master Schedule, Site Logistics Plan, and Building Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project's master schedule. Work may or may not be continuous.
55. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.
56. **ALLOWANCES** – Subcontract 9A is to carry the following Allowance in the Base Bid:
  - A) Allow 200 man hours and \$10,000 in materials to furnish and install railings and other safety requirements as directed by the Construction Manager. Note: This cost is not to be used for Subcontract 9A's normal safety requirements as required by the Contract Documents.
  - B) Allow 200 man hours to repair damages by others noted on the punch list.
57. **UNIT PRICES** – N/A.
58. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**



# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

## Bid Package #9B Painting & Caulking

1. The following scope of work is known as Bid Package #9B, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 9B will perform all the work described in Bid Package #9B. This includes completion of ALL Painting and Caulking Work in this project, as further described herein.
3. Bid Package #9B includes all Painting and Caulking in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 77 00	*Closeout Procedures	01/21/19
<b>Division 07</b>	<b>*Thermal and Moisture Protection</b>	<b>01/21/19</b>
07 92 00	*Joint Sealants	01/21/19
<b>Division 09</b>	<b>*Finishes</b>	<b>01/21/19</b>
09 91 23	Interior Painting	01/21/19
09 96 00	High Performance Coatings	01/21/19

\* Partial scope of work as applicable under this specification. See below for details.



4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).
  - B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
  - C. Work Authorization Order #1, CT DAS Division of Construction Services.
  - D. Agreement Between Contractor and Subcontractor (The Subcontract).
  - E. GMP Amendment(s), CT DAS Division of Construction Services.
  - F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
  - G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
  - H. Any and all Addenda issued prior to bid date for this Bid Package.
  - I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
  - J. Division 00 Procurement and Contracting Requirements (ALL Sections).
  - K. Division 01 General Requirements (ALL Sections).
  - L. PDS Procurement Requirements Section 00 23 00.
  - M. CT DOC Security Requirements Section 00 73 63.
  - N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
  - O. Division 50 Project-Specific Available Information.
  - P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
  - Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
  - R. Site Logistics Plan by PDS Engineering & Construction, Inc.
  - S. Building Logistics Plan by PDS Engineering & Construction, Inc.

**SCOPE OF WORK: Subcontract 9B**

5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 9B is responsible for, the term "Contractor", "General Contractor", "Subcontractor", "Painting Contractor", "Painter", "Construction Manager", "CMR", or "Others" shall mean "Subcontract 9B".





6. Subcontract 9B is responsible for **all Painting and Caulking Work** including, but not limited to, painting of all interior doors and frames that are inside rooms within work areas, touch-up painting of all walls, ceilings, soffits and other finished surfaces that are inside rooms within work areas as needed, painting of all new exterior doors and frames in pipe chase “doghouses”, painting of all new gypsum board, all new masonry walls and infills, pipe bollards, handrails, platforms and ladders, all primed or bare structural steel, pipe supports and hangers, all exposed piping and conduits, all galvanized metal substrates, and any other unpainted surfaces called out to be painted, in accordance with **Section 09 91 23 Interior Painting** and **Section 09 96 00 High-Performance Coatings**, Architectural Drawings and details, Structural Drawings and details, Mechanical Drawings, and other Contract Documents. Primer paint on structural steel is by Steel Subcontract 5A. Pavement line striping is by Sitework Subcontract 31B.
7. For reference, Subcontract 9B must be familiar with the **bid packages and scope of work for Masonry Subcontract 4A, Structural Steel & Miscellaneous Metals Subcontract 5A, General Trades Subcontract 9A, and Mechanical Subcontract 23A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.
8. Subcontract 9B is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.
9. Subcontract 9B is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls**, and **Section 01 73 27 Cutting and Patching** as it applies to Painting and Caulking Work, including furnishing all of the following: Subcontractor 9B’s drinking water,



secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, ladders, staging and scaffolding, environmental protection, fire extinguishers, barricades, temporary enclosures, temporary heating and ventilating, temporary shoring and support, material and equipment handling, protection and storage, temporary power and temporary lighting, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Painting and Caulking. Temporary floor protection shall be by Subcontract 1A.

10. All work and sequencing shall strictly comply with the project **Master Schedule, Site Logistics Plan, and Building Logistics Plan**. Subcontract 9B shall provide and maintain a flexible workforce in the event QC tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.
11. Subcontract 9B is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **painting and caulking work**, as required for the new and existing walls, doors, ceilings, piping, supports, frames, railings, etc. to match existing colors and textures.
12. Subcontract 9B is responsible to **unload, store, protect from damage, then distribute and install** all materials associated with this bid package.
13. Subcontract 9B is responsible for **storing materials off site** until such time as they are needed on site and for storing and moving materials on site due to changing jobsite conditions as needed.
14. The Architectural Drawings and Structural Drawings **contain notes, charts, details, code references and specifications** that should complement the Specification Sections in the Project Manual. In case of a conflict between specifications, the more stringent or more expensive requirements shall apply.
15. Subcontract 9B is responsible for all surface preparation and the application of **paint systems on interior substrates** in accordance with **Section 09 91 23 Interior Painting** and Interior Painting Schedule of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings. This includes surface preparation of substrates, specified application procedures, samples, mockups, proper storage, field quality control and Owner testing, cleaning and protection, attic stock, and touch-up.
16. Subcontract 9B is responsible for all surface preparation and the application of **high-performance coating systems on galvanized metal exterior substrates and concrete masonry unit interior substrates** in accordance with **Section 09 96 00 High-Performance Coatings**, Exterior High-Performance Coating Schedule and Interior High-Performance Coating Schedule of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings. This includes surface



preparation of all substrates, specified application procedures, samples, mockups, proper storage, field quality control and Owner testing, cleaning and protection, attic stock, and touch-up.

17. Subcontract 9B is responsible to furnish and install **all joint sealants** in accordance with **Section 07 92 00 Joint Sealants** as it pertains to this scope of work as required to provide a complete and warranted system. This shall also include joint sealants at all areas where the work of Subcontract 9B intersects or abuts existing work or the work of any other new materials installed by other Subcontracts.
18. Subcontract 9B is responsible to **coordinate all painting and caulking work** with all other Subcontractors (i.e. 4A, 5A, 9A, 9C, 23A).
19. Subcontract 9B is responsible to furnish and install **Joint Sealants** including silicone, non-staining silicone and latex joint sealants, joint sealant backing, miscellaneous materials, and protection within and abutting painted surfaces and dissimilar materials in accordance with Specification **Section 07 92 00 Joint Sealants**. Scope of work includes perimeter joints between dissimilar materials, such as around frames of doors, windows, and louvers. Joints between plumbing fixtures and adjoining walls, floors, and counters. Interior slab-to-wall, and other interior concrete joints. Any other interior and exterior caulking not specifically listed herein.
20. The following Subcontracts are responsible for some caulking / joint sealants:
  - 4A – Control and expansion joints in unit masonry and joints in exterior insulation and finish systems.
  - 7A – Roof joints.
  - 31B – Exterior concrete joints.
21. Subcontract 9B is responsible to provide and install **caulking** around all HM frames, fire extinguisher cabinets, wall lockers, electrical panels, access panels, etc. and any other wall mounted trim, cabinets, or equipment, etc. where new or touch-up painting occurs.
22. Subcontract 9B is responsible to **caulk the joints between dissimilar materials** i.e. drywall and masonry, steel and drywall, steel and masonry, wood and drywall, wood and steel, wood and masonry, etc. where new or touch-up painting occurs.
23. Subcontract 9B will replace work that **fails inspection and needs rework**. This will be done at no cost and the cost of re-inspections or retesting will be paid for by this Subcontractor. Additionally the cost of the Construction Manager's time to manage the re-inspections and retests will be paid for by this Subcontractor.
24. Subcontract 9B is responsible to paint the door frame and doors for the **pipe chase "doghouse" mock-up** per Section 04 22 00 Part 1.6A, for Architect's approval.



25. Subcontract 9B is responsible for **hot and cold weather** painting and caulking work, including heating equipment, materials, fuel, tenting, scaffolding and labor for temporary heat, and moving and storing heating equipment and tanks as they are needed on site due to changing jobsite conditions.
26. Subcontract 9B shall **sort and load debris** generated by painting and caulking work into designated dumpsters as required by the Construction Manager. Dumpsters shall be furnished by the CMR.
27. Subcontract 9B is responsible for normal **sanding and surface preparation** necessary in order to properly apply its paint and produce an acceptable finish on all metal surfaces in all locations, i.e. HM doors and frames, access panels and miscellaneous metals that receive paint. Start of painting work on these surfaces signifies acceptance of the previous subcontractors' work.
28. Subcontract 9B is responsible to **sand the primer paint** applied by Subcontract 5A and Subcontract 23A prior to applying finish paint over their surfaces in accordance with the Specifications and as shown on Drawings. Coordinate specified primer selection with these Subcontractors and apply specified finish coats compatible with the primer.
29. Subcontract 9B is responsible to **apply specified primer and finish coats** to all exposed prime painted or unpainted new work installed in this project.
30. Subcontract 9B is responsible to **touch-up** or otherwise repair and restore marred, exposed finishes and surfaces damaged by construction activities. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration. Do not paint over UL and similar labels, including mechanical and electrical nameplates.
31. Subcontract 9B is responsible to complete all **touch-up** paint cited in the Construction Manager's uncompleted work list, then perform touch-up again to complete all items listed in the Architect's punch list.
32. Subcontract 9B is responsible submit and apply finish paints that are **compatible with prime paints** previously applied by other Subcontracts i.e. structural steel, hollow metal, etc.
33. Subcontract 9B is responsible to **post signs** indicating "WET PAINT" at all times as needed.
34. Subcontract 9B is responsible for **cleaning, filling, patching small holes, and prepping** the existing interior walls or other surfaces that are specified to be newly painted.
35. Subcontract 9B will be responsible to provide its own **temporary light** for its work areas, if the existing wall outlets are insufficient or unavailable for use.
36. Subcontract 9B is responsible to clean, prep and paint of all new **interior and exterior pipe railings, lintels and exposed steel.**
37. Subcontract 9B is responsible to **inspect all surfaces prior to application of primers.** Any unacceptable surfaces shall be reported to the Construction Manager in writing for correction. Failure to



do so constitutes acceptance of said surfaces and Subcontract 9b shall be solely responsible for its finished appearance.

38. Subcontract 9B is responsible to touch up paint over areas where Subcontract 9A **touches up taping imperfections** after first coat of primer has been applied.
39. Subcontract 9B is responsible to touch up paint over areas where Subcontract 9A **repairs cracks** in the drywall and **taping** after the ceiling grid was installed by Subcontract 9C and prior to application of final coat of paint.
40. Subcontract 9B is responsible to **paint all exposed FP/MEP piping** color coded unless otherwise noted.
41. Subcontract 9B shall be responsible to provide **barricades and protection** to prevent other workers from damaging wet painted finishes. Caution tape is not an acceptable barrier.
42. Subcontract 9B is responsible to furnish and deliver all required **attic stock** at the end of the project. Properly label, stack, and store maintenance materials in areas designated by the Owner and CMR. Take inventory and get delivery paperwork and transmittals signed for the materials.
43. Subcontract 9B is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. These documents are provided for your information. No hazardous materials abatement is included in your scope of work.
44. Subcontract 9B is responsible to carry a \$5,000 Allowance for touch up painting after the Owner's furniture, fixtures, and equipment is moved in at the end of each phase, as directed by the CMR. The touch-up allowance is not to be used for punch list work that occurred before the FF&E was moved in. All time and material shall be tracked with daily T&M tickets signed by the PDS Superintendent.
45. **SCHEDULE** – Follow the project's master schedule and Site Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project's master schedule. Work may or may not be continuous.
46. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate



Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.

47. **ALLOWANCES** – Subcontract 9B is to carry the following Allowance in the Base Bid:
  - A) Subcontract 9B to carry an allowance of \$5,000 for touch up painting after the Owner's furniture, fixtures, and equipment is moved in at the end of each phase, as directed by the CMR.
48. **UNIT PRICES** – N/A.
49. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**





# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

## Bid Package #9C Ceilings

1. The following scope of work is known as Bid Package #9C, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 9C will perform all the work described in Bid Package #9C. This includes completion of ALL Ceilings Work in this project, as further described herein.
3. Bid Package #9C includes all Ceilings Work in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 77 00	*Closeout Procedures	01/21/19
<b>Division 02</b>	<b>*Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19
<b>Division 09</b>	<b>*Finishes</b>	<b>01/21/19</b>
09 51 13	Acoustical Panel ceilings	01/21/19
09 54 23	Linear Metal Ceilings	01/21/19

\* Partial scope of work as applicable under this specification. See below for details.



4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).
  - B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
  - C. Work Authorization Order #1, CT DAS Division of Construction Services.
  - D. Agreement Between Contractor and Subcontractor (The Subcontract).
  - E. GMP Amendment(s), CT DAS Division of Construction Services.
  - F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
  - G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
  - H. Any and all Addenda issued prior to bid date for this Bid Package.
  - I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
  - J. Division 00 Procurement and Contracting Requirements (ALL Sections).
  - K. Division 01 General Requirements (ALL Sections).
  - L. PDS Procurement Requirements Section 00 23 00.
  - M. CT DOC Security Requirements Section 00 73 63.
  - N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
  - O. Division 50 Project-Specific Available Information.
  - P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
  - Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
  - R. Site Logistics Plan by PDS Engineering & Construction, Inc.
  - S. Building Logistics Plan by PDS Engineering & Construction, Inc.

**SCOPE OF WORK: Subcontract 9C**

5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 9C is responsible for, the term "Contractor", "General Contractor", "Subcontractor", "Ceiling Contractor", "Construction Manager", "CMR", or "Others" shall mean "Subcontract 9C".





6. Subcontract 9C is responsible for **all Acoustical Panel Ceilings and Linear Metal Ceilings Work** including, but not limited to, selective demolition of acoustical panel ceilings and linear metal ceilings as needed and as indicated to facilitate new above ceiling work, installation of new acoustical panel ceilings and linear metal ceilings as needed and as indicated, in accordance with **Section 09 51 13 Acoustical Panel Ceilings** and **Section 09 54 23 Linear Metal Ceilings**, Architectural Drawings and details, Structural Drawings and details, Mechanical Drawings, and other Contract Documents. Gypsum board work is by General Trades Subcontract 9A.
7. For reference, Subcontract 9C must be familiar with the **bid packages and scope of work for Masonry Subcontract 4A, Structural Steel & Miscellaneous Metals Subcontract 5A, General Trades Subcontract 9A, Fire Suppression Subcontract 21A, Mechanical Subcontract 23A, and Electrical Subcontract 26A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.
8. Subcontract 9C is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.
9. Subcontract 9C is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls**, and **Section 01 73 27 Cutting and Patching** as it applies to Ceilings Work, including furnishing all of the following: Subcontractor 9C's drinking water, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, ladders, staging and scaffolding, environmental protection, fire extinguishers, barricades, temporary enclosures, temporary



heating and ventilating, temporary shoring and support, material and equipment handling, protection and storage, temporary power and temporary lighting, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Ceilings.

10. All work and sequencing shall strictly comply with the project **Master Schedule, Site Logistics Plan, and Building Logistics Plan**. Subcontract 9C shall provide and maintain a flexible workforce in the event inspections fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.
11. Subcontract 9C is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **ceilings work**, as required for the new and existing ceilings, i.e. to match existing colors and textures. Wall angle in good condition may be re-used, if possible.
12. Subcontract 9C is responsible to **unload, store, protect from damage, then distribute and install** all materials associated with this bid package.
13. Subcontract 9C is responsible for **storing materials off site** until such time as they are needed on site and for storing and moving materials on site due to changing jobsite conditions as needed.
14. The Architectural Drawings and Structural Drawings **contain notes, charts, details, code references and specifications** that should complement the Specification Sections in the Project Manual. In case of a conflict between specifications, the more stringent or more expensive requirements shall apply.
15. Subcontract 9C is responsible for **selective demolition and disposal of all acoustical panel ceilings and linear metal ceilings** as needed in accordance with **Section 02 41 19 Selective Demolition** and as indicated on the Drawings to facilitate new above ceiling work. Remove and stack/consolidate all debris during selective demolition and move debris into designated dumpsters (furnished by the CMR) daily. Clean up areas daily. Do not reuse existing acoustical ceiling panels or linear metal pans.
16. Subcontract 9C is responsible to furnish and install all **Acoustical Panel Ceilings** in accordance with **Section 09 51 13 Acoustical Panel Ceilings** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings. This includes acoustical panels and metal suspension systems for ceilings, coordination, installation, and samples, submittals, mockups, edge moldings and trim, acoustical sealant, performance requirements, storage, handling, protection, attic stock, field measurements, preparation, quality control, cleaning, etc.
17. Subcontract 9C is responsible to furnish and install all **Linear Metal Ceilings** in accordance with **Section 09 54 23 Linear Metal Ceilings** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings. This includes all strip, linear metal pans and suspension systems for linear metal ceilings, coordination, installation, and samples, submittals, mockups, edge



moldings and trim, performance requirements, storage, handling, protection, attic stock, field measurements, preparation, quality control, cleaning, etc.

18. Subcontract 9C is responsible to **coordinate all ceilings work** with all other Subcontractors (i.e. 4A, 5A, 9A, 9B, 21A, 23A, 26A).
19. Subcontract 9C will replace work that **fails inspection and needs rework**. This will be done at no cost and the cost of re-inspections or retesting will be paid for by this Subcontractor. Additionally the cost of the Construction Manager's time to manage the re-inspections and retests will be paid for by this Subcontractor.
20. Subcontract 9C shall **sort and load debris** and other debris generated by ceilings work into designated dumpsters as required by the Construction Manager. Dumpsters shall be furnished by the CMR.
21. Subcontract 9C is responsible to attend and participate in all **MEP coordination meetings** to jointly resolve conflicts and ceiling coordination issues associated with space constraints, precedence of work, security constraints, routing, interferences, demolition, cutting and patching, and other problems, with the MEP trades and the Construction Manager.
22. Subcontract 9C is responsible to establish all **line and grade** for the performance of their work. Coordinate dimensions with Architectural, Structural, and Mechanical Drawings. All dimensions are taken to finished face of wall, from column centerlines, or to the face of the existing finish material, unless noted otherwise. Clear dimensions are to finished face of construction, and shall take precedence over all other dimensions.
23. Subcontract 9C is responsible to make sure that all dimensions and conditions are **field verified**, and the Architect shall be notified of all inconsistencies or problems immediately upon discovery and before proceeding with work. Verify all critical dimensions within and/or related to the existing buildings. Dimensions and conditions indicated were determined by visual survey and/or information from existing original building drawings.
24. All indications and notations on the Drawings which **apply to one area, component, or condition** shall apply to all other similar areas, components, or conditions unless clearly indicated otherwise.
25. Subcontract 9C is responsible to make **ceiling cut-outs** for items penetrating finished ceiling and ceiling-mounted items that are installed by other trades including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, perimeter moldings, fire alarm devices, electrical devices, AV equipment, etc.
26. Subcontract 9C is responsible to **coordinate the installation of its ceilings** with all Subcontractors having work within the ceiling grid or having work above the ceilings.



27. Subcontract 9C is responsible to **replace and reinstall up to 100 ceiling pads** of any type that are missing and/or damaged prior to Final Cleaning of each phase to the satisfaction of the Architect, Construction Manager and Owner at no additional cost. This is separate from the allowance.
28. Subcontract 9C is responsible to **coordinate** the installation of the ceiling grid, whether shown on the reflected ceiling plan or not, with any ceiling expansion joint assemblies, door track assemblies, sliding curtain assemblies, lighting, sprinklers, registers, grilles and diffusers, projectors, etc.
29. Subcontract 9C is responsible for part of **expansion control**, namely, to provide and install wall-to-ceiling and ceiling-to-ceiling Architectural Joint Systems that intersect or abut its ceilings as required.
30. Subcontract 9C is responsible to **repair any finishes** damaged during the installation of the acoustic wall panels and metal pans.
31. Subcontract 9C will be responsible to provide its own **temporary light** for its work areas, if the existing wall outlets are insufficient or unavailable for use.
32. Subcontract 9C is responsible to furnish and deliver all required **attic stock** at the end of the project. Properly label, stack, and store materials in areas designated by the Owner and CMR. Take inventory and get delivery paperwork and transmittals signed for the materials.
33. Subcontract 9C is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. These documents are provided for your information. No hazardous materials abatement is included in your scope of work.
34. Subcontract 9C is responsible to carry an **allowance** of 200 carpenter man hours and **\$5,000.00** in materials to repair/replace ceilings as directed by the Construction Manager. All time and material shall be tracked with daily T&M tickets signed by the PDS Superintendent.
35. **SCHEDULE** – Follow the project’s Master Schedule, Site Logistics Plan, and Building Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project’s master schedule. Work may or may not be continuous.



36. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.
37. **ALLOWANCE** – Subcontract 9C is to carry the following Allowance in the Base Bid:
  - A) Subcontract 9C to carry an allowance of 200 carpenter man hours and \$5,000.00 in materials to repair/replace ceilings as directed by the Construction Manager.
38. **UNIT PRICES** – N/A.
39. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**

# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

## Bid Package #21A Fire Suppression

1. The following scope of work is known as Bid Package #21A, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 21A will perform all the work described in Bid Package #21A. This includes completion of ALL Fire Suppression Work in this project, as further described herein.
3. Bid Package #21A includes all Fire Suppression Systems Modification work in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 77 00	*Closeout Procedures	01/21/19
<b>Division 02</b>	<b>*Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19
<b>Division 07</b>	<b>*Thermal and Moisture Protection</b>	<b>12/21/18</b>
07 84 13	*Penetration Firestopping	12/21/18
07 92 00	*Joint Sealants	12/21/18
<b>Division 08</b>	<b>*Openings</b>	<b>01/21/19</b>
08 31 13.53	*Security Access Doors and Frames	01/21/19
<b>Division 21</b>	<b>Fire Suppression</b>	<b>01/21/19</b>

21 13 13

Wet Pipe Sprinkler Systems

01/21/19

\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).
  - B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
  - C. Work Authorization Order #1, CT DAS Division of Construction Services.
  - D. Agreement Between Contractor and Subcontractor (The Subcontract).
  - E. GMP Amendment(s), CT DAS Division of Construction Services.
  - F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
  - G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
  - H. Any and all Addenda issued prior to bid date for this Bid Package.
  - I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
  - J. Division 00 Procurement and Contracting Requirements (ALL Sections).
  - K. Division 01 General Requirements (ALL Sections).
  - L. PDS Procurement Requirements Section 00 23 00.
  - M. CT DOC Security Requirements Section 00 73 63.
  - N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
  - O. Division 50 Project-Specific Available Information.
  - P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
  - Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
  - R. Site Logistics Plan by PDS Engineering & Construction, Inc.
  - S. Building Logistics Plan by PDS Engineering & Construction, Inc.

**SCOPE OF WORK: Subcontract 21A**



5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 21A is responsible for, the term “Contractor”, “General Contractor”, “Subcontractor”, “Sprinkler Contractor”, “Fire Suppression Contractor”, “Fire Protection Contractor”, “Construction Manager”, “CMR”, or “Others” shall mean “Subcontract 21A”.
6. Subcontract 21A is responsible for **all Fire Suppression Work** including, but not limited to, selective demolition, cutting, capping, removal, and disposal of fire sprinkler piping and heads as needed, minor relocations or modifications of existing wet-pipe fire protection sprinkler systems as required to complete the MEP Work of this project, while matching the components of existing sprinkler fire protection systems, in accordance with **Section 02 41 19 Selective Demolition** and **Section 21 13 13 Wet Pipe Sprinkler Systems**, Architectural Drawings, Structural Drawings, Mechanical Drawings, and other Contract Documents.
7. For reference, Subcontract 21A must be familiar with the **bid packages and scope of work for Structural Steel & Miscellaneous Metals Subcontract 5A, General Trades Subcontract 9A, Ceilings Subcontract 9C, Mechanical Subcontract 23A, and Electrical Subcontract 26A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.
8. Subcontract 21A is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.
9. Subcontract 21A is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls, and Section 01 73 27 Cutting and Patching** as it applies to



Fire Suppression Work, including furnishing all of the following: Subcontractor 21A's drinking water, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, ladders, staging and scaffolding, environmental protection, fire extinguishers, barricades, temporary enclosures, temporary heating and ventilating, temporary shoring and support, material and equipment handling, protection and storage, temporary power and temporary lighting, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Fire Suppression.

10. All work and sequencing shall strictly comply with the project **Master Schedule, Site Logistics Plan, and Building Logistics Plan**. Subcontract 21A shall provide and maintain a flexible workforce in the event inspections or tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.
11. Subcontract 21A is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **fire suppression work**, as required above the new and existing ceilings, i.e. to match existing system components. As much of the existing wet fire sprinkler systems must remain in service and use as possible.
12. Subcontract 21A is responsible to **unload, store, protect from damage, then distribute and install** all materials associated with this bid package.
13. Subcontract 21A is responsible for **storing materials off site** until such time as they are needed on site and for storing and moving materials on site due to changing jobsite conditions as needed.
14. The Architectural Drawings and Structural Drawings **contain notes, charts, details, code references and specifications** that should complement the Specification Sections in the Project Manual. In case of a conflict between specifications, the more stringent or more expensive requirements shall apply.
15. Subcontract 21A is responsible for **selective demolition**, including the isolation, draining, cutting, capping, shutoff, disconnections, removal, and disposal of fire sprinkler piping and heads as needed, for minor relocations or modifications of existing wet-pipe fire protection sprinkler systems as required to complete the MEP Work of this project, in accordance with **Section 02 41 19 Selective Demolition** and as indicated on the Drawings to facilitate the new above ceiling work. Remove and stack/consolidate all debris during selective demolition and move debris into designated dumpsters (furnished by the CMR) daily. Clean up areas daily.

16. Subcontract 21A shall **drain** all Fire Suppression System piping and equipment in buildings prior to demolition. Subcontract 21A shall ensure that no water leaks into the buildings and shall notify the CMR a week in advance of system shutdowns.
17. Subcontract 21A shall **cut and cap, drain, disconnect, and remove** all their respective piping, fixtures, components, accessories, hangers, etc. that are required for disposal. Subcontract 21A shall then properly dispose of all fire suppression debris to the appropriate dumpsters.
18. Subcontract 21A is responsible to furnish and install specified **penetration firestopping for Fire Suppression Work** in accordance with **Section 07 84 13 Penetration Firestopping** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. Not all penetration firestopping locations that are necessary for Fire Suppression Work are indicated on the Drawings. The Base Bid includes all penetration firestopping for Fire Suppression Work whether shown on Drawings or not.
19. Subcontract 21A is responsible to furnish and install specified **joint sealants for Fire Suppression Work** in accordance with **Section 07 92 00 Joint Sealants** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. Not all joints to be sealed for Fire Suppression Work are indicated on the Drawings. The Base Bid includes all joint sealants for Fire Suppression Work whether shown on Drawings or not.
20. Subcontract 21A is responsible to furnish and install all **Wet Pipe Sprinkler Systems Modifications** in accordance with **Section 21 13 13 Wet Pipe Sprinkler Systems** of the Specifications and the Architectural, Structural, Mechanical, and other Contract Drawings. Not all sprinkler relocations are indicated on the Drawings. This work includes minor relocations of existing sprinkler piping and sprinkler heads as needed so that the new MEP work above ceilings may be done, including pipes, fittings, specialties, sprinklers, pressure gauges, delegated design, submittals, quality assurance, Owner notification of interruptions a week in advance, coordination with other trades, extra materials, identification, tests and inspections as required, cleaning, etc. Match existing sprinkler fire protection system components.
21. Subcontract 21A is responsible for **Quality Assurance** as specified in **Section 21 13 13 Wet Pipe Sprinkler Systems**, including Installer qualifications, Engineering responsibility, welding qualifications, and NFPA Standards, as well as all specified **Preparation**, including fire hydrant flow testing, and specified **Field Quality Control** tests and inspections.
22. Subcontract 21A is responsible to **coordinate all fire suppression work** with all other Subcontractors (i.e. 4A, 5A, 9A, 9B, 9C, 23A, 26A).

23. Subcontract 21A will replace work that **fails testing and inspection and needs rework**. This will be done at no cost and the cost of re-inspections or retesting will be paid for by this Subcontractor. Additionally the cost of the Construction Manager's time to manage the re-inspections and retests will be paid for by this Subcontractor.
24. Subcontract 21A shall **sort and load debris** and other debris generated by fire suppression work into designated dumpsters as required by the Construction Manager. Dumpsters shall be furnished by the CMR.
25. Subcontract 21A is responsible to attend and participate in all **MEP coordination meetings** to jointly resolve conflicts and coordination issues associated with space constraints, precedence of work, security constraints, routing, interferences, demolition, cutting and patching, and other problems, with the MEP trades and the Construction Manager.
26. Subcontract 21A is responsible to establish all **line and grade** for the performance of their work. Coordinate dimensions with Architectural, Structural, and Mechanical Drawings. All dimensions are taken to finished face of wall, from column centerlines, or to the face of the existing finish material, unless noted otherwise. Clear dimensions are to finished face of construction, and shall take precedence over all other dimensions.
27. Subcontract 21A is responsible to make sure that all dimensions and conditions are **field verified**, and the Architect shall be notified of all inconsistencies or problems immediately upon discovery and before proceeding with work. Verify all critical dimensions within and/or related to the existing buildings. Dimensions and conditions indicated were determined by visual survey and/or information from existing original building drawings.
28. All indications and notations on the Drawings which **apply to one area, component, or condition** shall apply to all other similar areas, components, or conditions unless clearly indicated otherwise.
29. Ceilings Subcontract 9C is responsible to make **ceiling cut-outs** for items penetrating finished ceiling and ceiling-mounted items that are installed by other trades including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, perimeter moldings, fire alarm devices, electrical devices, AV equipment, etc.
30. Subcontract 21A is responsible to **coordinate the installation and relocation of its fire sprinkler piping and heads** with all Subcontractors having work within the ceiling grid or having work above the ceilings.
31. Subcontract 21A is responsible to **remove and replace, or remove and relocate sprinkler heads and associated branch piping for each head inside Building 10 where indicated on Drawings** in spaces as required to clear new MEP work and prevent major interferences, restore each affected area

to its original condition with adequate sprinkler coverage, and furnish and install all piping, fittings, supports, supplementary steel, etc. and calculations and testing as required to accomplish this. This work is included in the Base Bid.

32. Subcontract 21A is responsible to **remove and replace, or remove and relocate 25 sprinkler heads and up to 15 LF branch piping for each head inside buildings where NOT indicated on Drawings** in spaces as required to clear new MEP work and prevent major interferences, restore each affected area to its original condition with adequate sprinkler coverage, and furnish and install all piping, fittings, supports, supplementary steel, etc. and calculations and testing as required to accomplish this. This work may not be shown on the Drawings. Carry this quantity in the Base Bid. Actual quantity may vary, and pricing will be adjusted up or down based on approved unit prices. Verify work with the CMR.
33. Subcontract 21A is responsible to comply with NFPA, State and Local Codes, FM Global, the State Fire Marshal's review and approval, and other Authority Having Jurisdiction.
34. Subcontract 21A is responsible to **design, furnish and install modified wet fire suppression systems** in conformance with the Contract Documents, NFPA, State and Local Codes, FM Global, the Fire Marshal's review and approval, and other Authority Having Jurisdiction. Subcontract 21A's work includes performance requirements and working pressure specification included in Section 21 13 13.
35. Subcontract 21A is responsible to furnish and install all **supplementary steel, channel, threaded rods, and supports, and all hangers and restraints** as required.
36. Subcontract 21A shall coordinate its **Fire Suppression System shop drawings** with Architectural Drawings, Structural Drawings, Mechanical Drawings, Electrical Drawings, and other Contract Documents.
37. Subcontract 21A is responsible to **extend existing Fire Protection water drains** from exterior of existing façade to exterior of pipe enclosure "doghouse" façade and maintain pitch, as shown in the Addendum #1 Drawings.
38. Subcontract 21A is responsible to expedite all **design drawings, calculations**, and product data through the submittal approval process, which includes proper sign-off by the State Fire Marshal. Subcontract 21A is also responsible to ensure that FM Global also obtains a copy of these drawings and encompasses any additional requirements to satisfy the same. This review and approval process shall be completed in accordance with the project schedule.
39. Subcontract 21A is responsible to **protect heads from finish trades** until the buildings are turned over to the Owner. Sprinkler drops in drywall ceilings shall be plugged until after finish trades have completed their work and the heads can be installed. Other arrangements can be made to achieve this but must be agreeable to the Construction Manager prior to installation.

40. Subcontract 21A is responsible to furnish and install all required **Fire Protection related signage, valve tags and pipe identification markers** in accordance with ANSI/ASME A-13.1 and code requirements.
41. Subcontract 21A shall furnish and locate all **security access doors** as required for this scope of work to Subcontract 9A for installation in drywall partitions or ceilings, and to Subcontract 4A for installation in masonry walls. Access doors shall be furnished as specified in **Section 08 31 13.53 Security Access Doors and Frames**.
42. Subcontract 21A is responsible to **coordinate** the installation of the sprinklers and ceiling grid with Ceilings Subcontract 9C.
43. Subcontract 21A will be responsible to provide its own **temporary power and lighting** for its work areas, if the existing wall outlets and fixtures are insufficient or unavailable for use.
44. Subcontract 21A is responsible to furnish and deliver all required **attic stock** at the end of the project. Properly label and store materials in areas designated by the Owner and CMR. Take inventory and get delivery paperwork and transmittals signed for the materials.
45. Subcontract 21A is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. These documents are provided for your information. No hazardous materials abatement is included in your scope of work.
46. **SCHEDULE** – Follow the project’s Master Schedule, Site Logistics Plan, and building Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project’s master schedule. Work may or may not be continuous.
47. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.
48. **ALLOWANCES** – N/A.

**Bid Package #21A Fire Suppression**  
**Project No. BI-JA-465**

49. **UNIT PRICES** – Provide unit prices in the Bid Proposal Form for:

A) Remove sprinkler head / replace with new & up to 15 LF of new branch piping. \_\_\_\_\_ EA.

B) Remove sprinkler head / relocate existing & up to 15 LF of new branch piping. \_\_\_\_\_ EA.

50. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**

# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

## Bid Package #26A Electrical

1. The following scope of work is known as Bid Package #26A, including, but not limited to, all labor, layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 26A will perform all the work described in Bid Package #26A. This includes completion of ALL Electrical Work in this project, as further described herein.
3. Bid Package #26A includes all Electrical Work in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/19</b>
00 73 63	*Connecticut Department of Correction Security Requirements	01/21/19
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/19</b>
01 11 00	*Summary of Work	01/21/19
01 20 00	*Contract Considerations	01/21/19
01 35 26	*Government Safety Requirements	01/21/19
01 45 00	*Quality Control	01/21/19
01 50 00	*Temporary Facilities and Controls	01/21/19
01 77 00	*Closeout Procedures	01/21/19
<b>Division 02</b>	<b>*Existing Conditions</b>	<b>01/21/19</b>
02 41 19	*Selective Demolition	01/21/19
<b>Division 07</b>	<b>*Thermal and Moisture Protection</b>	<b>01/21/19</b>
07 84 13	*Penetration Firestopping	01/21/19
07 92 00	*Joint Sealants	01/21/19
<b>Division 08</b>	<b>*Openings</b>	<b>01/21/19</b>
08 31 13.53	*Security Access Doors and Frames	01/21/19
<b>Division 23</b>	<b>*Heating, Ventilating and Air Conditioning</b>	<b>01/21/19</b>

23 05 33	*Heat Tracing for HVAC Piping	01/21/19
<b>Division 26</b>	<b>Electrical</b>	<b>01/21/19</b>
26 05 19	Low Voltage Electrical Power Conductors and Cables	01/21/19
26 05 26	Grounding and Bonding for Electrical Systems	01/21/19
26 05 29	Hangers and Supports for Electrical Systems	01/21/19
26 05 33	Raceways and Boxes for Electrical Systems	01/21/19
26 05 48	Vibration and Seismic Controls for Electrical Systems	01/21/19
26 05 53	Identification for Electrical Systems	01/21/19
26 08 00	Testing, Adjusting, and Balancing	01/21/19
26 22 13	Low Voltage Distribution Transformers	01/21/19
26 27 26	Wiring Devices	01/21/19
26 29 23	*Variable Frequency Motor Controllers	01/21/19
26 41 00	Facility Lightning Protection	01/21/19
<b>Division 27</b>	<b>*Communications</b>	<b>01/21/19</b>
27 11 00	*Communications Equipment	01/21/19
<b>Division 28</b>	<b>*Electronic Safety and Security</b>	<b>01/21/19</b>
28 33 00	*Gas and Carbon Monoxide Detection Equipment	01/21/19
28 44 00	*Refrigerant Vapor Monitoring System	01/21/19

\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:
  - A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).
  - B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
  - C. Work Authorization Order #1, CT DAS Division of Construction Services.
  - D. Agreement Between Contractor and Subcontractor (The Subcontract).
  - E. GMP Amendment(s), CT DAS Division of Construction Services.
  - F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
  - G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
  - H. Any and all Addenda issued prior to bid date for this Bid Package.



- I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
- J. Division 00 Procurement and Contracting Requirements (ALL Sections).
- K. Division 01 General Requirements (ALL Sections).
- L. PDS Procurement Requirements Section 00 23 00.
- M. CT DOC Security Requirements Section 00 73 63.
- N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
- O. Division 50 Project-Specific Available Information.
- P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
- Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
- R. Site Logistics Plan by PDS Engineering & Construction, Inc.
- S. Building Logistics Plan by PDS Engineering & Construction, Inc.

**SCOPE OF WORK: Subcontract 26A**

- 5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 26A is responsible for, the term “Contractor”, “General Contractor”, “Subcontractor”, “Electrical Contractor”, “Construction Manager”, “CMR”, or “Others” shall mean “Subcontract 26A”.
- 6. Subcontract 26A is responsible for **all Electrical Work** including, but not limited to, make-safe, LOTO, disconnect, selective demolition, cutting, removal, and disposal of electrical conduits, wire, junction boxes, panels, light fixtures, etc. as required, and minor relocations or modifications of existing electrical components and light fixtures as required to complete the MEP Work of this project, in accordance with **Section 02 41 19 Selective Demolition** and all Electrical Work included in **Division 26 Electrical** and **Division 27 Communications**, Civil Drawings, Architectural Drawings, Mechanical Drawings, Electrical Drawings and Notes, Electrical Demolition Drawings and Notes, and other Contract Documents.
- 7. For reference, Subcontract 26A must be familiar with the **bid packages and scope of work for General Trades Subcontract 9A, Ceilings Subcontract 9C, Mechanical Subcontract 23A, and Sitework Subcontract 31B** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.

8. Subcontract 26A is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.
9. Subcontract 26A is responsible for compliance with **Section 01 45 00 Quality Control, Section 01 50 00 Temporary Facilities and Controls, and Section 01 73 27 Cutting and Patching** as it applies to Electrical Work, including furnishing all of the following: Subcontractor 26A's drinking water, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), lifts and hoists, ladders, staging and scaffolding, environmental protection, fire extinguishers, barricades, temporary enclosures, temporary heating and ventilating, temporary shoring and support, material and equipment handling, protection and storage, temporary power and temporary lighting, employee transportation, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Electrical work.
10. All work and sequencing shall strictly comply with the project **Master Schedule, Site Logistics Plan, and Building Logistics Plan**. Subcontract 26A shall provide and maintain a flexible workforce in the event inspections or tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.
11. Subcontract 26A is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **Electrical work**, as required above the new and existing ceilings in buildings, and in the Central Plant. As much of the existing electrical systems and light fixtures must remain in service and use as possible.

12. Subcontract 26A is responsible to **provide power** to temporary electric tankless on-demand **domestic water heaters** supplied by Mechanical Subcontract 23A for use in Buildings 0, 1, 2, 3, 4, 7, 9A and 12, and a larger, temporary **electric boiler** for use in the main kitchen Building 9A during the Hot Water System Shutdown from April 1, 2020 to November 1, 2020. Provide power and connections as work sequences permit, then disconnect and remove electrical work after HW system becomes operational.
13. Subcontract 26A is responsible to **unload, store, protect from damage, then distribute and install** all materials associated with this bid package.
14. Subcontract 26A is responsible for **storing materials off site** until such time as they are needed on site and for storing and moving materials on site due to changing jobsite conditions as needed.
15. The Architectural Drawings and Structural Drawings **contain notes, charts, details, code references and specifications** that should complement the Specification Sections in the Project Manual. In case of a conflict between specifications, the more stringent or more expensive requirements shall apply.
16. Subcontract 26A is responsible for all **electrical selective demolition**, as needed and/or as shown, including electrical work items noted to be removed on Drawings, and minor relocations of light fixtures and associated conduits and wiring as required to complete the MEP Work of this project, in accordance with **Section 02 41 19 Selective Demolition** and as indicated on the Drawings to facilitate the new above ceiling work. Remove and stack/consolidate all debris during selective demolition and move debris into designated dumpsters (furnished by the CMR) daily. Clean up areas daily.
17. Subcontract 26A is responsible for **make-safe, LOTO, disconnections, selective demolition, cutting, removal, and disposal** of electrical conduits, wire, junction boxes, panels, light fixtures, etc., as needed or as shown on Contract Drawings, and remove all their respective components, accessories, hangers, etc. that are required for disposal. Subcontract 26A shall then properly dispose of all electrical debris to the appropriate dumpsters.
18. Subcontract 26A is responsible for all **Electrical Modifications** in accordance with **Division 26 Electrical** of the Specifications and the Civil, Electrical, Architectural, Mechanical, and other Contract Drawings. Not all light fixture relocations are indicated on the Drawings. This work includes minor relocations of existing light fixtures as needed so that the new MEP work above ceilings may be done.
19. Subcontract 26A is responsible to **coordinate all electrical work** with all other Subcontractors (i.e. 9A, 9B, 9C, 21A, 23A, 26A, 31B).
20. Subcontract 26A will replace work that **fails testing and inspection and needs rework**. This will be done at no cost and the cost of re-inspections or retesting will be paid for by this Subcontractor. Additionally the cost of the Construction Manager's time to manage the re-inspections and retests will be paid for by this Subcontractor.

21. Subcontract 26A shall **sort and load debris** and other debris generated by electrical work into designated dumpsters as required by the Construction Manager. Dumpsters shall be furnished by the CMR.
22. Subcontract 26A is responsible to attend and participate in all **MEP coordination meetings** to jointly resolve conflicts and coordination issues associated with space constraints, precedence of work, security constraints, routing, interferences, demolition, cutting and patching, and other problems, with the MEP trades and the Construction Manager.
23. Subcontract 26A is responsible to establish all **line and grade** for the performance of their work. Coordinate dimensions with Architectural, Structural, and Mechanical Drawings. All dimensions are taken to finished face of wall, from column centerlines, or to the face of the existing finish material, unless noted otherwise. Clear dimensions are to finished face of construction, and shall take precedence over all other dimensions.
24. Subcontract 26A is responsible to make sure that all dimensions and conditions are **field verified**, and the Architect shall be notified of all inconsistencies or problems immediately upon discovery and before proceeding with work. Verify all critical dimensions within and/or related to the existing buildings. Dimensions and conditions indicated were determined by visual survey and/or information from existing original building drawings.
25. All indications and notations on the Drawings which **apply to one area, component, or condition** shall apply to all other similar areas, components, or conditions unless clearly indicated otherwise.
26. Ceilings Subcontract 9C is responsible to make **ceiling cut-outs** for items penetrating finished ceiling and ceiling-mounted items that are installed by other trades including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, perimeter moldings, fire alarm devices, electrical devices, AV equipment, etc.
27. Subcontract 26A is responsible to **coordinate the installation and relocation of its light fixtures and other electrical components** with all Subcontractors having work within the ceiling grid or having work above the ceilings.
28. Subcontract 26A is responsible to **remove and replace, or remove and relocate light fixtures and associated conduit and wire for each fixture inside buildings where indicated on Drawings** in spaces as required to clear new MEP work and prevent major interferences, restore each affected area to its original condition with adequate lighting, and furnish and install all conduits, wire, boxes, fittings, supports, supplementary steel, etc. as required to accomplish this. This work is included in the Base Bid.

29. Subcontract 26A is responsible to **remove and replace, or remove and relocate 50 light fixtures and associated conduit and wire for each fixture inside buildings where NOT indicated on Drawings** in spaces as required to clear new MEP work and prevent major interferences, restore each affected area to its original condition with adequate lighting, and furnish and install all conduits, wire, boxes, fittings, supports, supplementary steel, etc. as required to accomplish this. This work may not be shown on the Drawings. Carry this quantity in the Base Bid. Actual quantity may vary, and pricing will be adjusted up or down based on approved unit prices. Verify work with the CMR.
30. Subcontract 26A is responsible to comply with State and Local Codes, FM Global, the State Building Inspector's review and approval, and other Authority Having Jurisdiction.
31. Subcontract 26A is responsible to furnish and install all **supplementary steel, channel, threaded rods, and supports, and all hangers and restraints** as required.
32. Subcontract 26A is responsible to **extend existing electrical devices** from exterior of existing façade to exterior of pipe enclosure "doghouse" façade, as shown in the Addendum #1 Drawings.
33. Subcontract 26A shall furnish and locate all **security access doors** as required for this scope of work to Subcontract 9A for installation in drywall partitions or ceilings, and to Subcontract 4A for installation in masonry walls. Access doors shall be furnished as specified in **Section 08 31 13.53 Security Access Doors and Frames**.
34. Subcontract 26A is responsible to **coordinate** the installation of the light fixtures and ceiling grid with Ceilings Subcontract 9C.
35. Subcontract 26A will be responsible to provide its own **temporary power and lighting** for its work areas, if the existing wall outlets and fixtures are insufficient or unavailable for use.
36. Subcontract 26A is responsible to furnish and deliver all required **attic stock** at the end of the project. Properly label and store materials in areas designated by the Owner and CMR. Take inventory and get delivery paperwork and transmittals signed for the materials.
37. Subcontract 26A is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. These documents are provided for your information. No hazardous materials abatement is included in your scope of work.
38. Subcontract 26A is responsible to furnish and install specified **penetration firestopping for Electrical Work** in accordance with **Section 07 84 13 Penetration Firestopping** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. Not all

penetration firestopping locations that are necessary for Electrical Work are indicated on the Drawings. The Base Bid includes all penetration firestopping for Electrical Work whether shown on Drawings or not.

39. Subcontract 26A is responsible to furnish and install specified **joint sealants for Electrical Work** in accordance with **Section 07 92 00 Joint Sealants** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. Not all joints to be sealed for Electrical Work are indicated on the Drawings. The Base Bid includes all joint sealants for Electrical Work whether shown on Drawings or not.
40. Subcontract 26A is responsible to furnish and install specified **heat trace systems** in accordance with **Section 23 05 33 Heat Tracing for HVAC Piping** of the Specifications and the Civil Drawings, Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings as follows: Electrical Bid Package 26A shall furnish and install specified electric heating cables, accessories, warning labels, warning tape, power wiring, grounding, and control panels for the heat trace systems per Section 23 05 33, after piping has been tested and before insulation is installed, or in prefabricated heat trace tubes as indicated on Addendum #1 Drawings M518 and C502. Mechanical Bid Package 23A shall furnish and install signal and control wiring for the heat trace systems and connect the heat trace systems to the BMS. Heat trace is required for lateral HW and CHW S&R hydronic piping runs piping near and inside the new outdoor pipe enclosure “doghouses” typical as shown on Drawing C502, for the existing Fuel Oil piping to the Fuel Oil storage tank as shown on Drawings M209 and M414, and for the lateral HW and CHW S&R hydronic piping at the Building 9C loading dock area as shown on Addendum #1 Drawing M518.
41. Subcontract 26A is responsible to furnish and install all **low voltage electrical power conductors, cables and connectors** in accordance with **Section 26 05 19 Low Voltage Electrical Power Conductors and Cables** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. Architectural Drawings, Structural, Mechanical, and other Contract Drawings. This work includes materials, submittals, quality assurance, installation, and field testing.
42. Subcontract 26A is responsible to furnish and install all **grounding and bonding for Electrical Systems** in accordance with **Section 26 05 26 Grounding and Bonding for Electrical Systems** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. This work includes grounding materials, submittals, quality assurance, installation, identification and labeling, lightning arrestor grounding conductors, and field testing. Mechanical Subcontract 23A is responsible for all grounding and bonding for BMS and Communications systems.

43. Subcontract 26A is responsible to furnish and install all **hangers and supports for Electrical Systems** in accordance with **Section 26 05 29 Hangers and Supports for Electrical Systems** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. This work includes hangers and supports for electrical equipment and systems, construction requirements for concrete bases, performance requirements, delegated design by a licensed Connecticut Professional Engineer, submittals, quality assurance, coordination, support, anchorage, and attachment components, fabricated metal equipment support assemblies, installation, and concrete bases.
44. Subcontract 26A is responsible to furnish and install all **raceways and boxes** for Electrical systems in accordance with **26 05 33 Raceways and Boxes for Electrical Systems** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. Architectural, Structural, Mechanical, and other Contract Drawings. Raceways and boxes are not necessarily shown on the Drawings. This work includes rigid steel hot dip galvanized conduit, flexible steel conduit, Liquid-Tight flexible conduit, conduit fittings, wireways and auxiliary gutters, outlet, junction, and pull boxes, identification labels, etc.
45. Subcontract 26A is responsible to furnish and install all **vibration and seismic controls** for Electrical systems in accordance with **Section 26 05 48 Vibration and Seismic Controls for Electrical Systems** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. This work includes vibration isolation for engine generator set, if any, dry type transformers, and at electrical connections to rotating and vibrating equipment. This work includes seismic restraints for all electrical and fire alarm systems and equipment.
46. Subcontract 26A is responsible to furnish and install all **fixed identification** for Electrical systems in accordance with **Section 26 05 53 Identification for Electrical Systems** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. This work includes performance requirements, color and legend requirements, and nameplates.
47. Subcontract 26A is responsible to furnish and install all **shop and field acceptance testing, adjusting and balancing** for Electrical systems in accordance with **Section 26 08 00 Testing, Adjusting, and Balancing** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. This work includes testing, adjusting and balancing for wire and cable, motor controllers, motors, primary switchgear, motor control centers, switchboards, freeze protection system, lightning protection system, grounding, three phase receptacles, calibration, etc.
48. Subcontract 26A is responsible to furnish and install all **low-voltage distribution transformers** rated 1000V or less in accordance with **Section 26 22 13 Low Voltage Distribution Transformers** of the

Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. This work includes dry type transformers, vibration isolation, and mounting supports, test reports, quality assurance, adjusting, cleaning, etc.

49. Subcontract 26A is responsible to furnish and install all **wiring devices: switches, receptacles, and cover plates** in accordance with **Section 26 27 26 Wiring Devices** of the Specifications and the Architectural Drawings, Electrical Drawings, Mechanical Drawings, and other Contract Drawings. Not all wiring devices are indicated on the Drawings.
50. Mechanical Subcontract 23A is responsible to furnish the specified **Variable Frequency Drives (VFDs)** for all its Mechanical Equipment as required, in accordance with **Section 26 29 23 Variable Frequency Motor Controllers**, Mechanical Specifications, Mechanical Equipment Schedules, Communications Drawings, Electrical Drawings, and all related Contract Documents. **Electrical Subcontract 26A shall install, run power circuits, and connect power to the VFDs.**
51. Subcontract 26A is responsible to furnish and install all **multi-point, Faraday-type lightning protection system for Building 10** in accordance with **26 41 00 Facility Lightning Protection** of the Specifications and Electrical Drawing E501, and other Contract Drawings. This work includes new lightning protection air terminal attached to Boiler B10-3 chimney stack, removal/repair/replacement of existing boiler stack lightning protection and connection to the new boiler stacks, grounding and bonding, connection to building roof peripheral lightning protection grid, acquiring a Master "C" Label, and providing a UL-approved tie-in of the new system into the existing building lightning protection system.
52. Mechanical Subcontract 23A is responsible for **Division 27 Communications** in its entirety, in accordance with Section 27 05 00 Common Work Results for Communications Systems, **Section 27 11 00 Communications Equipment**, and Section 27 15 00 Communications Cabling, York Facility Fiber Schedule on Drawing ES701, all Mechanical Drawings, BMS Symbols, Abbreviations, Notes, System Architecture, Control Panel Details, Flow Diagrams, Sequence of Operation, Drawings and Equipment Schedules, Communication Drawings and Details, Fiber Schedules, Fiber Optic Site plan, Fiber Optic Installation Plans, Civil Drawings, and all related Contract Documents. Ignore Engineer's comments and notes regarding "Civil Contractor" and "Architectural Contractor" as these do not apply. All work shall be done by Subcontract 23A or its "Controls Contractor". Refer to Civil Drawings for layout. Field layout for underground pipe loop and fiber optic network conduits shall be by Sitework Subcontract 31B, who will provide as-built data to Subcontract 23A for the purpose of preparing its Mechanical and Communications as-built record drawings.



53. Mechanical Subcontract 23A is responsible to furnish and install all specified **direct buried conduits for the fiber optic distribution system to connect to the BMS System**, including conduits, orange detectable locating tape, specified buried pull boxes, watertight external penetrations, pull strings, fiber optic network cable, splice connections, grounding, bonding, electrical protection, etc. Sitework Subcontract 31B will excavate and backfill.
54. Mechanical Subcontract 23A shall furnish and install all **BMS and Communication low voltage conduits and wiring**, fiber rack equipment, control panels, CAT 6 cabling, fiber optic cable and connections, Optical Line Terminals, Optical Network Terminal panels, BMS panels, and all raceways, junction boxes, pathways, cable trays, hooks, hangers, supports, etc. required for the BMS. All low voltage wiring, cable, connectors, conduits, raceways, boxes, etc. for BMS and Controls Work shall comply with Division 26 Electrical Specifications. **Electrical Subcontract 26A will complete all power wiring, power circuitry, and power terminations required between a piece of controls equipment and its power source.**
55. Mechanical Subcontract 23A is responsible for **Division 28 Electronic Safety and Security** in its entirety, to furnish and install these systems in accordance with **Section 28 33 00 Gas and Carbon Monoxide Detection Equipment**, and **Section 28 44 00 Refrigerant Vapor Monitoring System**, and as coordinated with Section 23 52 39 Fire-Tube Boilers, and Section 23 64 16 Centrifugal Water Chillers, Drawings M302 & M303, all Mechanical and BMS Drawings, Equipment Schedules, Communication Drawings, and all related Contract Documents. All work shall be done by Subcontract 23A or its "Controls Contractor". Work includes all specified systems, controllers, sensors, transmitters, remote alarms, annunciator panels, power supplies/junction boxes, quality assurance, sequence of operation, examination, startup and commissioning, and training. **Electrical Subcontract 26A will complete all single-point power wiring, circuitry, and terminations required for Division 28 systems equipment.**
56. **SCHEDULE** – Follow the project's Master Schedule, Site Logistics Plan, and Building Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project's master schedule. Work may or may not be continuous.

57. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.
58. **ALLOWANCES** – N/A.
59. **UNIT PRICES** – Provide unit prices in the Bid Proposal Form for:
- A) Remove light fixture / replace with new & up to 15 LF of new conduit & wire. \_\_\_\_\_ EA.
  - B) Remove light fixture / relocate existing & up to 15 LF of new conduit & wire. \_\_\_\_\_ EA.
  - C) Furnish and Install Receptacle (wiring up to 25'). \_\_\_\_\_ per EA.
  - D) Furnish and Install Switch and Box (wiring up to 25'). \_\_\_\_\_ per EA.
  - E) Furnish and Install Enclosed Switch. \_\_\_\_\_ per EA.
  - F) Furnish and Install Conduit Drop in Wall (up to 20'). \_\_\_\_\_ per EA.
  - G) Furnish and Install Surface Raceway. \_\_\_\_\_ per LF.
  - H) Furnish and Install Cable Tray. \_\_\_\_\_ per LF.
  - I) Furnish and Install 4" Rigid Steel Conduit. \_\_\_\_\_ per LF.
  - J) Furnish and Install 2" Rigid Steel Conduit. \_\_\_\_\_ per LF.
  - K) Furnish and Install 1/2" Aluminum Rigid Conduit. \_\_\_\_\_ per LF.
  - L) Furnish and Install temporary stringer lights \_\_\_\_\_ per LF.
  - M) Furnish and Install temporary single halogen lights \_\_\_\_\_ each.
  - N) Furnish and Install temporary power stanchion \_\_\_\_\_ each.
  - O) Furnish and Install temporary power to trailer \_\_\_\_\_ each.
  - P) Furnish and Install temporary exterior lights \_\_\_\_\_ each.
60. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**



# York Correctional Central Plant and Distribution System

201 West Main Street, Niantic, CT

**Bid Package #31B – Sitework (SBE)**

1. The following scope of work is known as Bid Package #31B, including, but not limited to, all labor, surveying and layout, supervision, materials, deliveries, onsite storage and handling, hauling, equipment, maintenance, tools, and all other items, considerations and procedures necessary to complete this scope of work in accordance with the Contract Documents as prepared by the Engineer, WSP USA, its Consultants, and the CMR.
2. Subcontract 31B will perform all the work described in Bid Package #31B. This includes completion of ALL Sitework in this project, as further described herein.
3. Bid Package #31B includes all Existing Conditions, Excavation and Fill, Structural Excavation, Bedding, and Fill, Dewatering, Earth Stripping and Stockpiling, Topsoil, Asphalt Paving, Curbs, Pavement Markings, Utilities, and Handling of Polluted/Contaminated Onsite Soils, in accordance with the Contract Documents prepared by WSP USA, its Consultants and the CMR. Include the following Specification Sections specifically, but not limited to:

Spec. Section	Title	Date
<b>Division 00</b>	<b>Procurement and Contracting Requirements</b>	<b>01/21/18</b>
00 30 00	*General Statements for Available Information	01/21/18
<b>Division 01</b>	<b>General Requirements</b>	<b>01/21/18</b>
01 00 10	*Site General Requirements	01/21/18
01 11 00	*Summary of Work	01/21/18
01 20 00	*Contract Considerations	01/21/18
01 35 16	*Alteration Project Procedures	01/21/18
01 35 26	*Government Safety Requirements	01/21/18
01 35 29	*Health, Safety and Emergency Response Procedures	01/21/18
01 35 43	*Environmental Procedures	01/21/18
01 45 00	*Quality Control	01/21/18
01 50 00	*Temporary Facilities and Controls	01/21/18
01 71 23	Field Engineering	01/21/18
01 73 29	*Cutting and Patching	01/21/18
01 77 00	*Closeout Procedures	01/21/18
<b>Division 02</b>	<b>Existing Conditions</b>	<b>01/21/18</b>



02 41 19	*Selective Demolition (Sitework, Concrete, Earthwork)	01/21/18
02 56 01	Securing, Construction and Dismantling of Temporary WSA	01/21/18
02 61 14	Excavation and Handling of Controlled Material	01/21/18
02 61 22	Removal and Disposal of Controlled Material	01/21/18
02 71 00	Groundwater Treatment	01/21/18
<b>Division 31</b>	<b>*Earthwork</b>	<b>01/21/18</b>
31 14 00	*Earth Stripping and Stockpiling	01/21/18
31 23 00	Excavation and Fill	01/21/18
31 23 01	Structural Excavation and Fill	01/21/18
31 23 19	Dewatering	01/21/18
31 25 00	*Erosion Control	01/21/18
<b>Division 32</b>	<b>*Exterior Improvements</b>	<b>01/21/18</b>
32 12 16	Asphalt Paving	01/21/18
32 16 13	Curbs	01/21/18
32 17 23	Pavement Markings	01/21/18
<b>Division 33</b>	<b>Utilities</b>	<b>01/21/18</b>
33 41 00	Storm Utility Drainage Piping	01/21/18
33 49 00	Storm Utility Drainage Structures	01/21/18
<b>Division 50</b>	<b>*Project-Specific Available Information</b>	<b>01/21/18</b>
50 20 00	*Environmental Assessment Information (SMP)	01/21/18
50 30 00	*Hazardous Building Materials Inspection and Inventory	01/21/18
50 40 00	*Subsurface Geotechnical Report	01/21/18
50 60 00	*FM Global Checklist for Roofing Systems	01/21/18
50 70 00	*Statement of Special Inspections	01/21/18
50 80 00	*Additional Information:	01/21/18
50 80 00.1	*Aquifer Protection Area Registration Approval Letter	01/21/18
50 80 00.2	*Natural Diversity Database Review (NDDB) Review Request	01/21/18

\* Partial scope of work as applicable under this specification. See below for details.

4. The Contract Documents for this Bid Package include, but are not limited to:

- A. Standard Form of Agreement Between Owner and Construction Manager at Risk (CMR) for GMP, CT DAS Division of Construction Services (The Contract).



- B. General Conditions and Supplementary Conditions of the Contract for Construction for CMR, CT DAS Division of Construction Services.
- C. Work Authorization Order #1, CT DAS Division of Construction Services.
- D. Agreement Between Contractor and Subcontractor (The Subcontract).
- E. GMP Amendment(s), CT DAS Division of Construction Services.
- F. Contract Drawings "Bid Set" dated 12/21/18 by WSP USA and its Consultants (ALL Drawings).
- G. Project Manual "Bid Set", dated 01/21/19 by WSP USA and its Consultants (ALL Sections).
- H. Any and all Addenda issued prior to bid date for this Bid Package.
- I. Issue For Bid - Design Narrative Report dated 12/21/18 by WSP.
- J. Division 00 Procurement and Contracting Requirements (ALL Sections).
- K. Division 01 General Requirements (ALL Sections).
- L. PDS Procurement Requirements Section 00 23 00.
- M. CT DOC Security Requirements Section 00 73 63.
- N. PDS Project Schedule, dated 01/17/19, and subsequent updates.
- O. Division 50 Project-Specific Available Information.
- P. Soil Management Plan (SMP) dated 12/2018 by Loureiro Engineering Associates.
- Q. Stormwater Pollution Control Plan (SWPCP) dated 10/2018 by Loureiro Engineering Assoc.
- R. Site Logistics Plan by PDS Engineering & Construction, Inc.

#### **SCOPE OF WORK: Subcontract 31B**

- 5. Within Specification Sections, Drawings, this Bid Package, and Work that Subcontract 31B is responsible for, the term "Contractor", "General Contractor", "Subcontractor", "Site Contractor", "Excavator", "Construction Manager", "CMR", or "Others" shall mean "Subcontract 31B".
- 6. For reference, Subcontract 31B must be familiar with the **bid packages and scope of work for Site Preparation Subcontract 31A, Concrete Subcontractor 3A, and Mechanical Subcontractor 23A** so that there is a clear understanding of responsibilities, interaction, cooperative efforts, coordination, and sequencing of work.



7. Subcontract 31B is responsible to comply with **Section 00 73 63 Connecticut Department of Correction (CT DOC) Security Requirements**. All Subcontractor personnel who either visit or work on site must first pass a background check and receive a clearance from CT DOC. It takes a minimum of two (2) weeks after receipt for CT DOC to process the background report/clearance form for each person. Visitors for the Pre-Bid Meeting and Walk-through must submit (via e-mail) their paperwork a minimum of two (2) weeks in advance of the scheduled meeting date. Each Subcontractor must submit (via e-mail) paperwork for all its workers (and all potential Subcontractor workers) a minimum of four (4) weeks in advance of the scheduled mobilization or construction start date. Each individual background report/clearance form must be filled out completely with the project number, all requested personal information, and must be legible, signed, and witnessed, or else it will not be processed. All individual workers and contained area work crews (and their tools, equipment, vehicles, materials, and construction debris) must be checked-in, escorted continuously, and checked-out by DOC Correction Officers every day. Strict adherence to all CT DOC Security Requirements, Official Working Rules, and procedures is mandatory. Individuals that do not comply with the DOC security requirements will be barred from access to the facility. No one may enter the property without clearance – no exceptions.
8. Subcontract 31B is responsible to comply with **Section 01 00 10 Site General Requirements**. No permit fees are required, however, Subcontract 31B must comply with the terms and conditions of the **CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities**, the project's **Stormwater Pollution Control Plan (SWPCP)**, and the project's **Soil Management Plan (SMP)**, as well as all Survey and Civil Drawings and Details, including all figures, drawings, details, weekly inspection logs, reports, etc.
9. Sitework Subcontract 31B is responsible for all **Underground Utilities, Soil Support, Special Work Requirements, and Traffic Maintenance**, in accordance with **Section 01 00 10 Site General Requirements**, Civil Drawings, Mechanical Drawings, Structural Drawings, and other Contract Documents, changing project conditions, and as directed by the DOC and the CMR. This includes the location, support, safety and protection of underground utilities, excavation soil support devices or soil strengthening techniques per OSHA requirements, maintenance of permanent or temporary roads/sidewalks, utilities, and other amenities for convenience, safety and safe access to buildings at all times during the Work, and maintenance of access to the site, through work zones, and to move about on the site. Subcontract 31B shall furnish and install all temporary roads and pathways as needed to provide temporary safe access/means of egress to building and site, and remove all such measures when no longer needed.



10. Subcontract 31B is responsible for compliance with **Section 01 45 00 Quality Control**, **Section 01 50 00 Temporary Facilities and Controls**, and **Section 01 73 27 Cutting and Patching** as it applies to Earthwork, Exterior Improvements, and Utilities, including furnishing all of the following: Subcontractor 31B's office trailer with drinking water, sanitation, heating and cooling, and utility connections, secure storage containers, fuel, combustible materials storage, tools and equipment, generators, proper daily waste disposal (into appropriate dumpsters furnished by the CMR), temporary lifts and hoists, cranes, ladders, staging and scaffolding, environmental protection, barricades, temporary enclosures, temporary heating and ventilating, temporary shoring and support, insulation blankets in excavations to prevent ground freezing overnight, material and equipment handling, protection and storage, temporary power and temporary lighting, a minimum of two (2) self-contained light plants for the full duration, hydrostatic pressure test water disposal in an approved manner (plunge pools, frac tanks, filters, hay bales, etc.) in both hot and cold weather, temporary pumps and hoses/pipes for dewatering as required, employee transportation, test pits, access for inspections, as-built drawings, repairs, temporary protection, temporary heating and weather protection, insulating blankets, cutting and patching, noise, smoke, and dust control, cleanup, and anything else having to do with Earthwork, Exterior Improvements, and Utilities activities.
11. **Field layout for underground pipe loop and fiber optic network conduits** shall be by Sitework Subcontract 31B, in accordance with **Section 01 71 23 Field Engineering**, who will also provide as-built data to Subcontract 23A for the purpose of preparing its Mechanical and Communications as-built record drawings.
12. Subcontract 31B is responsible to hire a local **Connecticut Licensed Land Surveyor** for the duration of the project and utilize the Engineer's digital survey data (provided through the CMR), including topography, elevations, coordinates, and stationing shown on the Survey Drawings, Civil Drawings, and Site Piping Alignment Tables, to **lay out all site underground piping, vaults, manholes, anchor blocks, buried conduits, pull boxes, sidewalks, foundations, footings, etc.**, and provide offsets for the Work. Subcontract 31B shall then use these offsets to excavate for the underground work. Subcontract 23A shall use these offsets for underground pipe and conduit installation. Subcontract 31B shall protect all existing survey control, monuments, benchmarks, etc. Do not set stakes, rods, pipes, nails or pins or flag trees in non-fenced areas. Protect existing vegetation to remain as specified.
13. Mechanical Subcontract 23A is responsible to utilize this same Engineer's digital survey data (provided through the CMR), including topography, elevations, control points and stationing, to prepare and submit detailed **underground hydronic piping shop drawings**, showing complete plan and profile, piece marks and configurations, proposed field welds and factory welds, pipe sizes, weights,





dimensions, and proposed fabrication and delivery dates that meet the CMR's project schedule. This ensures coordination between the layout and the piping installation.

14. The **Surveyor hired by Sitework Subcontract 31B shall locate, measure, and provide as-built dimensional data and coordinates** for all underground hydronic piping, buried valves, vents, anchor blocks, vaults, manholes, and OFC conduits and pull boxes as they are installed, foundations for doghouses and equipment foundations, existing underground utilities that have been exposed, and shall provide this raw survey data to Subcontract 23A for the purpose of preparing and submitting **underground piping as-built record drawings** as specified immediately after underground hydronic piping and conduit is installed in each area or phase. Subcontract 31B shall prepare and submit **sitework as-built record drawings** for each area or phase as the work progresses, including information about existing utilities, roads, sidewalks, equipment pads, doghouses, and other site features. As-builts are required in advance of billing for the Work in each area or phase. For each scheduled phase or sequence, as shown in the project's master schedule and Site Logistics Plan, coordinate all underground site piping and conduit work with Subcontracts 3A, 23A and 31A. According to the schedule, a minimum of two (2) phases of underground site piping will be installed simultaneously. So, two (2) separate Subcontract 31B excavation crews for underground hydronic piping will be needed, plus a crew for excavation of the new equipment pads at the Central Plant.
15. Mechanical Subcontract 23A is responsible to layout for and coordinate its concrete **equipment pads, equipment foundations, pump bases, and housekeeping pad sizes and locations** with Concrete Subcontract 3A and Sitework Subcontract 31B. Subcontract 23A shall furnish all embeds, anchor bolts, templates, layout drawings, and fasteners for its pad-mounted equipment as required. Subcontract 5A shall furnish pipe bollards for Subcontract 31B to install.
16. Subcontract 23A is responsible to layout for and coordinate the **structural steel pipe supports** with Concrete Subcontract 3A, Structural Steel Subcontract 5A, and Sitework Subcontract 31B.
17. **TYPICAL UNDERGROUND PIPING INSTALLATION SEQUENCE OF WORK** – At the beginning of each sequence, Site Preparation Subcontract 31A shall remove trees, install erosion and sedimentation controls, install temporary fencing, strip topsoil, remove stumps, and rough grade the site in accordance with the phasing in the project's master schedule and Site Logistics Plan. **The Surveyor hired by Sitework Subcontract 31B shall utilize the Engineer's survey data, elevations, coordinates, and stationing shown on the Survey Drawings, Civil Drawings, and Site Piping Alignment Tables, to lay out all site underground piping, vaults, manholes, anchor blocks, buried conduits, pull boxes, etc., and provide offsets for the Work. Subcontract 31B shall then use these offsets to excavate, export unsuitable soils, protect utilities, dewater, provide sand pipe bedding, and provide 3/8" pea**





**stone under pipe joints.** Concrete Subcontract 3A shall install anchor blocks and footings for access riser vaults. Subcontract 31B shall furnish and install the **precast access riser vaults** with 18" diameter openings, and **precast manholes** with 8" or 18" diameter booted openings and sand bedding. Subcontract 23A shall furnish, handle, and install the prefabricated insulated piping and valves in the excavated areas and structures in the loop and all the way to the buildings. Subcontract 31B shall **backfill and compact** the underground piping, with sand bedding up to 4" above the pipe insulation, with joints exposed until the hydrostatic pressure testing and radiographic testing is complete and approved. Then they will **backfill and compact everything up to 38" below Finish Grade** so that Subcontract 23A can install the two (2) 4" Optical Fiber Cable (OFC) conduits with pull strings and specified pull boxes in accordance with **Section 27 11 00 Communications Equipment**, Civil Drawings, and Communication Drawings. Subcontract 31B shall then **backfill and compact the OFC conduits**. Subcontract 31A will return to move the temporary fence to the next sequence of work, spread topsoil, fine grade, and seed and/or mulch the disturbed areas to complete the sequence **while the next sequence is being excavated** by Subcontract 31B. All work and sequencing shall strictly comply with the project master schedule and Site Logistics Plan. Subcontract 31B shall provide and maintain a flexible workforce in the event QC tests fail, work falls behind schedule, CT DOC shuts down the work for security reasons, severe weather occurs, or for any other reason beyond the CMR's control.

18. Sitework Subcontract 31B is responsible to comply with **Section 01 73 29 Cutting and Patching** associated with **sawcutting pavement and concrete, site demolition, test pits, coring, trenching, bedding, and backfill**, both interior and exterior, as required for the new underground piping and conduits and mechanical equipment. Perform all cutting and patching of pavement as shown in the Drawings. All other cutting and patching of pavement shall be performed on a Unit Price basis.
19. Sitework Subcontract 31B is responsible for all **Site Demolition** in accordance with **Section 02 41 19 Selective Demolition**, Civil Drawings, Mechanical Drawings, Structural Drawings, and other Contract Documents, including sawcutting, demolition and disposal of site concrete, pavement, buried debris found during excavations, underpinning footings and foundations as needed, temporary shoring and protection of existing underground utilities, foundation coring, etc. Perform all sawcutting and removal of pavement as shown in the Drawings. All other sawcutting and removal of pavement shall be performed on a Unit Price basis.
20. According to **Section 50 40 00 Subsurface Geotechnical Report** and the **Soil Management Plan** in **Section 50 20 00 Environmental Assessment Information**, the existing onsite soils are uniform and can be generally categorized as silty sands, typical for approximately 9 feet below existing grade, and



are further classified as either contaminated, polluted, or natural soil. Subsequent sieve analyses indicate that the silt content can be higher than the specified gradation, however, the existing onsite soils can be used for trench backfill in lawn areas. These soils shall be placed in lifts above the specified, imported pipe sand bedding that extends 4" above the pipe, and compacted. Due to the import of the specified sand for bedding, and the volume displaced by the pipe, there will be an excess of existing silty sands that has to be dealt with by Subcontract 31B as described herein. When backfilling of the underground piping in the AEC's, the polluted and contaminated soils shall be used first for onsite backfill in lawn areas. No polluted or contaminated soil may leave the site.

21. Subcontract 31B is responsible to set up and operate a temporary **screening plant** in a designated area onsite and shall remove large rocks and screen the silty sands for re-use as trench backfill above the underground pipe.
22. Subcontract 31B is responsible for the excavation, handling, and hauling of **polluted and/or contaminated soils** from the three (3) Areas of Environmental Concern (AEC) identified in the **Soil Management Plan** in accordance with **Section 50 20 00 Environmental Assessment Information** and **Section 02 61 14 Excavation and Handling of Controlled Material**, and stockpiling these soils in a temporary onsite WSA as specified in **Section 02 56 01 Securing, Construction and Dismantling of Temporary Waste Stockpile Area** for 100% re-use onsite as trench backfill in lawn areas, with actual locations of this backfill to be noted on the as-built site drawings. Include excavation, handling, hauling, stockpiling, re-loading, re-hauling, and re-use of approximately **4,000 CY of polluted soils** and **3,625 CY of contaminated soils** from the AEC's in the Base Bid. Provide unit prices per CY to be used for either more or less polluted and contaminated soils encountered and transported to the temporary WSA. For ease of calculating volumes, heaping triaxle dump trucks will be counted as **18 cubic yards per load** and heaping 10-wheeler dump trucks will be counted as **14 cubic yards per load**. Coordinate Reuse Notifications with Loureiro Engineering. If the Owner wants these materials to be removed from the site and disposed of instead, the Environmental Remediation unit prices listed in **Section 01 20 00 Contract Considerations** shall be used, and the work by Subcontract 31B shall comply with **Section 02 61 22 Removal and Disposal of Controlled Material**.
23. Subcontract 31B is responsible to furnish all labor, supervision, materials and equipment for all **Earth Stripping and Stockpiling of Topsoil**, in accordance with **Section 31 14 00 Earth Stripping and Stockpiling**. Subcontract 31B shall spread, rake and rough grade existing stockpiled topsoil, and furnish, spread, rake and rough grade all additional specified topsoil as needed to achieve 4" minimum thickness in the disturbed lawn areas at the end of each phase or sequence for Site Preparation Subcontract 31A to fine grade, amend and seed. Site Preparation Subcontract 31A is responsible for



stripping, loading, hauling, and stockpiling of the existing topsoil in the two (2) laydown areas in WAO #1 only. Subcontract 31A shall haul, spread, fine grade, amend and seed this stockpiled topsoil in the two (2) laydown areas at the end of the project. All other Earth Stripping and Stockpiling of Topsoil, and furnishing, spreading, raking and rough grading of all existing and additional topsoil as needed to achieve 4" minimum thickness shall be by Sitework Subcontract 31B. Typical existing topsoil is only 2" thick and does not meet the specifications for Topsoil.

24. Site Preparation Subcontract 31A is responsible for **all Turfs and Grasses** on this project, in accordance **Section 32 92 00 Turfs and Grasses** and the Civil Drawings, in **all disturbed lawn areas on site**. Subcontract 31A shall **fine grade, scarify and prep** the existing or imported topsoil that shall be furnished, spread to 4" thickness, and rough-graded by Sitework Subcontract 31B.
25. Subcontract 31B is responsible to furnish all labor, supervision, materials and equipment for all **Earth Stripping and Stockpiling of Excavated Natural Soils (Common/Ordinary Materials)**, in accordance with **Section 31 14 00 Earth Stripping and Stockpiling**. Onsite natural "silty sand" materials that are to be used for common/ordinary trench backfill shall be temporarily stored and stockpiled on site in designated location(s), placed in lifts above the specified pipe sand bedding (4" above the pipe), and compacted. Subcontract 31B shall haul and temporarily stockpile suitable onsite excavated natural silty sand materials to a designated onsite fenced area known as "Area 1" (about ½ mile away from the main prison facilities) for the purpose of removing rocks and screening the silty sands for re-use as trench backfill. This is a small area and shall be cleaned up at the end of the underground piping work and all excess natural materials removed to another designated area onsite.
26. Subcontract 31B is responsible to: A) Load, haul, spread 18" to 24" high and grade the **majority of excess clean natural soils to an onsite location** approximately 1 mile from the main prison facilities, B) Load, haul and dump **500 CY excess clean natural soils to an offsite location on State property** that is approximately 5 miles from the main prison facilities, C) Load, haul and dump **2,000 CY excess clean natural soils to an offsite location on State property** that is approximately 30 miles from the main prison facilities, and/or D) At the Bidder's option, load and haul away **some excess clean natural soils to another offsite location on private property**, if Subcontract 31B has made such arrangements. Any of these options may be utilized by Subcontract 31B to haul away all excess soils, as approved by the Owner and CMR, and, regardless of which options are taken, all excess soils must be hauled away by Subcontract 31B, and the cost of this work shall be included in the Base Bid.
27. Subcontract 31B is responsible for all **Excavation and Fill**, in accordance with **Section 31 23 00 Excavation and Fill**, Civil Drawings, Mechanical Drawings, Structural Drawings, and other Contract Documents, including, but not limited to, all excavation as required, to the lines and grades indicated on



the Drawings, and all fill or backfill as indicated or required, including compaction, proof-rolling, excavation and replacement of natural soils, unsuitable soils, imported sand bedding, rock excavation and removal, soil screening and rock segregation in a designated area for re-use as backfill, subbase and base materials and fine grading and compaction for pavement, sidewalks, slabs, and foundations, insulation blankets in excavations to prevent ground freezing overnight, removal of abandoned utilities, stockpiling onsite and/or hauling of excess materials offsite, rough grading, trenching for buried pipe, all test pits as needed to locate existing underground utilities, furnish and install all vaults and manholes, bedding, sheeting, shoring, underpinning, and bracing, 3-ft. overexcavation and fill with 3/8" pea stone for support under all underground hydronic pipe joints, flowable fill (CDF) as required under structures, all imported specified crushed stone, choke stone, blast rock, rip rap, bedding sand, common fill, structural fill, gravel, and topsoil/loam, etc. as required. Site Preparation Subcontract 31A is responsible for stump and root backfill due to clearing and grubbing operations, the site prep, materials, and installation of the temporary 6" thick gravel surfacing over Tensar TriAx geogrid in the two laydown areas and gravel paths in WAO #1, and the removal and hauling, disposal, covering, or stockpiling of these materials and complete site restoration of the disturbed areas in an approved manner at the end of the project.

28. Subcontract 23A is responsible to furnish and install all specified **direct buried conduits for the fiber optic distribution system to connect to the BMS System**, including conduits, orange detectable locating tape, specified buried pull boxes and pull box covers, watertight external penetrations, pull strings, fiber optic network cable, splice connections, grounding, bonding, electrical protection, etc. Sitework Subcontract 31B will **excavate and backfill** for the fiber optic distribution system.
29. Subcontract 31B is responsible for all **Structural Excavation and Fill**, in accordance with **Section 31 23 01 Structural Excavation and Fill**, Civil Drawings, Mechanical Drawings, Structural Drawings, and other Contract Documents, including, but not limited to, excavation and backfill for all foundations, site structures, surfaced areas, and general construction as required, to the lines and grades indicated on the Drawings, and all fill or backfill as indicated or required, including compaction, proof-rolling, excavation and replacement of natural soils, unsuitable soils, imported sand bedding, rock excavation and removal, subbase and base materials and fine grading and compaction for pavement, sidewalks, slabs, and foundations, stockpiling onsite and/or hauling of excess materials offsite, fine grading, bedding, sheeting, shoring, underpinning, and bracing, flowable fill (CDF) as required under structures, all imported specified crushed stone, choke stone, blast rock, bedding sand, structural fill, and gravel, etc. as required.



30. Sitework Subcontract 31B is responsible for all **Dewatering** and **Groundwater Treatment** in accordance with **Section 31 23 19 Dewatering** and **Section 02 71 00 Groundwater Treatment**, Civil Drawings, Mechanical Drawings, Structural Drawings, **Division 50**, and other Contract Documents, including the pumping, management, containment, treatment, and proper disposal of contaminated groundwater generated during dewatering activities in the three (3) Areas of Environmental Concern (AEC) identified in the **Soil Management Plan** in **Section 50 20 00 Environmental Assessment Information**. For clean, natural soils in non-polluted or non-contaminated areas, Subcontract 31B shall also provide and maintain **temporary dewatering systems** required to lower and control groundwater levels such that all work is performed in the dry and to provide a stable subgrade during construction. This includes control of surface runoff, removal of subsurface water from excavations and trenches, removal of sediment and control rates and volumes of water removed from work areas, and protection of adjacent and downgradient areas.
31. Subcontract 31B is responsible to furnish, install, and maintain proper **Erosion and Sedimentation Control Measures** for **Temporary Waste Stockpile Areas** and **Clean Fill Stockpile Areas**, such as anti-tracking pads (construction entrances), haul roads, hay bales, dust control, and silt fencing, etc., in accordance with **Section 31 25 00 Erosion Control** and **Section 01 00 10 Site General Requirements**, and as shown on Civil Drawings, Details on Drawing C505. The terms and conditions of the **CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities** (permit fees by the Owner), the project's Soil Management Plan (SMP) and the project's Stormwater Pollution Control Plan (SWPCP) must be complied with, including figures, drawings, weekly inspection logs, reports, etc., CT DOC Requirements, "Connecticut Guidelines for Soil Erosion and Sediment Control" latest edition, and all applicable Local, State of Connecticut, and Federal Codes, Statutes, and Regulations. Site Preparation Subcontract 31A is responsible for all other soil and sedimentation control measures shown on the Drawings, except for sediment removal from Subcontract 31B's excavations and trenches, or cleaning/removing dirt and mud tracked by Sitework Subcontract 31B's vehicles and equipment.
32. Proper **erosion and sedimentation control and dust control** measures required specifically for temporary Waste Stockpile Areas, Clean Fill Stockpile Areas, haul roads, sediment removal and dewatering from excavations and trenches, and surface water control in excavated areas, shall be furnished, installed, and maintained by **Sitework Subcontract 31B**. Site Preparation Subcontract 31A is responsible for all other soil and sedimentation control measures shown on the Drawings.





33. Subcontract 31B is responsible to **remove all dirt, mud, and debris** that it tracks on pavement, dirt/gravel roads, construction entrances, laydown areas, sidewalks, etc. and sweep all affected areas clean.
34. Subcontract 31B is responsible to install **temporary gravel on geogrid haul roads** as needed for dump truck traffic from excavated areas to the WSA, the fill screening area, and the stockpile areas. Remove these temporary roads later, dispose of materials, and restore the areas to original condition.
35. Subcontract 31B is responsible to **fill and repair all ruts and damage** it makes to lawns, woods, roads, work areas, tree clearing areas, etc.
36. Subcontract 31B is responsible for all **Division 32 Exterior Improvements** in its entirety in accordance with **Section 32 12 16 Asphalt Paving, Section 32 16 13 Curbs, and Section 32 17 23 Pavement Markings**, Civil Drawings, Mechanical Drawings, and all other Contract Documents. Install full depth driveways and full depth roadways with bituminous curb, and match and repair pavement per details on Drawing C504. Perform all asphalt paving work shown in the Drawings. All other asphalt paving work shall be performed on a Unit Price basis. Remove, replace, furnish as needed, and install matching Grasscrete pavers on prepared subgrade per Detail 5/C505 up to the retaining wall at the access road near the west sallyport where the pipelines cross the road. Furnish and install granite, bituminous concrete, and precast concrete curbs where indicated on Drawings. Remove existing pavement markings as needed, prepare the surface, and furnish and install new pavement markings where indicated on Drawings.
37. Subcontract 31B is responsible for all **Division 33 Utilities** in its entirety in accordance with **Section 33 41 00 Storm Utility Drainage Piping and Section 33 49 00 Storm Utility Drainage Structures**, Civil Drawings, Mechanical Drawings, Structural Drawings, and all other Contract Documents. This includes all test pits, exposure and support of all existing underground utilities being crossed, site storm drainage systems and connection of building drains, geotextile fabric, all storm drainage manholes and catch basins, and **all precast access riser vaults (no precast foundations) and precast access riser manholes, boots, security covers, risers, ladder rungs, and sand bedding for the underground hydronic piping.**
38. Subcontract 31B is responsible to read, understand, and comply with **Section 00 30 00 General Statements for Available Information** and Related Documents, and **Division 50 Project-Specific Available Information**, to identify suspect hazardous materials, if encountered, and promptly notify the CMR so that the appropriate actions can be taken to prevent potential exposure and have the materials tested by the Owner. Pay attention to **Section 50 20 00 Environmental Assessment Information**, which contains the **Soil Management Plan**, and **Section 50 40 00 Subsurface Geotechnical Report**.



These documents are provided for your information. No hazardous materials abatement is included in your scope of work.

39. Subcontract 31B is responsible to carry an \$8,000 Allowance to purchase, furnish and install one (1) slightly used **40-ft modified storage container (conex box) for use as a footbridge** outside Building 23. This container is available locally from Aaron Supreme (1-888- 508-4836), who will modify it in their yard by removing the doors from both ends, cutting and installing two framed “windows” in each side of the box, making sure there are no sharp cut edges anywhere, and reinforcing it to span approximately 20 feet over an excavation and for lifting and setting it in place. Subcontract 31B shall be responsible to receive it, handle it, set it in place, then remove it and haul it away to a designated spot on site (or take it away offsite) when it is no longer needed.
40. **SCHEDULE** – Follow the project’s master schedule and Site Logistics Plan for all phasing and milestones. Refer to the master construction schedule included with the bidding documents. This schedule is included to give the Bidder a general time frame as to when their scope of work will take place. Changes to this schedule during construction will not be grounds for any change orders or claims. The milestones and end dates cannot slip. This Subcontractor is responsible for providing the Construction Manager a detailed schedule including submittals, deliveries, and man-loading after award, which complies with the project’s master schedule. Work may or may not be continuous.
41. **WAGE RATES** – Provide hourly Labor Rates for each trade on the Labor Rate Breakdown sheet provided with the Bid Form. If awarded this Subcontract, provide a detailed, itemized Labor Rate Breakdown for each trade within 14 calendar days, with burdens but without overhead and profit, to be used on this project.
42. **ALLOWANCES** – Subcontract 31B is to carry the following Allowance in the Base Bid:
  - A) Allow \$8,000 to purchase, furnish, deliver, handle, install, and later remove and haul away one (1) slightly used **40-ft modified storage container (conex box) for use as a footbridge** (see Item #38 above).
43. **UNIT PRICES** – Provide unit prices in the Bid Proposal Form for:
  - A) Excavate, handle, stockpile in the temporary WSA, and re-use contaminated soil.  
\_\_\_\_\_ per CY
  - B) Excavate, handle, stockpile in the temporary WSA, and re-use polluted soil.  
\_\_\_\_\_ per CY
  - C) Polluted Soil - Excavation. \_\_\_\_\_ per CY
  - D) Polluted Soil - Loading and Disposal. \_\_\_\_\_ per CY



- E) Polluted Soil - Handle, Place, Backfill, Grade, and Compact in an On Site Borrow Pit.  
\_\_\_\_\_ per CY
- F) Contaminated Soil - Excavation. \_\_\_\_\_ per CY
- G) Contaminated Soil - Loading and Disposal. \_\_\_\_\_ per CY
- H) Contaminated Soil - Handle, Place, Backfill, Grade, and Compact in an On Site Borrow Pit.  
\_\_\_\_\_ per CY
- I) Clean Soil - Excavation. \_\_\_\_\_ per CY
- J) Clean Soil - Loading and Hauling. \_\_\_\_\_ per CY
- K) Imported Engineered Fill/Well-compacted Granular Fill - Furnish, Handle, Place, Backfill, Grade, and Compact where Polluted, Contaminated, or Unsuitable soils are removed.  
\_\_\_\_\_ per CY
- L) 6" of Gravel Surfacing over Geosynthetic Separation Barrier In-Place. \_\_\_\_\_ per SY
- M) 6" of Gravel Surfacing over Tensar TriAx Geogrid In-Place. \_\_\_\_\_ per SY
- N) 3" of Gravel Surfacing for 6' wide Pathways In-Place. \_\_\_\_\_ per LF
- O) Construction Entrance (Anti-Tracking Pad) as specified. \_\_\_\_\_ each
- P) Additional Test Pits. \_\_\_\_\_ each
- Q) Supply Topsoil. \_\_\_\_\_ per CY
- R) Fine Grade Topsoil. \_\_\_\_\_ per SY
- S) Seeding and Lawn Establishment. \_\_\_\_\_ per SY
- T) 2-1/2" Class II Bituminous Concrete Sidewalk over 6" compacted processed base (typ.).  
\_\_\_\_\_ per SF
- U) Bituminous Concrete Curb (typ.). \_\_\_\_\_ per LF
- V) Vehicular 4" Bituminous Concrete Section on 8" Processed Aggregate Base over 10" Subbase (Full Depth Roadway) (typ.). \_\_\_\_\_ per SY
- W) Vehicular 4" Bituminous Concrete Section on 6" Processed Aggregate Base over 10" Subbase (Full Depth Driveway) (typ.). \_\_\_\_\_ per SY
- X) Sawcutting for Pavement Repair for above 4" Bituminous Concrete Sections.  
\_\_\_\_\_ per LF
- Y) Pavement Removal and Disposal for Pavement Repair for above 4" Bituminous Concrete Sections.  
\_\_\_\_\_ per SY
- Z) Other unit prices to be used are found in Section 01 20 00 Contract Considerations.

44. **SUPPLEMENTS** – N/A.

**END OF BID PACKAGE**



## ALLOWANCES

*NOTE TO ALL SUBCONTRACTORS: Work performed against an Allowance is not a Change Order and shall be done at the Construction Manager's written or verbal direction and tracked with daily T&M tickets using labor and equipment rates or unit prices included in the Bid Form as approved by the CMR and Owner. The Base Bid already includes markup for the Subcontractor's overhead and profit, so do not mark-up Allowances. Submit change order proposals with copies of signed T&M tickets as backup with the monthly requisition. Any unused amount of an allowance contained in your Bid Package shall be 100% credited back to the Owner prior to financial closeout.*

**1. BID PACKAGE 1A – MOVING & CLEANING:**

**Moving & Cleaning Subcontract 1A is to carry the following Allowances in the Base Bid:**

A) Allow \$20,000 to rent, deliver, and pickup 16-foot PODS storage containers, as needed for each phase and as directed by the CMR, for the purpose of temporary storage of the Owner's furniture and contents that are removed from each room or space in question.

**2. BID PACKAGE 9A – GENERAL TRADES & CARPENTRY:**

**General Trades & Carpentry Subcontract 9A is to carry the following Allowances in the Base Bid:**

A) Allow 200 man hours and \$10,000 in materials to furnish and install railings and other safety requirements as directed by the Construction Manager. Note: This cost is not to be used for Subcontract 9A's normal safety requirements as required by the Contract Documents.

B) Allow 200 man hours to repair damages by others noted on the punch list.

**3. BID PACKAGE 9B – PAINTING & CAULKING:**

**Painting & Caulking Subcontract 9B is to carry the following Allowance in the Base Bid:**

A) Subcontract 9B to carry an allowance of \$5,000 for touch up painting after the move in of the Owner's FF&E at the end of each phase, as directed by the CMR.

4. **BID PACKAGE 9C – CEILINGS**

**Ceilings Subcontract 9C is to carry the following Allowance in the Base Bid:**

- A) Subcontract 9C to carry an allowance of 200 carpenter man hours and \$5,000 in materials to repair/replace ceilings as directed by the Construction Manager.

5. **BID PACKAGE 23A – MECHANICAL**

**Mechanical Subcontract 23A is to carry the following Allowances in the Base Bid:**

- A) Allow \$100,000 to furnish, install, and later remove temporary domestic water heaters for use in Buildings 0, 1, 2, 3, 4, 7, 9A and 12 during the Hot Water System Shutdown from April 1, 2020 to November 1, 2020. Electric tankless on-demand water heaters may be purchased for this purpose in most of the buildings, sized for the demand of each building. The main kitchen is in Building 9A, which requires a larger, temporary electric boiler to be installed.
- B) Allow \$250,000 for removal and/or relocation of major unavoidable interferences associated with “ETR” mechanical and plumbing piping, supports, and equipment “as needed” but not shown or indicated on the Drawings, as authorized in advance by the CMR.

6. **BID PACKAGE 31A – SITE PREPARATION: Clearing & Grubbing / Fencing / Lawns**  
**Site Preparation Subcontract 31A is to carry the following Allowances in the Base Bid:**

- B) For WAO #1 – Allow \$30,000 to retain the services of a Licensed Electrical sub-Subcontractor to furnish, install, and later remove temporary power to the CMR’s four (4) double-wide trailers.
- C) Allow \$50,000 for Snow Removal on a Time and Material (T&M) basis as directed by the CMR.

7. **BID PACKAGE 31B – SITEWORK: Excavation & Backfill / Paving**

**Sitework Subcontract 31B is to carry the following Allowance in the Base Bid:**

- A) Allow \$8,000 to purchase, furnish, deliver, handle, install, and later remove and haul away one (1) slightly used **40-ft modified storage container (conex box) for use as a footbridge.**

END OF SECTION 01 22 00

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**UNIT PRICE LIST**

*NOTE TO ALL SUBCONTRACTORS: Provide unit pricing (per S.F., L.F., C.F., C.Y., EA., TON, etc.) on the Unit Price Schedule (D) provided with the Bid Proposal Form for materials or services added to or deducted from this Subcontract to be utilized if quantities of this scope of work are increased or decreased from the Contract Documents. Where applicable, Unit Prices shall apply to the actual difference from the quantities identified in the Contract Documents for the Base Bid. Also refer to Specification Sections and Drawings related to your work for descriptions and applicable Unit Prices. All awarded Subcontractors must submit unit prices with materials and labor rates with detailed breakdown for each applicable trade upon contract execution, subject to approval by the CM and the Owner. Unit Prices shall remain valid for the life of project, including all costs for a complete installation/removal. All unit prices provided are for adds and/or deducts and are to include all overhead and profit. The deduct unit price will be the unit price less 10%.*

**1. BID PACKAGE 3A – CONCRETE**

**Concrete Subcontract 3A is to provide the following Unit Prices on the Bid Proposal Form:**

- A) 6" Equipment Pad, Reinforced (typ.). \_\_\_\_\_ per SF
- B) 8" Equipment Pad, Reinforced (typ.). \_\_\_\_\_ per SF
- C) 12" Equipment Pad, Reinforced (typ.). \_\_\_\_\_ per SF
- D) 6" Concrete Sidewalk on 8" Compacted Granular Fill (typ.). \_\_\_\_\_ per SF
- E) Footing Forms, contact area. \_\_\_\_\_ per SF
- F) Footing Concrete, in place. \_\_\_\_\_ per CY
- G) Wall Forms, contact area. \_\_\_\_\_ per SF
- H) Wall Concrete, in place. \_\_\_\_\_ per CY
- I) Reinforcing Steel Bars, in place. \_\_\_\_\_ per LB
- J) Epoxy Polymer Sealer, in place. \_\_\_\_\_ per SF
- K) Epoxy Polymer Crack Filler, in place. \_\_\_\_\_ per LF
- L) Testing for Delaminated Concrete as specified. \_\_\_\_\_ per SF
- M) Epoxy Polymer Concrete Repair, in place. \_\_\_\_\_ per SF
- N) Rebar Prep for Concrete Repair, in place. \_\_\_\_\_ per LF

2. **BID PACKAGE 4A – MASONRY**

**Masonry Subcontract 4A is to provide the following Unit Prices on the Bid Proposal Form:**

- A) Replacement of existing decorative split-face block \_\_\_\_\_ per SF.
- B) Re-pointing of existing decorative split-face block \_\_\_\_\_ per SF.
- C) Replacement of existing CMU \_\_\_\_\_ per SF.
- D) Re-pointing of existing CMU \_\_\_\_\_ per SF.
- E) Cleaning of existing masonry \_\_\_\_\_ per SF.

3. **BID PACKAGE 21A – FIRE SUPPRESSION**

**Fire Suppression Subcontract 21A is to provide the following Unit Prices on the Bid Proposal Form:**

- A) Remove sprinkler head / replace with new & up to 15 LF of new branch piping. \_\_\_\_\_ EA.
- B) Remove sprinkler head / relocate existing & up to 15 LF of new branch piping. \_\_\_\_\_ EA.

4. **BID PACKAGE 26A – ELECTRICAL**

**Electrical Subcontract 26A is to provide the following Unit Prices on the Bid Proposal Form:**

- A) Remove light fixture/replace with new & up to 15 LF of new conduit/wire. \_\_\_\_\_ EA.
- B) Remove light fixture/relocate existing & up to 15 LF of new conduit/wire. \_\_\_\_\_ EA.
- C) Furnish and Install Receptacle (wiring up to 25'). \_\_\_\_\_ per EA.
- D) Furnish and Install Switch and Box (wiring up to 25'). \_\_\_\_\_ per EA.
- E) Furnish and Install Enclosed Switch. \_\_\_\_\_ per EA.
- F) Furnish and Install Conduit Drop in Wall (up to 20'). \_\_\_\_\_ per EA.
- G) Furnish and Install Surface Raceway. \_\_\_\_\_ per LF.
- H) Furnish and Install Cable Tray. \_\_\_\_\_ per LF.
- I) Furnish and Install 4" Rigid Steel Conduit. \_\_\_\_\_ per LF.
- J) Furnish and Install 2" Rigid Steel Conduit. \_\_\_\_\_ per LF.
- K) Furnish and Install 1/2" Aluminum Rigid Conduit. \_\_\_\_\_ per LF.
- L) Furnish and Install temporary stringer lights \_\_\_\_\_ per LF.
- M) Furnish and Install temporary single halogen lights \_\_\_\_\_ each.
- N) Furnish and Install temporary power stanchion \_\_\_\_\_ each.
- O) Furnish and Install temporary power to trailer \_\_\_\_\_ each.
- P) Furnish and Install temporary exterior lights \_\_\_\_\_ each.

**5. BID PACKAGE 31A – SITE PREPARATION: Clearing & Grubbing / Fencing / Lawns**

**Site Preparation Subcontract 31A is to provide the following Unit Prices on the Bid Proposal Form:**

- A) Additional weekly rental of 8-ft x 8-ft. temporary fence panels with stanchions installed with 3 ties at each joint. \_\_\_\_\_ per LF
- B) Additional monthly rental of 8-ft x 8-ft. temporary fence panels with stanchions installed with 3 ties at each joint. \_\_\_\_\_ per LF
- C) Furnish, install and maintain 8-ft. high semi-permanent C.L. fence with driven posts.  
\_\_\_\_\_ per LF
- D) Furnish, install and maintain 12-ft. high semi-permanent C.L. fence with driven posts.  
\_\_\_\_\_ per LF
- E) Furnish, install and maintain coiled razor wire on top of 12-ft. high semi-permanent fence.  
\_\_\_\_\_ per LF
- F) Furnish, install and maintain 3-ft. wide C.L. gate with concrete set posts. \_\_\_\_\_ per EA
- G) Furnish, install and maintain 6-ft. wide C.L. gate with concrete set posts. \_\_\_\_\_ per EA
- H) Furnish, install and maintain 12-ft. wide C.L. gate with concrete set posts. \_\_\_\_\_ per EA
- I) Furnish, install and maintain 24-ft. wide C.L. gate with concrete set posts. \_\_\_\_\_ per EA
- J) Additional weekly rental of custom temporary rolling fence. \_\_\_\_\_ per LF
- K) Additional monthly rental of custom temporary rolling fence. \_\_\_\_\_ per LF
- L) Additional purchase of custom temporary rolling fence. \_\_\_\_\_ per LF
- M) Clearing and grubbing and disposal of wooded area. \_\_\_\_\_ per 1,000 SF
- N) Individual tree, stump and root removal and disposal for saplings  $\leq 2$ " diameter tree.  
\_\_\_\_\_ per EA
- O) Individual tree, stump and root removal and disposal for a small  $\leq 4$ " diameter tree.  
\_\_\_\_\_ per EA
- P) Individual tree, stump and root removal and disposal for a medium  $\leq 8$ " diameter tree.  
\_\_\_\_\_ per EA
- Q) Individual tree, stump and root removal and disposal for a large  $\leq 16$ " diameter tree.  
\_\_\_\_\_ per EA

- R) Individual tree, stump and root removal and disposal for and a huge >16" diameter tree.  
\_\_\_\_\_ per EA
- S) Furnish, install and maintain silt fence. \_\_\_\_\_ per 100 LF
- T) Furnish, install and maintain 24-ft. wide x 25-ft. long construction entrance (anti-tracking pad).  
\_\_\_\_\_ per EA
- U) Furnish and install 6" gravel on geogrid. \_\_\_\_\_ per SF
- V) Other unit prices to be used are found in Section 01 20 00 Contract Considerations.

**6. BID PACKAGE 31B – SITEWORK: Excavation & Backfill / Paving**

**Sitework Subcontract 31B is to provide the following Unit Prices on the Bid Proposal Form:**

- A) Excavate, handle, stockpile in the temporary WSA, and re-use contaminated soil.  
\_\_\_\_\_ per CY
- B) Excavate, handle, stockpile in the temporary WSA, and re-use polluted soil.  
\_\_\_\_\_ per CY
- C) Polluted Soil - Excavation. \_\_\_\_\_ per CY
- D) Polluted Soil - Loading and Disposal. \_\_\_\_\_ per CY
- E) Polluted Soil - Handle, Place, Backfill, Grade, and Compact in an On Site Borrow Pit.  
\_\_\_\_\_ per CY
- F) Contaminated Soil - Excavation. \_\_\_\_\_ per CY
- G) Contaminated Soil - Loading and Disposal. \_\_\_\_\_ per CY
- H) Contaminated Soil - Handle, Place, Backfill, Grade, and Compact in an On Site Borrow Pit.  
\_\_\_\_\_ per CY
- I) Clean Soil - Excavation. \_\_\_\_\_ per CY
- J) Clean Soil - Loading and Hauling. \_\_\_\_\_ per CY
- K) Imported Engineered Fill/Well-compacted Granular Fill - Furnish, Handle, Place, Backfill, Grade, and Compact where Polluted, Contaminated, or Unsuitable soils are removed.  
\_\_\_\_\_ per CY
- L) 6" of Gravel Surfacing over Geosynthetic Separation Barrier In-Place. \_\_\_\_\_  
per SY
- M) 6" of Gravel Surfacing over Tensar TriAx Geogrid In-Place. \_\_\_\_\_ per SY
- N) 3" of Gravel Surfacing for 6' wide Pathways In-Place. \_\_\_\_\_ per LF
- O) Construction Entrance (Anti-Tracking Pad) as specified. \_\_\_\_\_ each

- P) Additional Test Pits. \_\_\_\_\_ each
- Q) Supply Topsoil. \_\_\_\_\_ per CY
- R) Fine Grade Topsoil. \_\_\_\_\_ per SY
- S) Seeding and Lawn Establishment. \_\_\_\_\_ per SY
- T) 2-1/2" Class II Bituminous Concrete Sidewalk over 6" compacted processed base (typ.).  
\_\_\_\_\_ per SF
- U) Bituminous Concrete Curb (typ.). \_\_\_\_\_ per LF
- V) Vehicular 4" Bituminous Concrete Section on 8" Processed Aggregate Base over 10"  
Subbase (Full Depth Roadway) (typ.). \_\_\_\_\_ per SY
- W) Vehicular 4" Bituminous Concrete Section on 6" Processed Aggregate Base over 10"  
Subbase (Full Depth Driveway) (typ.). \_\_\_\_\_ per SY
- X) Sawcutting for Pavement Repair for above 4" Bituminous Concrete Sections.  
\_\_\_\_\_ per LF
- Y) Pavement Removal and Disposal for Pavement Repair for above 4" Bituminous Concrete  
Sections. \_\_\_\_\_ per SY
- Z) Other unit prices to be used are found in Section 01 20 00 Contract Considerations.

END OF SECTION 01 22 00



# 8 CONTROLS

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## 8.1 EXISTING CONDITIONS

The York Correctional campus has two building management systems running in parallel. During main construction of the campus around 1991, Johnson Controls installed their Metasys system. This system uses JCI's N1 and N2 proprietary communication protocols. This system controls the central plant as well as controls in buildings 0 through 10. In addition, within the past few years, the campus hired SNE Building Systems to add a second control system that is installed only at buildings 10, 10A, 11, 12, and 13. This system relies on Schneider Electric's SmartStruxure controllers, which can communicate using LON, BACNet, Modbus, or Network 8000. There are existing Network 8000 controllers in some of these buildings, which were built separately.

This project will upgrade the central plant equipment as well as replace in kind controls in 22 buildings. Additional elements will be added to the system for the control and monitoring of the CHW and HW loop. The design will include new open BACNet controls for both the central plant and constituent buildings. All new controls for the plant and constituent buildings will be digitally controlled, and all pneumatics controls will be replaced with digital controls. The project will include detailed Piping & Instrumentation drawings (P&ID) to show all required points and connections.

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## 8.2 DESIGN NARRATIVE

The purpose of this document is to define the basic requirements for an Integrated Control System. The new control system shall be an industrial grade control system utilizing open and widely used industrial protocols and utilize standard off-the-shelf technologies (ie conventional 4-20mA, RTD and T/C inputs, low-voltage (mv) inputs, powered and isolated discrete inputs, AC and DC discrete outputs, Microsoft Windows, OPC, Modbus protocols, PC's, Windows Servers etc). The new control system shall incorporate a secure engineering and operational environment including for communications, alarming, operator graphics, system diagnostics, plant historians, sequence of events, and engineering.

The new control system shall utilize a single system-wide database where all system alarms and events as well as operator actions taken from any operator console is stored. Storage is by date/time of the event and is accessible to all operator consoles on the system. This minimizes the amount of up front engineering and simplifies any future system or I/O changes. The new system shall have the capability to automatically detect and recognize any hardware upon addition to or removal from the system without user intervention. It shall permit, with proper login credentials, the ability to control any plant area from any connected operator workstation.

This upgrade will be designed for maximum central plant availability.

Control network shall be built upon a new fiber backbone. Additional capacity will be inherent to the system and provisions in the way of additional below ground conduit will allow for segment replacement in the event of a network break. This will ensure that the system remains connected to the non-damaged segments/buildings. Controls at the individual buildings will be configured to be standalone so that connection with the Fiber network is not required for the controls to function properly. The site-wide fiber loop installation will bring back data from each building to the Central Plant for functions such as alarm monitoring, trending archiving and operator oversight. Global data such as outdoor air/humidity, scheduling and point overrides will be configured to work off of last reliable reading. Any failure in the system will result in an alarm being indicated at the operator workstations. The system will be capable of connecting local audio visual as well as network and paging alarms. This passive optical network will provide fiber connectivity to the network and allow for interface with the BMS system with high integration, flexible adaptation, notable reliability, reduced installation and O & M costs and lowers and capably disperses power.

The fiber topology for this solution will be a Passive Optical Network (PON). A PON consists of an optical line terminal (OLT) at the primary network or service provider hub and several optical network units (ONUs) or optical network terminals (ONTs), near end users or devices for conversion to and connection of traditional Ethernet connectivity using

CAT6 connections. The primary fiber route or trunk of the system is “split” along the route to feed the remote ONT’s. The term "passive" in Passive Optical Network refers to the fact that the splitter requires no power as opposed to an "active" device like the switches in a traditional network. The splitter serves to optically replicate upstream signals to a number of downstream fibers. Consequently, the optical splitter is sometimes referred to as a splitter/combiner. The splitter will be housed in a number of form factors.

The Central Plant (Building 10) will serve as the main hub for the fiber communications systems for the facility and will contain the following equipment:

- Passive Optical Network Optical Line Terminal (OLT) for connection to overall network and to provide downstream service to local Optical Network Terminals (ONT)
- Local ONT for connection to local BMS equipment and servers.
- Head-end equipment for the BMS system
- Power supply and rack mount UPS
- Fiber Rack and other passive management components

Conduit 4” PVC for the fiber optic communication from each building will run co-located and parallel within a common trench duct system with the new underground network piping throughout the site. The buildings will be wired to the latest TIA/EIA standard for fiber communications using single mode fiber. The fiber optic communications distribution system for this project will cover all buildings subject to the BMS upgrade for monitoring of the chilled water and hot water interfaces across the site.

Remote I/O shall be utilized in each building for all hardwire I/O points. Single channel integrity will be designed into the system by using field characterizable I/O modules. This means a failure in one channel does not affect other I/O channels. In this way, the I/O is configurable. Late project changes or additions do not need to be rewired or drawings reissued. For example, a configurable I/O terminal can be easily changed to be an analog input, RTD, thermocouple, analog output, digital input, or digital output. The Operating temperature limitation of the new control system shall be -40 to 70 deg C (-40 to 158 deg F).

The control system shall utilize smart (managed) switches. These switches shall provide capability for use to configure security from a single location. The switches shall include embedded diagnostics to indicate failures such as hardware or port failures, comms errors, etc. Security lockdown capability of all unused ports can be initiated with a single mouse click or keyboard action. In other words, all consoles shall include the capability of a one click disable (secure) of all USB ports and DVD drives. The new system switches shall support megabit and gigabit speed over fiber optic network cables. The new control system shall be designed to accommodate on-line expansion to the control network. For security purposes, users cannot connect with the control network at the remote-control panels. Communication devices, such as switches and routers, within the control network shall include 20% unused node addresses and ports on the network hardware.

Operator Interface capabilities are also provided to personal computers or thin-client hardware. The control system software will not need to be installed on the remote client(s). The remote client will not require high powered or sophisticated hardware to function.

The new control system shall have the capability to integrate industrial Ethernet I/O networks and devices that use standard BACnet, Modbus TCP or EtherNet/IP protocol drivers. The control system shall be able to read/write signals from the plant floor devices connected to Ethernet I/O such as boiler control packages, chillers, VFD’s, etc.

The new fiber loop is provided with sufficient bandwidth in case third-party controls, protocols, or equipment is to be integrated into the new central control system. Third party communications and equipment shall not be connected to the new automation control network fiber. Third party equipment shall be connected to I/O controllers located in the plant and throughout the campus. These I/O controllers will be connected to the Fiber Network through Optic Network Terminals (ONT) located in the I/O cabinet.

Individual buildings will be equipped with control panels located in the MERs where the Chilled water and Hot water enters the building. They will be sized to accommodate new equipment and systems being installed at each building. The control panels shall be equipped with an Optic Network Terminal (ONT) which will connect the Fiber Optic network to the

controller. Existing chilled and hot water valves serving air handler units (AHU) in the buildings will be replaced with pressure independent control valves (PICV). The PICV will be wired to, and controlled from, the new building control panel. New temperature sensors will be installed at the AHUs and wired back to the new controller in the main MER.

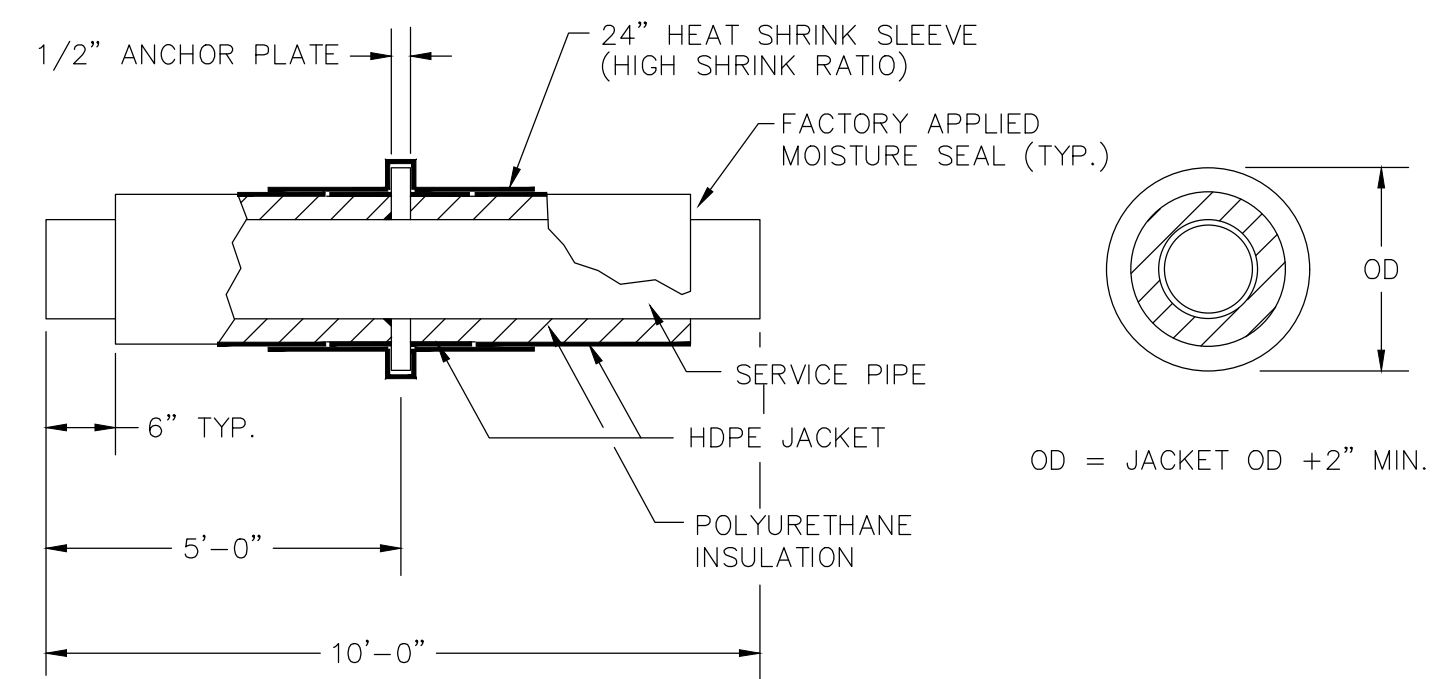
New temperature and pressure sensors will be installed in the hot and chilled water supply and return piping at the entry point within the main MER for each building as indicated on the design drawings. The chilled water and hot water temperature and pressure supply and return to/from each building will be indicated through the BMS. Flow meters for both hot and chilled water will be provided and BTU will be indicated through the BMS.

The differential pressure (DP) between the supply and return to/from each building for the chilled water and for the hot water systems will be calculated and sent to the VFD controller for the chilled water and hot water pumps at the plant so that proper flow can be maintained throughout the chilled and hot water loops. The BMS system shall allow the plant operator to designate (select) which of the building DP signals will be used to control the VFD speed for each pumping system (chilled water or hot water).

Integration with third party systems will be accomplished using the BACnet protocol. Integrated systems include; Boiler Master Control Panel, Chilled Control Panel, Fuel oil pump skid, refrigerant leak detection panel as well as Variable Frequency Drives (VFD). These third-party systems will not be furnished and installed by the controls contractor. The controls contractor shall be responsible for providing all hardware, software and field coordination required to facilitate full monitoring and control functions of each system listed through the BMS.

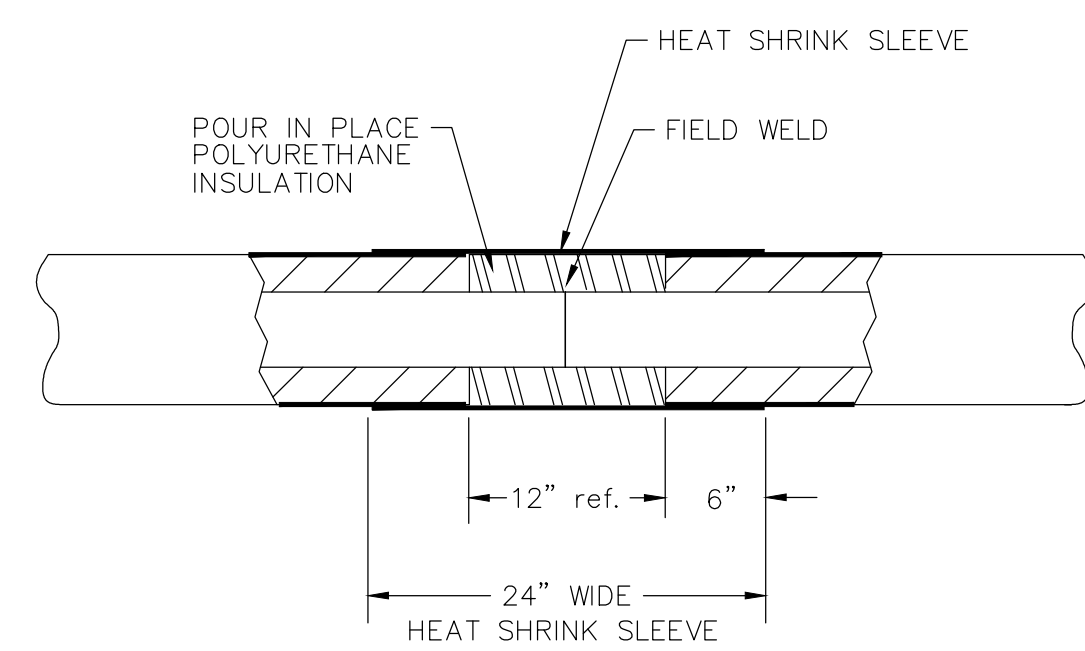
The system will be optically isolated from any external network. No connection to the internet will be provided under this design. To handle remote alarms and indications the system will utilize a local, hard wired dialer. This system does not rely upon the internet to provide remote alarming.





**1 STEEL PIPE STANDARD STRAIGHT PIPE ANCHOR BLOCK**

NOT TO SCALE

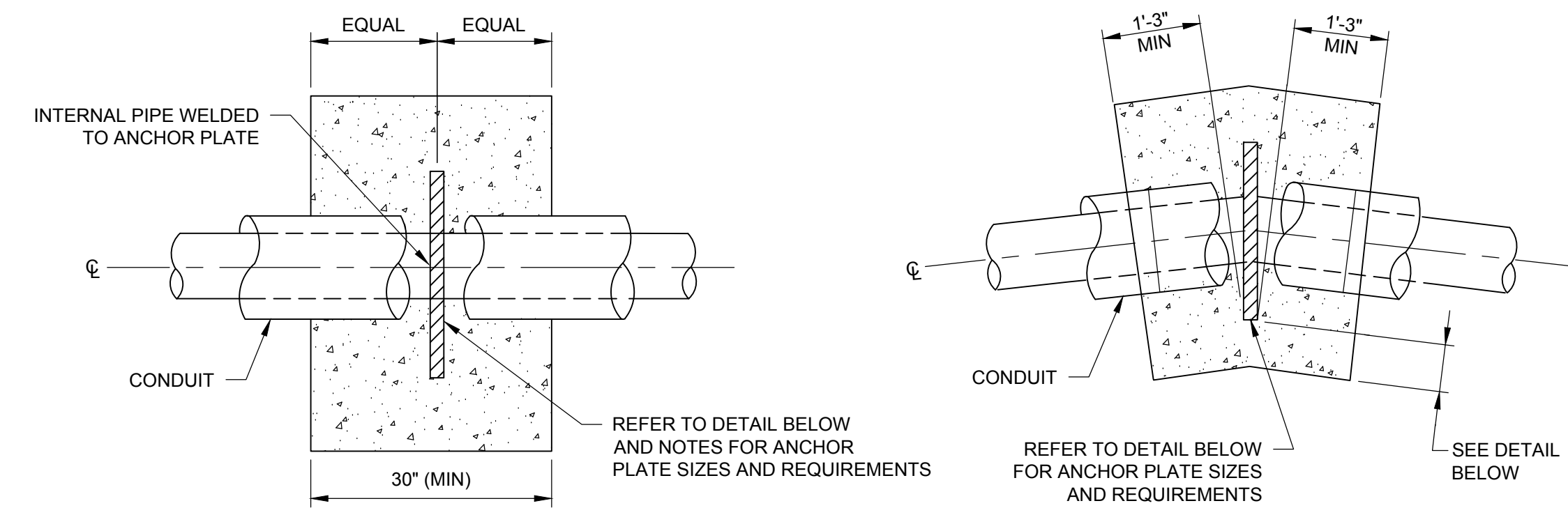


NOTES:

1. SOCKET WELD COUPLINGS, IF REQUIRED SUPPLIED BY INSTALLER
2. THE FOLLOWING FIELD JOINT MATERIAL SUPPLIED BY MANUFACTURER  
POUR IN PLACE POLYURETHANE INSULATION  
MOLD FOR POUR IN PLACE  
HEAT SHRINK SLEEVE  
STORE ALL CHEMICALS AT 60°F TO 85°F
3. DIFFERENCES IN HDPE JACKET OD'S BETWEEN PIECES ARE ACCOMMODATED BY A TAPER ACROSS THE FIELD JOINT
4. HEAT SHRINK SHALL BE 2 LAYERS WITH OPPOSING SEAMS.

**2 STEEL PIPE FIELD JOINT, HEAT SHRINK SLEEVE**

NOT TO SCALE

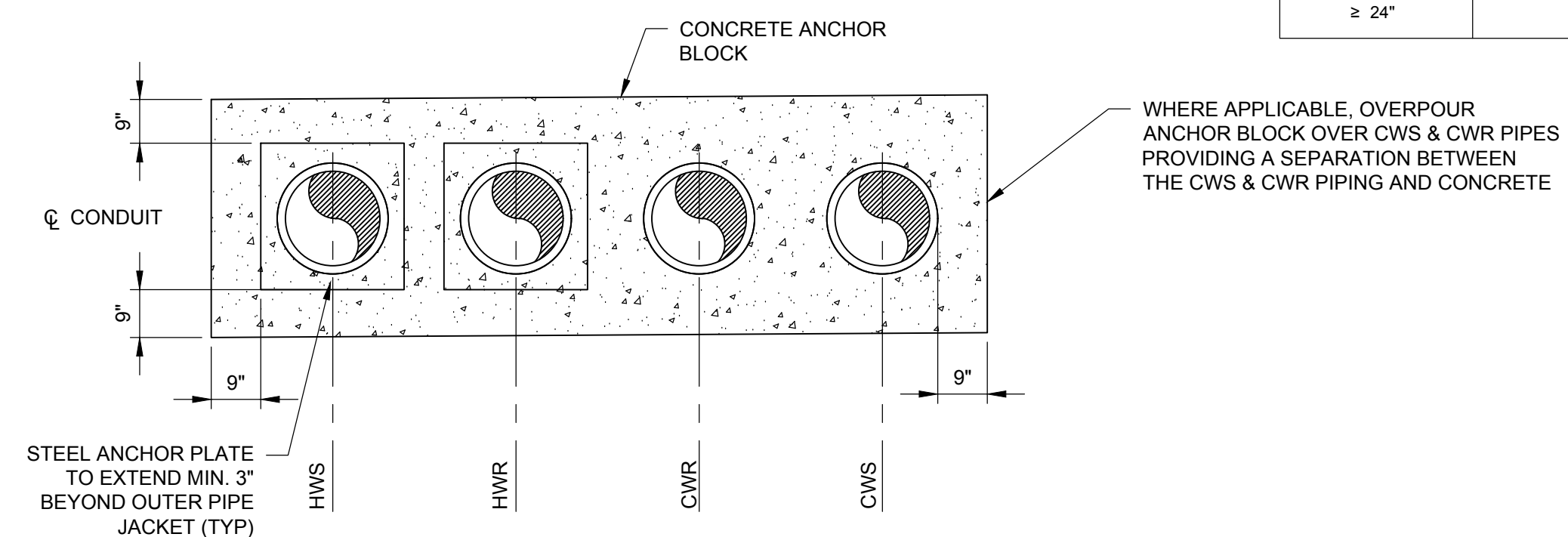


NOTES:

1. WELDED STEEL PLATES SHALL BE FACTORY INSTALLED AS PART OF PRE-ENGINEERED PIPING SYSTEM BY UNDERGROUND PIPING MANUFACTURER. PLATES SHALL BE FULLY WELDED AROUND THE CARRIER PIPES AND CONDUIT, PIPING SYSTEM SURFACE COATING SHALL BE CONTINUOUS OVER PIPING SYSTEM AND APPLIED AFTER FABRICATION.
2. PROVIDE ADDITIONAL ANCHORS TO THOSE SHOWN ON THE PLANS AS REQUIRED BY THE SPECIFIED PIPING SYSTEM STRESS ANALYSIS.

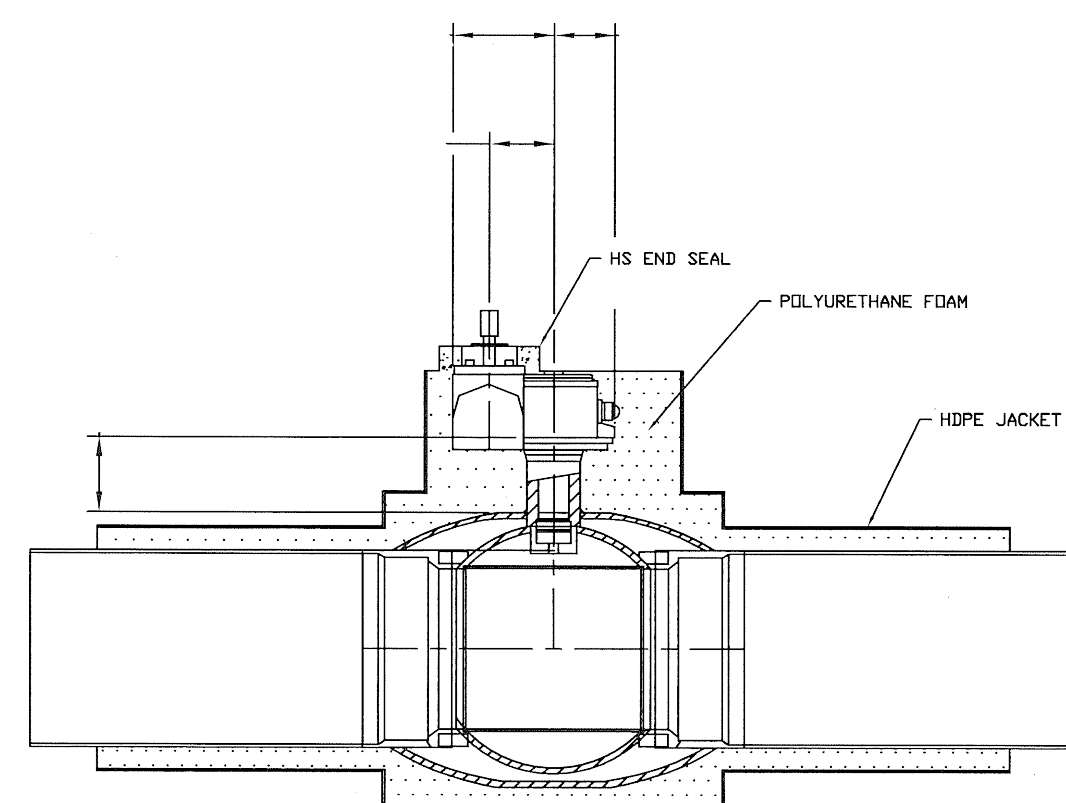
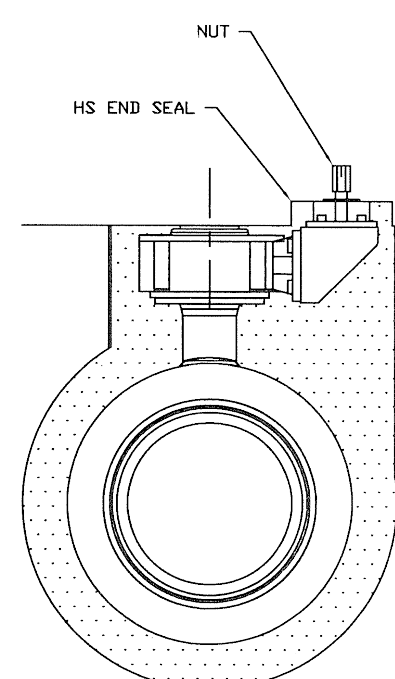
**ANCHOR BLOCK AT ELBOW DETAIL**

HWS/HWR CONDUIT NOMINAL DIA	PLATE THK. (IN.)
6 - 10"	3/8"
12 - 22"	1/2"
≥ 24"	3/4"



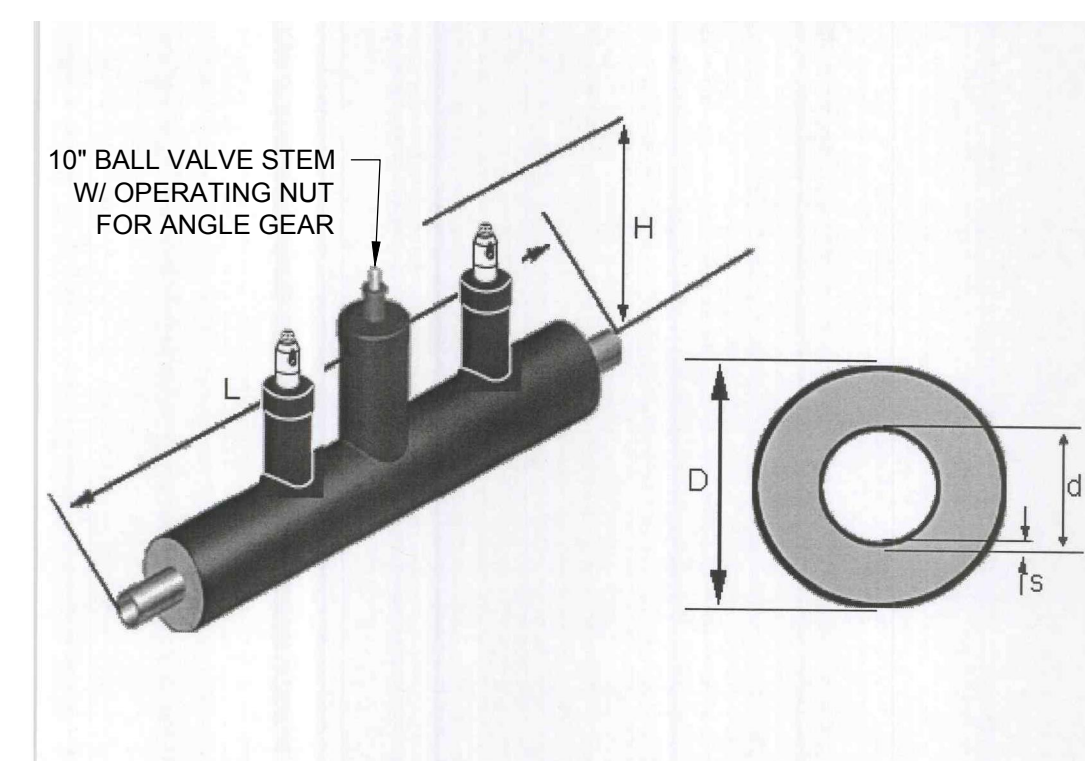
**3 TYPICAL ANCHOR BLOCK DETAIL**

NOT TO SCALE



**4 LONG STEM BALL VALVE WITH ANGLE GEAR**

NOT TO SCALE



Description	DN	Code	L	H	D around valve body	D around end pipe	d around valve body	d around end pipe	s*	notes
10" Pre-insulated ball valve	250	28481750/E	1500 mm	752 mm	400 mm	450 mm	273.0 mm	355.6 mm	5.0 mm / 8.0 mm	Equipped with vertical gear and 2 pcs 1" W" air vents

\* thickness of barrel end / thickness of pipe

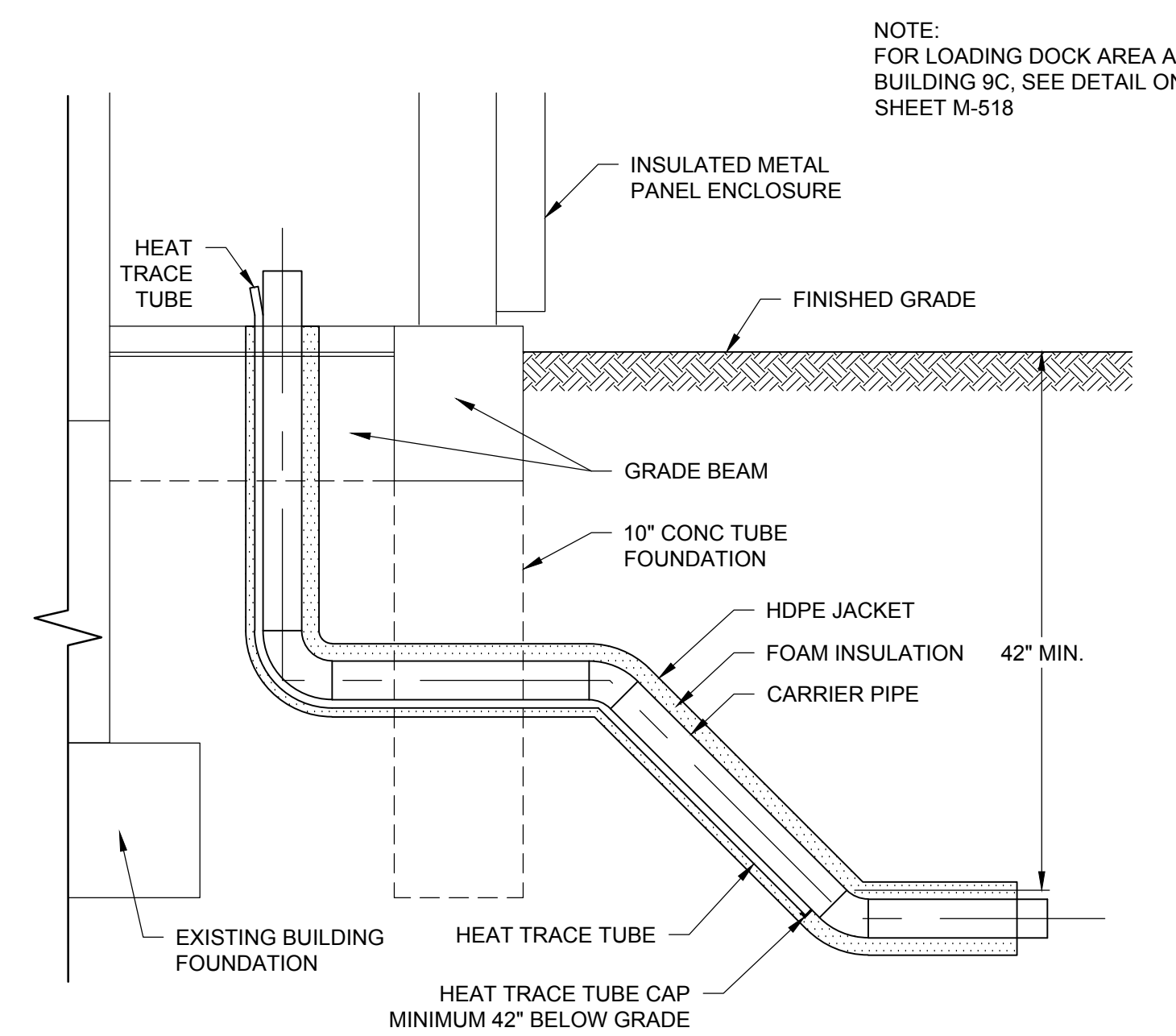
Properties	
Body:	DN 25-500 Steel, P235GH (1.0345) DN 600-800 Steel, P355 NL1 (1.0566) GP240GH (1.0619)
Ball:	DN 25-600 Stainless steel, X5CrNi18-10 (1.4301) DN 700-800 Steel + stainless plating, ASTM A350 LF2+Ni
Stem:	Stainless steel, X5CrNi18-9 (1.4305)
Top of stem:	Stainless steel, X5CrNi18-10 (1.4301)
Stem seals:	PTM
Ball seals:	PTFE+C

Insulation properties:	
Insulation	Polyurethane foam
Casing pipe	Polyethylene

Operation:	
Operation	10" valve: vertical gear box with hex stem top operation with t-key
Add. equipment	Air vents on both sides of the valve (2 pcs)

**5 10" ISOLATION VALVE WITH AIR RELEASE VALVE ASSEMBLY**

NOT TO SCALE

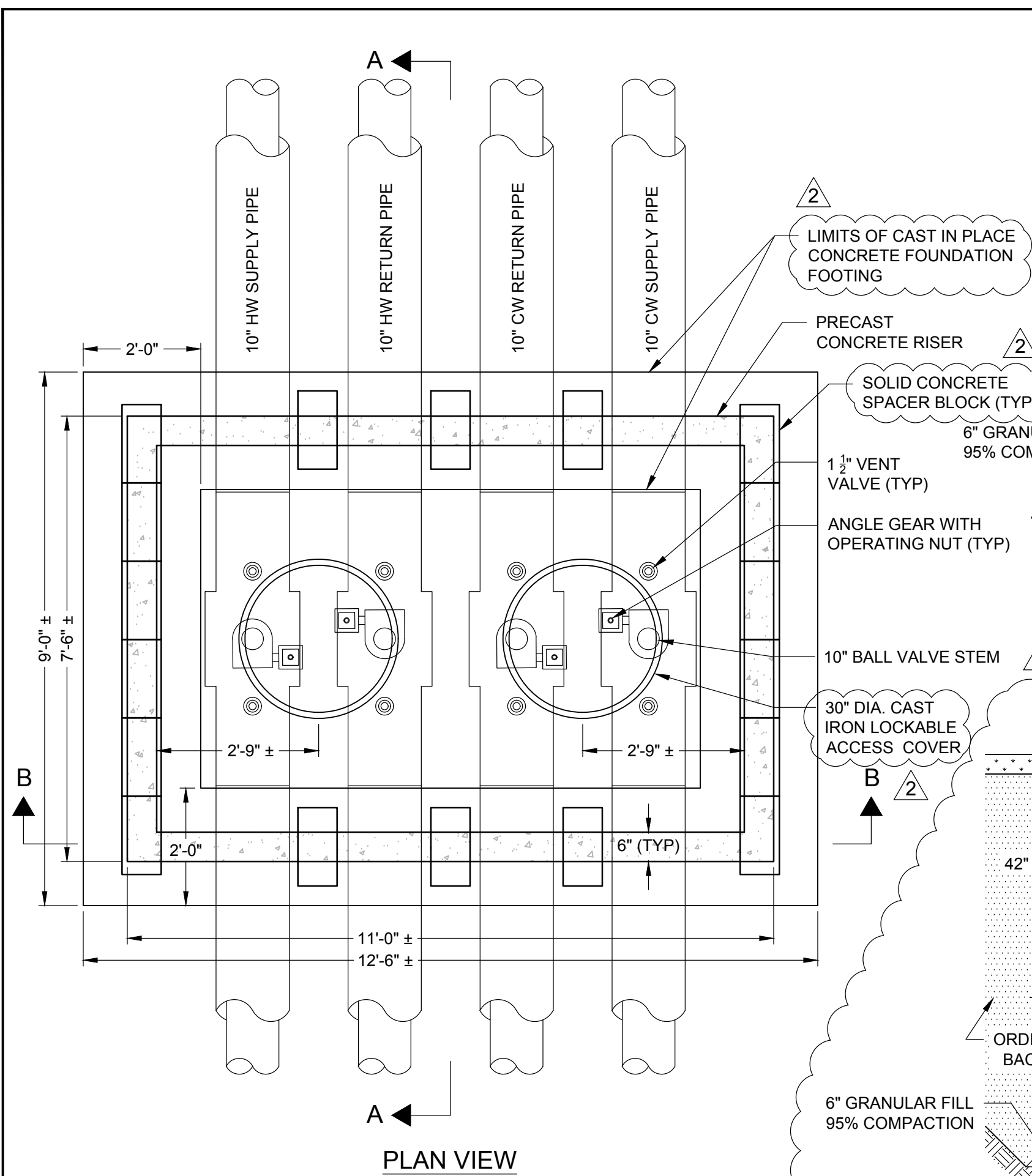


**6 HEAT TRACING DETAIL AT ENCLOSURES**

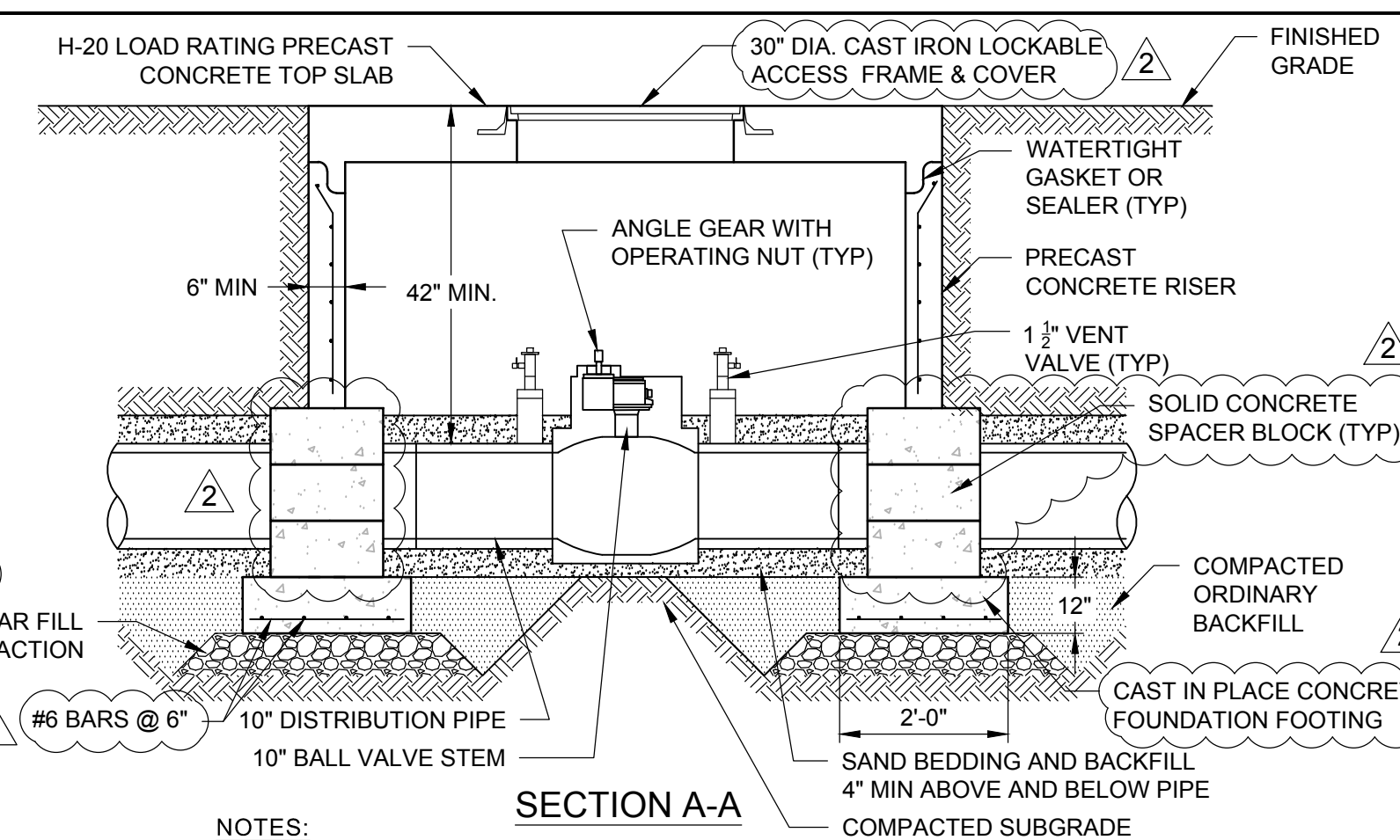
NOT TO SCALE

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REVISIONS			drawing prepared by	
mark	date	description	WSP USA	
	12/21/18	ISSUE FOR BID	ONE PENN PLAZA	
	01/28/19	ADDENDUM 1	NEW YORK, NY	
	02/06/19	ADDENDUM 2	project	
			YORK CORRECTIONAL INSTITUTION	
			CENTRAL PLANT AND DISTRIBUTION	
			NANTIC, CT	
CAD no.			project no.	
Site Details.dwg			189824	
			drawing no.	
			C502	

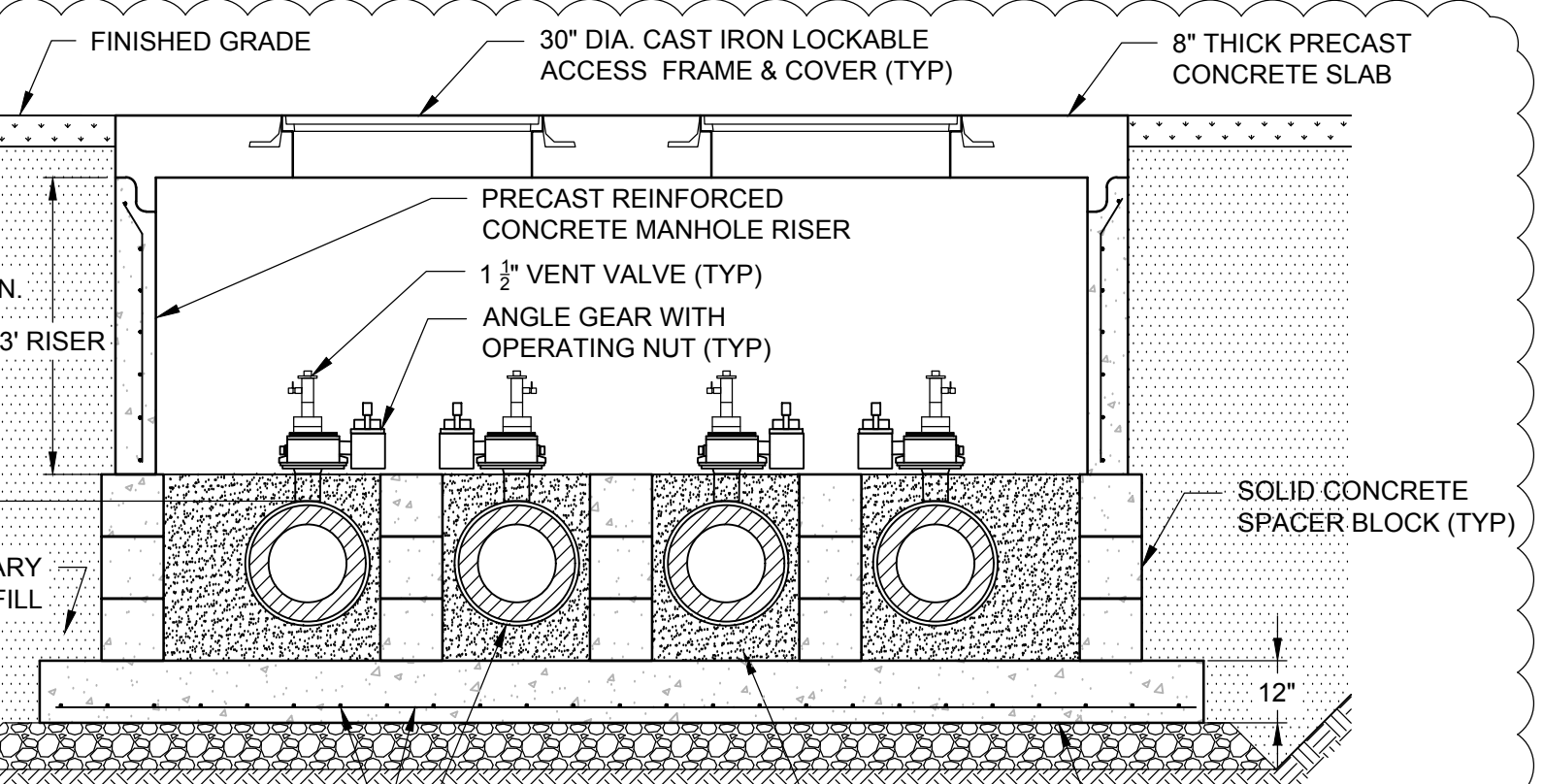




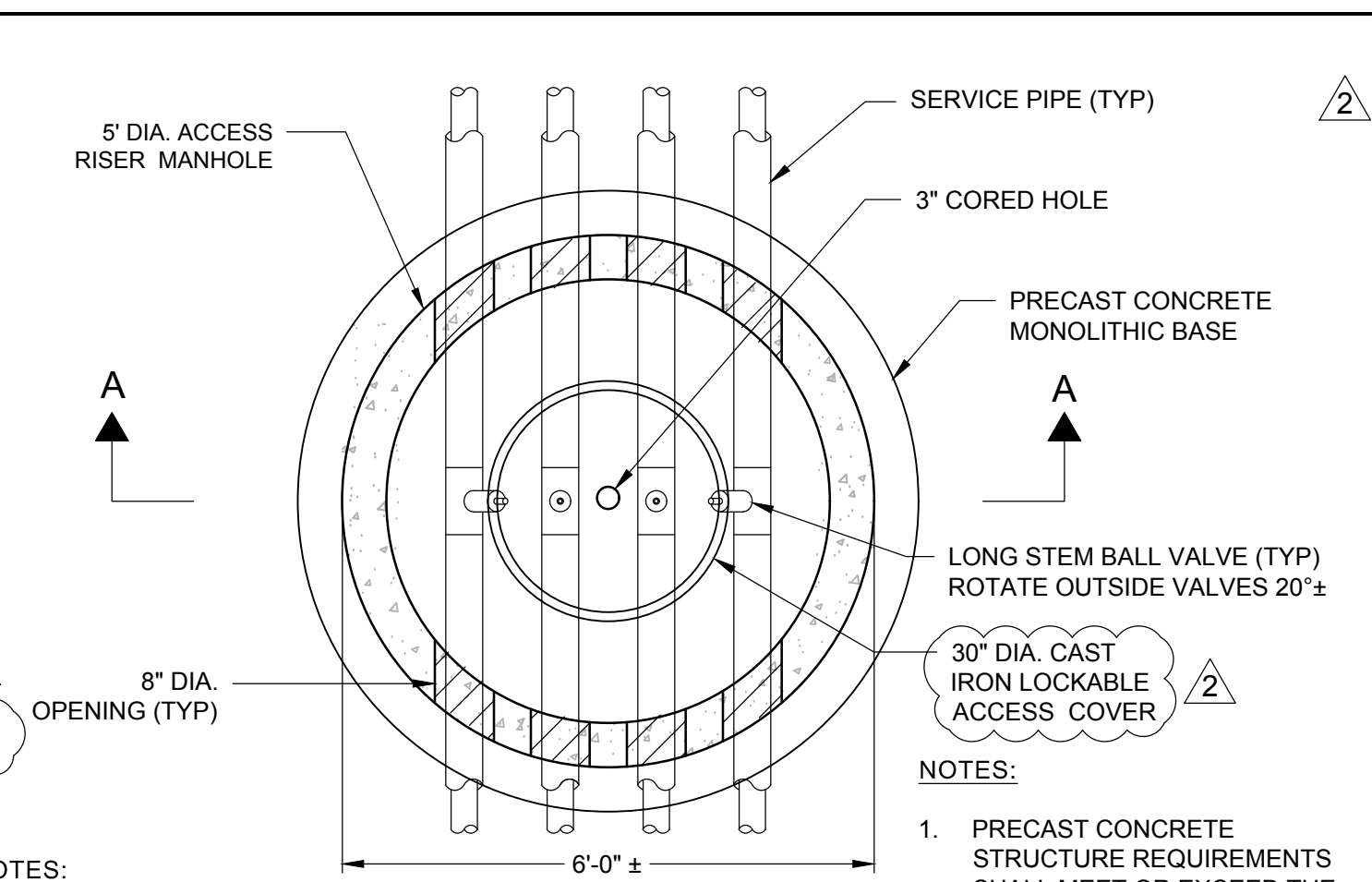
**1** DISTRIBUTION PIPING ISOLATION VALVE ACCESS RISER VAULT (TYPE 1)  
NOT TO SCALE



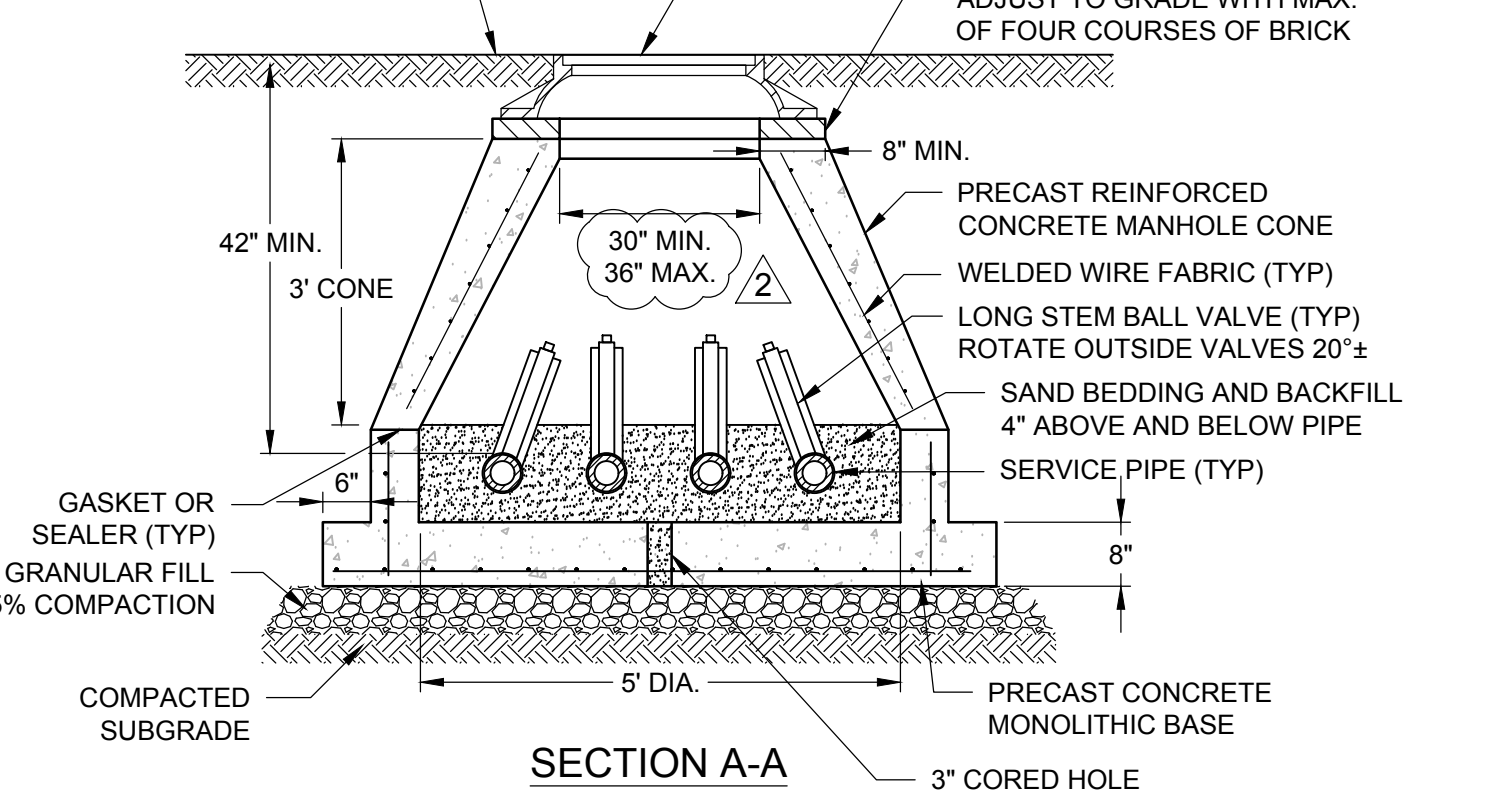
- NOTES:**
1. STRUCTURE REQUIREMENTS SHALL MEET OR EXCEED THE REQUIREMENTS FOR PRECAST STORM UTILITY DRAINAGE STRUCTURES.
  2. T-WRENCH TO BE SUPPLIED TO OPERATE ISOLATION VALVES FROM THE SURFACE.



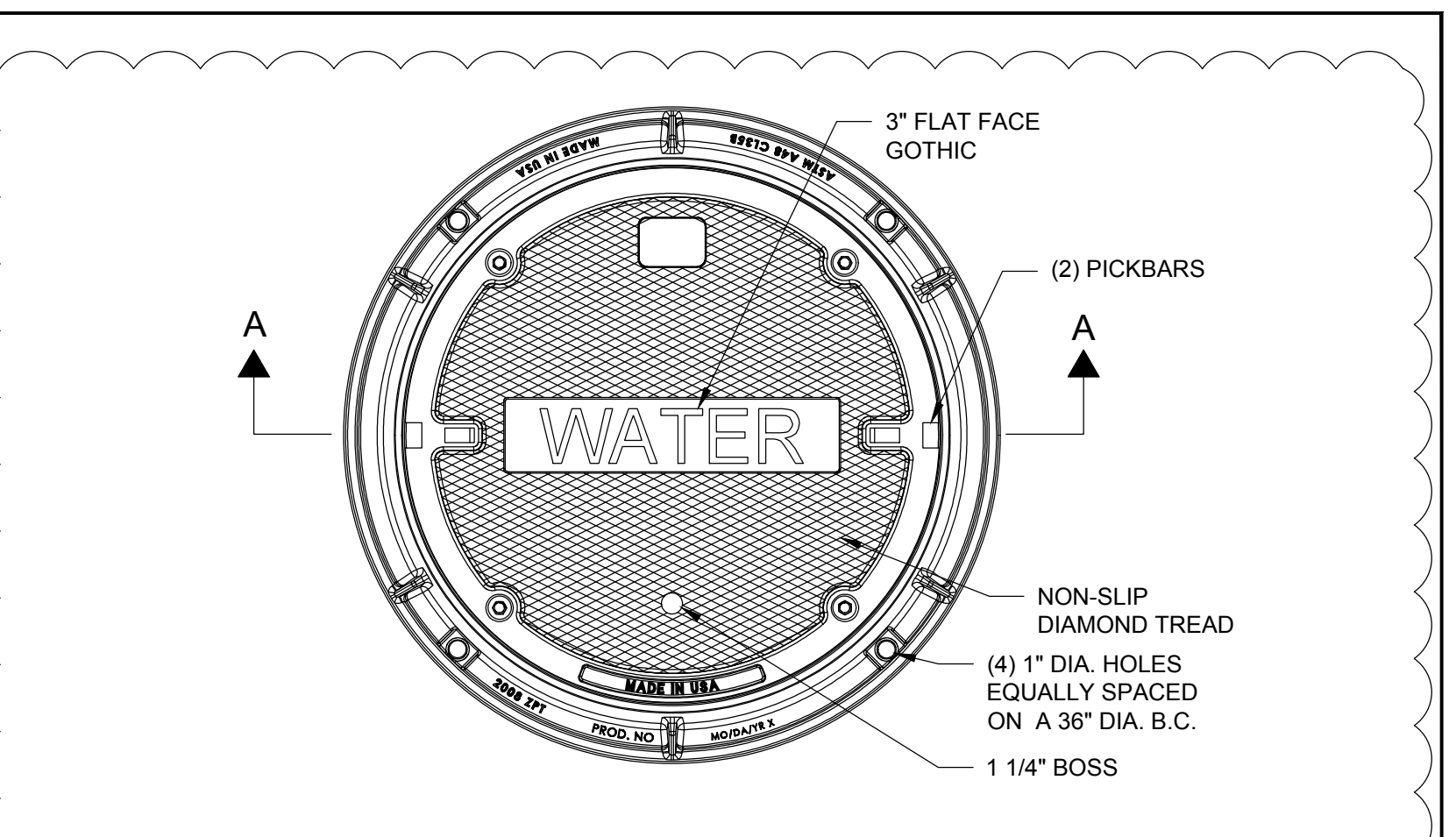
- NOTES:**
1. STRUCTURE REQUIREMENTS SHALL MEET OR EXCEED THE REQUIREMENTS FOR PRECAST STORM UTILITY DRAINAGE STRUCTURES.
  2. T-WRENCH TO BE SUPPLIED TO OPERATE ISOLATION VALVES FROM THE SURFACE.



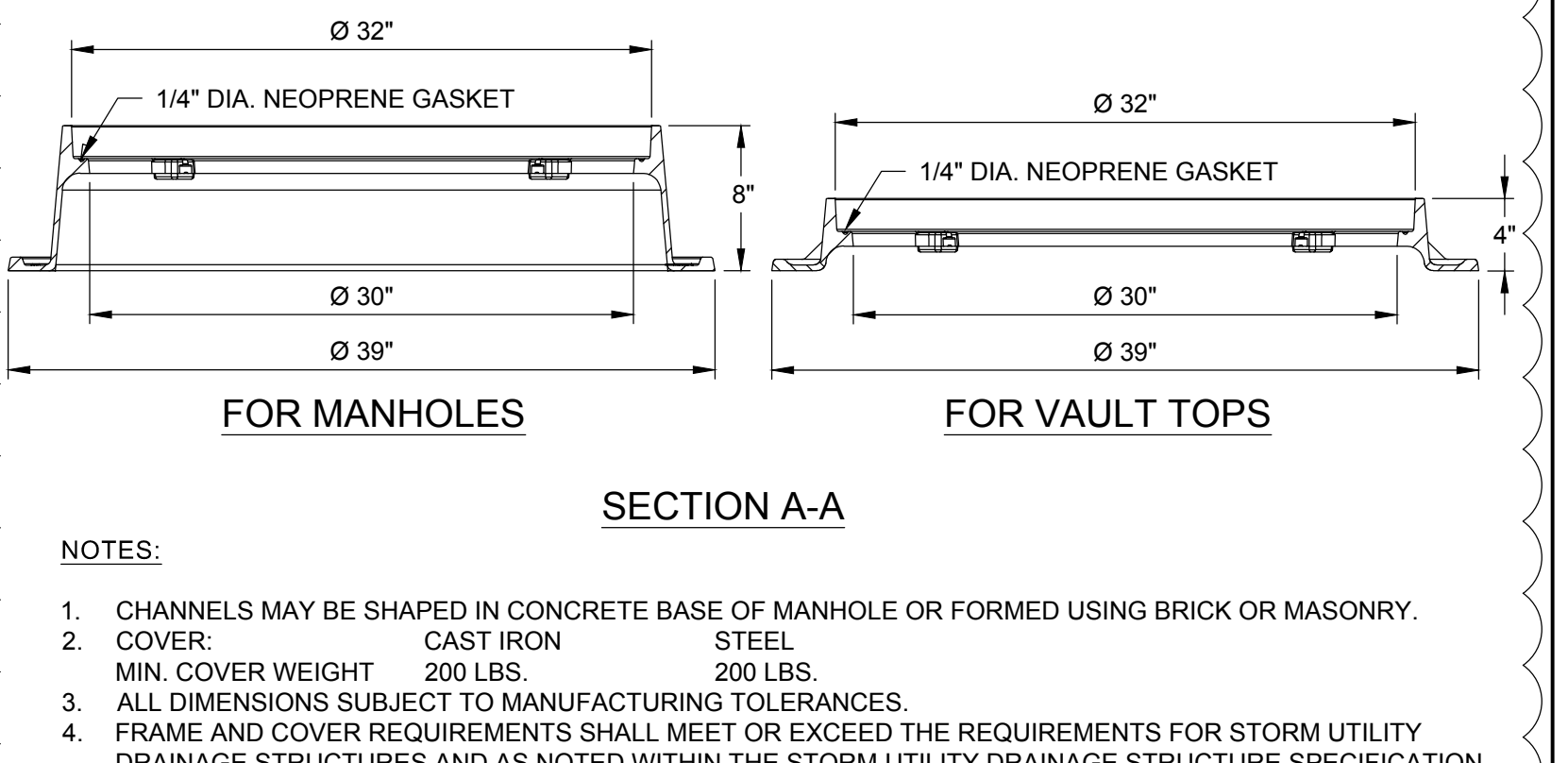
- NOTES:**
1. T-WRENCH TO BE SUPPLIED TO OPERATE ISOLATION VALVES FROM THE SURFACE.



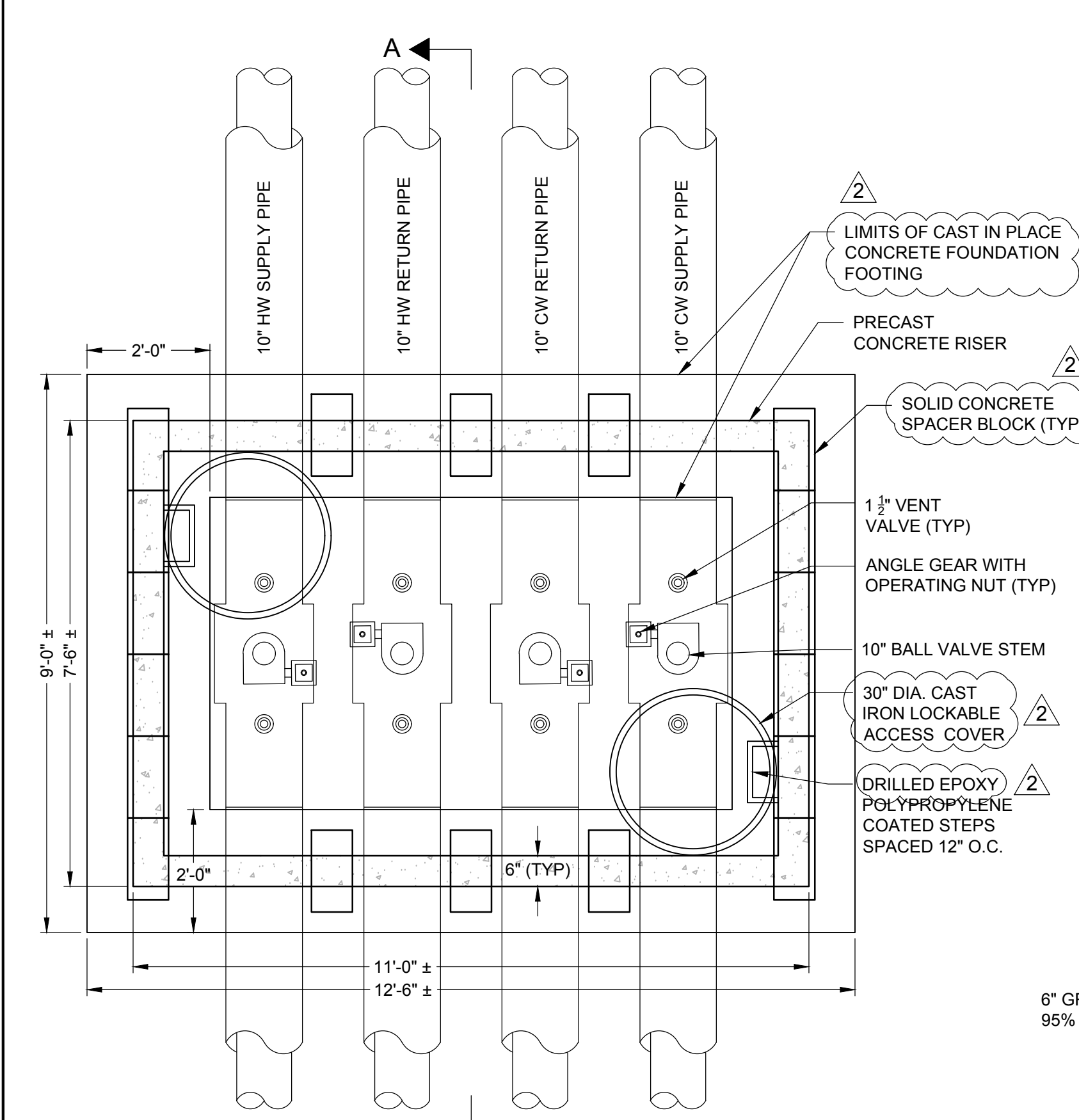
- NOTES:**
1. T-WRENCH TO BE SUPPLIED TO OPERATE ISOLATION VALVES FROM THE SURFACE.



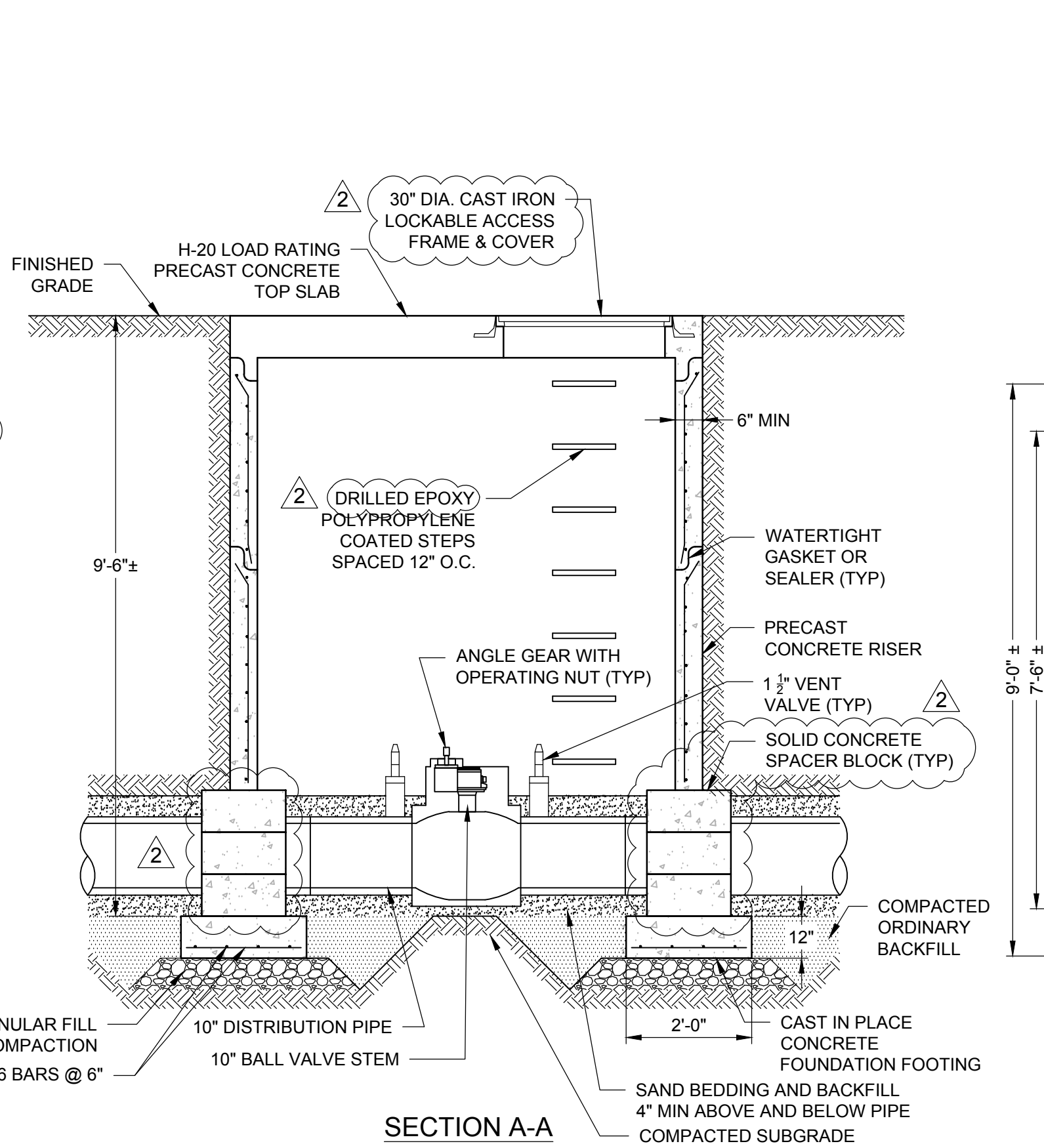
- NOTES:**
1. PRECAST CONCRETE STRUCTURE REQUIREMENTS SHALL MEET OR EXCEED THE REQUIREMENTS FOR STORM UTILITY DRAINAGE STRUCTURES.



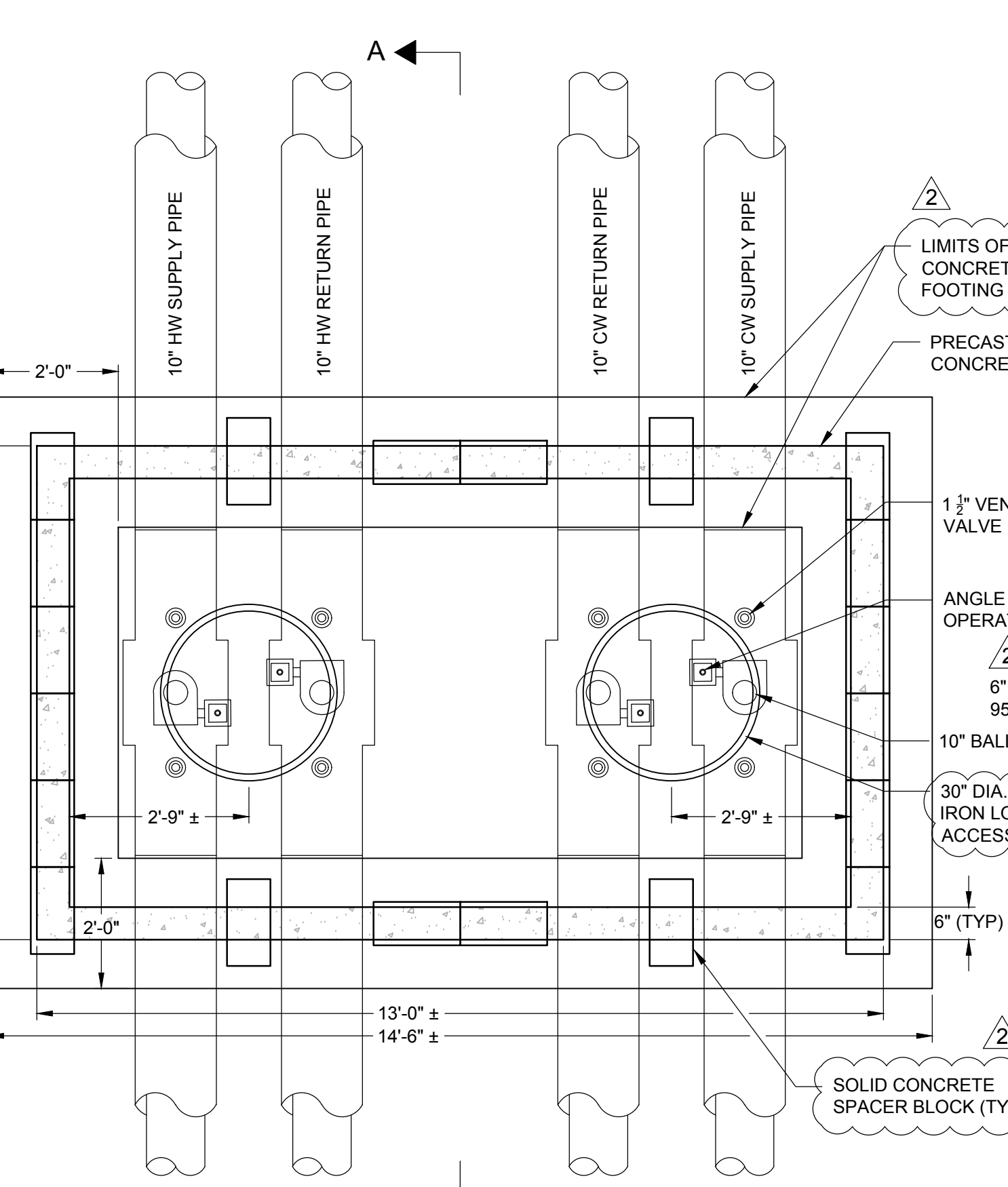
- NOTES:**
1. CHANNELS MAY BE SHAPED IN CONCRETE BASE OF MANHOLE OR FORMED USING BRICK OR MASONRY.
  2. COVER: CAST IRON 200 LBS. STEEL 200 LBS.
  3. ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.
  4. FRAME AND COVER REQUIREMENTS SHALL MEET OR EXCEED THE REQUIREMENTS FOR STORM UTILITY DRAINAGE STRUCTURES AND AS NOTED WITHIN THE STORM UTILITY DRAINAGE STRUCTURE SPECIFICATION.



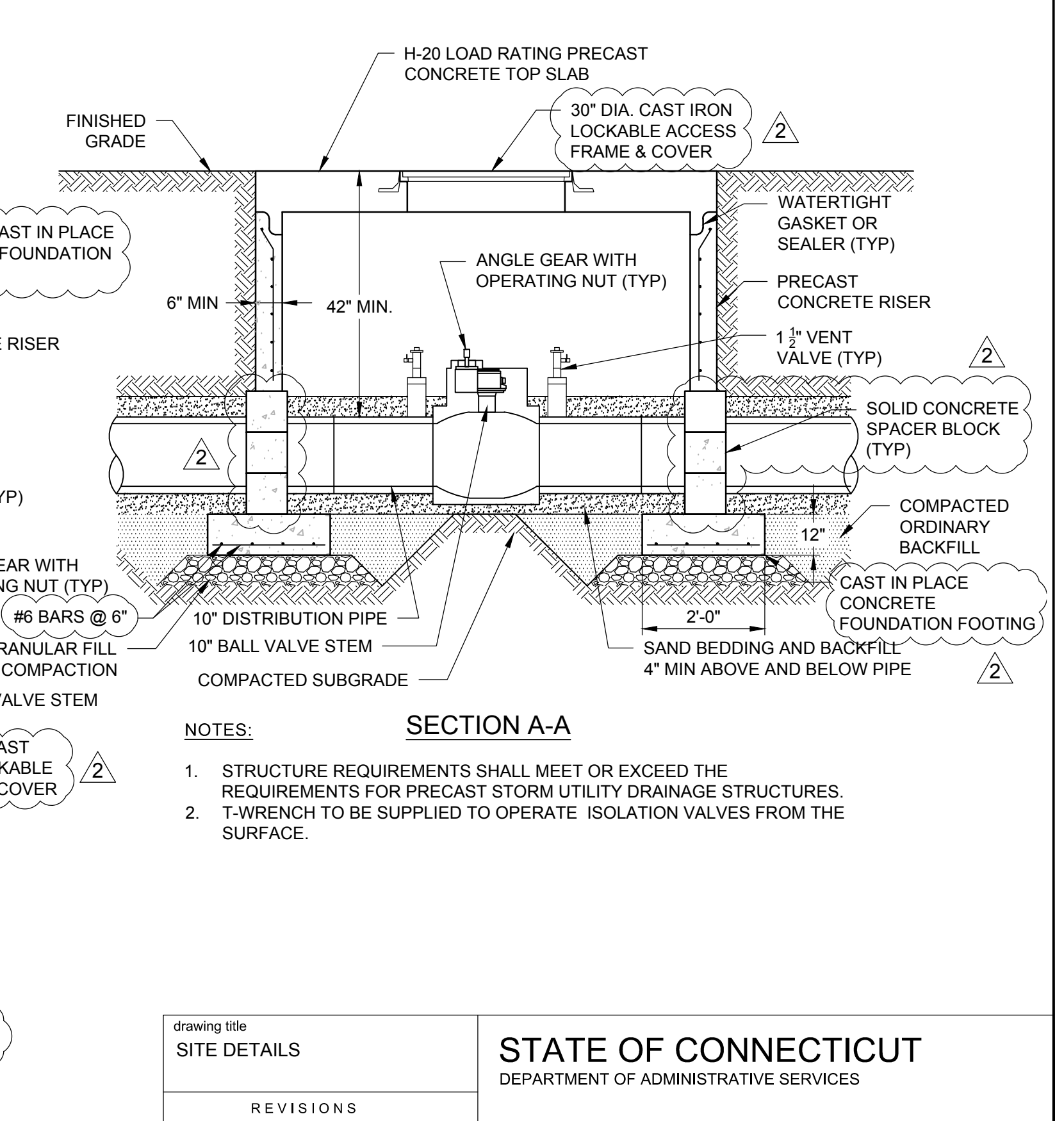
**4** DISTRIBUTION PIPING ISOLATION VALVE ACCESS RISER VAULT (TYPE 2)  
NOT TO SCALE



- NOTES:**
1. STRUCTURE REQUIREMENTS SHALL MEET OR EXCEED THE REQUIREMENTS FOR PRECAST STORM UTILITY DRAINAGE STRUCTURES.



**5** DISTRIBUTION PIPING ISOLATION VALVE ACCESS RISER VAULT (V-11)  
NOT TO SCALE

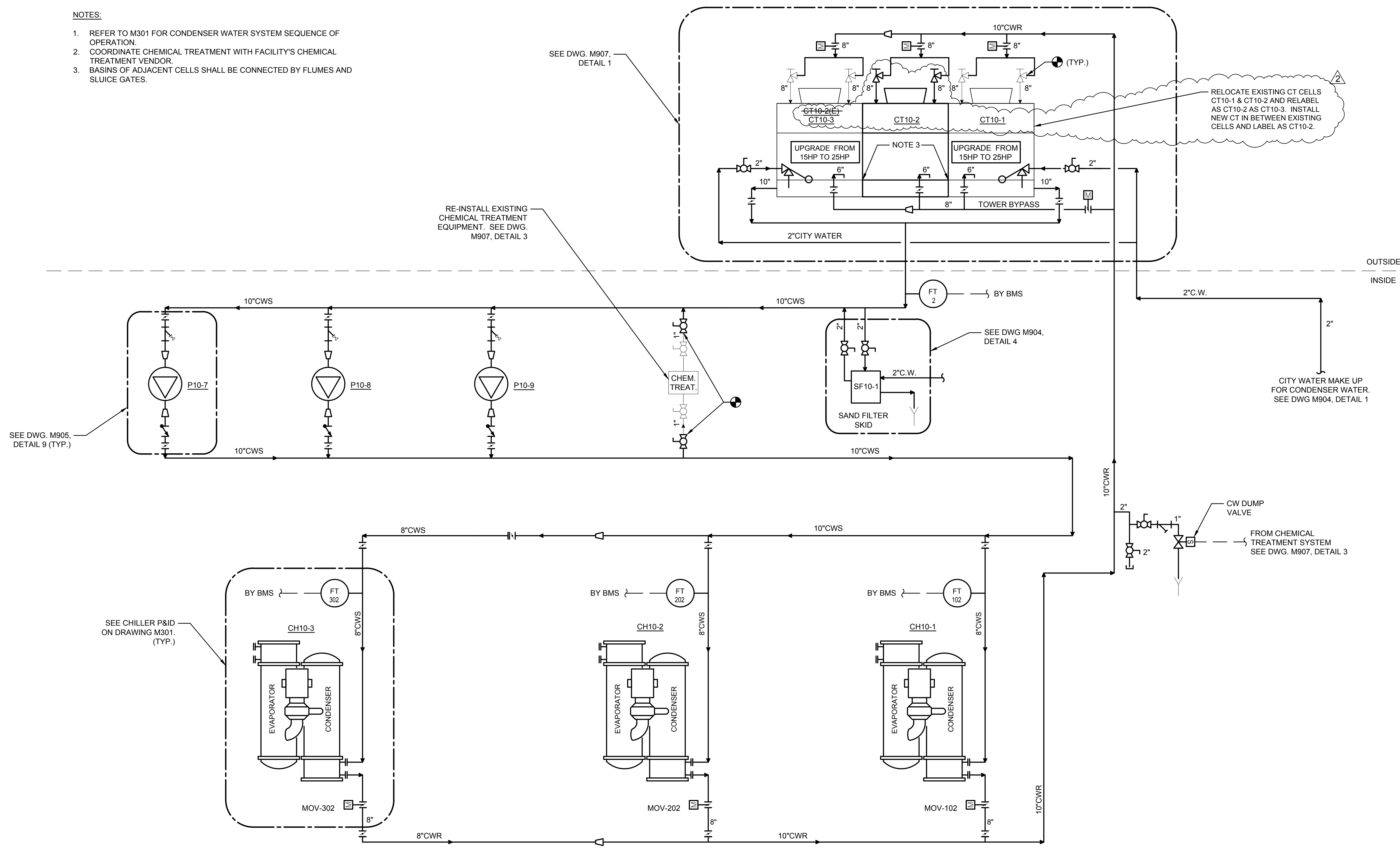


- NOTES:**
1. STRUCTURE REQUIREMENTS SHALL MEET OR EXCEED THE REQUIREMENTS FOR PRECAST STORM UTILITY DRAINAGE STRUCTURES.
  2. T-WRENCH TO BE SUPPLIED TO OPERATE ISOLATION VALVES FROM THE SURFACE.

drawing title			STATE OF CONNECTICUT		
SITE DETAILS			DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS					
mark	date	description	drawing prepared by	date	
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	02/06/19	ADDENDUM 2		project	YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION MANTIC, CT
			drawn by	JMO	
			approved by	KJW	
			drawing no.	C503	
CAD no.		project no.			
Site Details.dwg		189824			

**NOTES:**

1. REFER TO M301 FOR CONDENSER WATER SYSTEM SEQUENCE OF OPERATION.
2. COORDINATE CHEMICAL TREATMENT WITH FACILITY'S CHEMICAL TREATMENT VENDOR.
3. BASINS OF ADJACENT CELLS SHALL BE CONNECTED BY FLUMES AND SLUICE GATES.

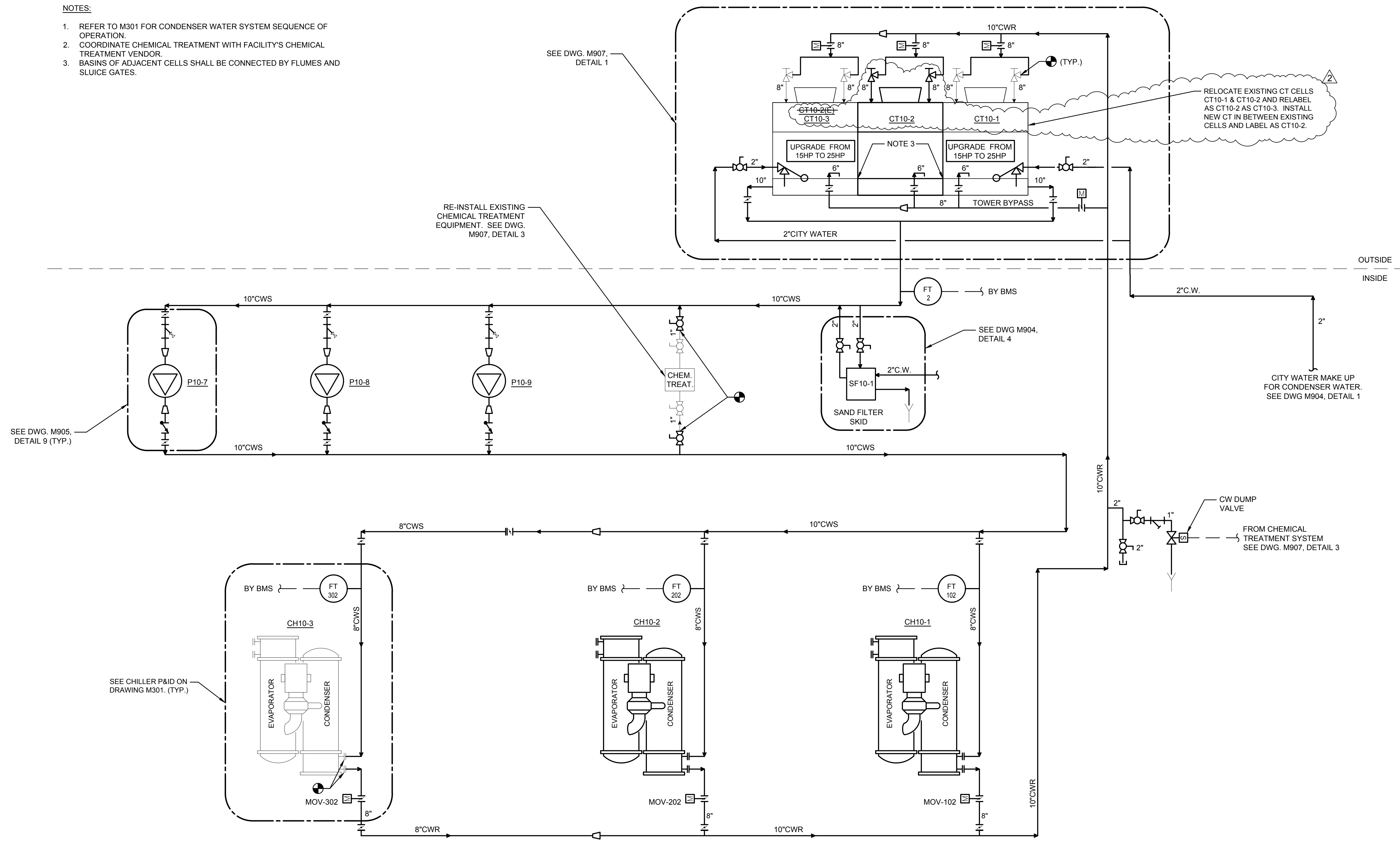


BUILDING 10 CONDENSER WATER FLOW DIAGRAM INSTALLATION

drawing title PLANT CONDENSER WATER FLOW DIAGRAM INSTALLATION			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS					
mark	date	description	drawing prepared by	date	scale
△	12/21/18 2/06/19	ISSUE FOR BID ADDENDUM 2	WSP USA ONE PENN PLAZA NEW YORK, NY	12/21/2018	NTS
project			drawing no.	M204	
YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NANTIC, CT			approved by RB		
CAD no. cad file	project no. 188824				

**NOTES:**

1. REFER TO M301 FOR CONDENSER WATER SYSTEM SEQUENCE OF OPERATION.
2. COORDINATE CHEMICAL TREATMENT WITH FACILITY'S CHEMICAL TREATMENT VENDOR.
3. BASINS OF ADJACENT CELLS SHALL BE CONNECTED BY FLUMES AND SLUICE GATES.



BUILDING 10 CONDENSER WATER FLOW DIAGRAM INSTALLATION PHASE 5

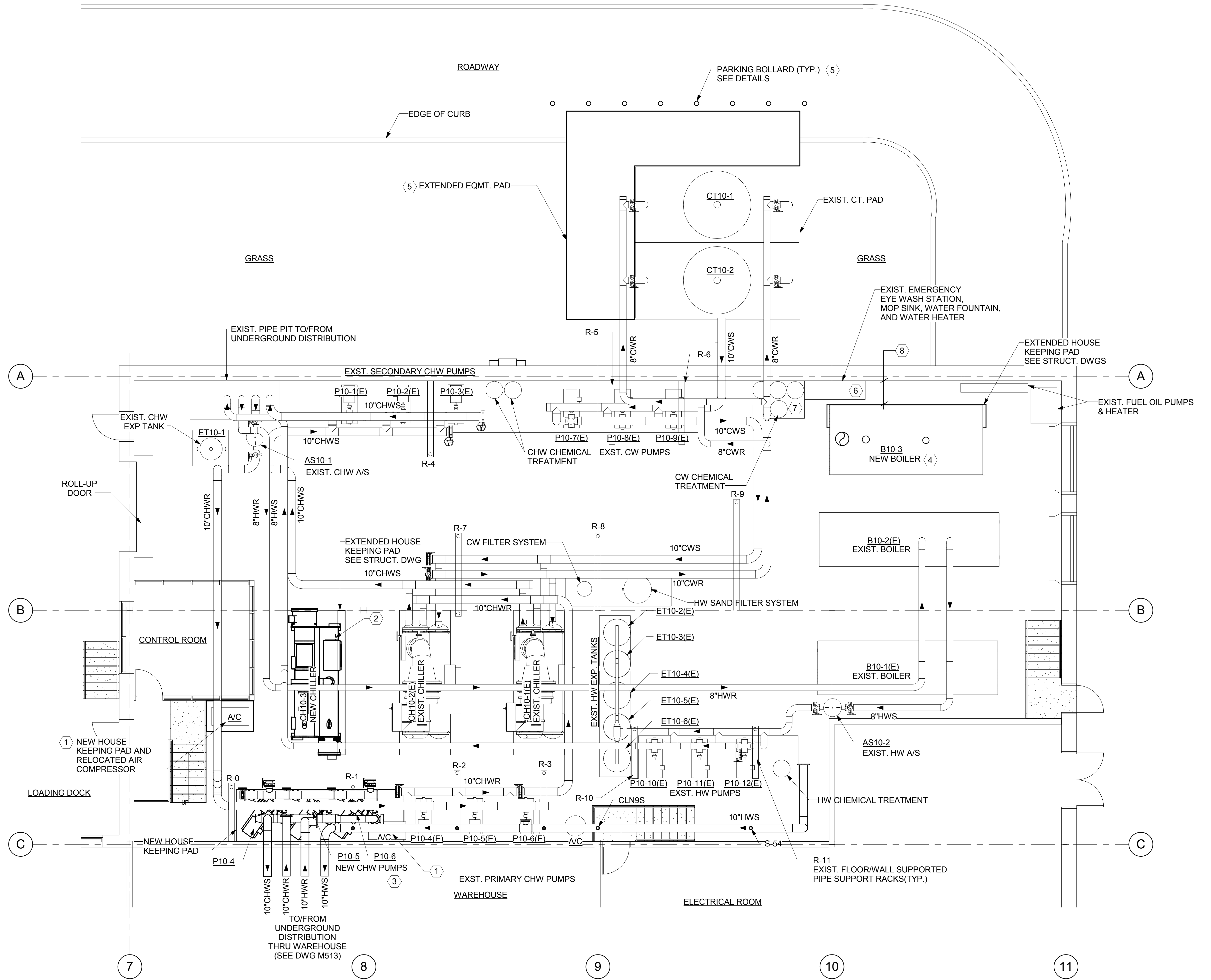
drawing title PLANT CW FLOW DIAGRAM INSTALLATION PHASE 5			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS					
mark	date	description	drawing prepared by	date	scale
△	12/21/18 2/06/19	ISSUE FOR BID ADDENDUM 2	WSP USA ONE PENN PLAZA NEW YORK, NY	12/21/2018	NTS
			project	drawn by	approved by
			YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NIANTIC, CT	SC	RB
			CAD no. cad file	project no. 188824	drawing no. M406

**GENERAL NOTES**

1. COORDINATE WORK IN THIS PHASE WITH PHASED FLOW DIAGRAMS.
2. COORDINATE PHASING WITH ALL OTHER TRADES.
3. NEW EQUIPMENT SHALL BE INSTALLED ON 4" THICK CONCRETE HOUSEKEEPING PADS UNLESS OTHERWISE NOTED. SEE STRUCTURAL DRAWINGS FOR DETAILS.
4. FOR HOUSE KEEPING PADS AND COOLING TOWER PAD, SEE STRUCTURAL DRAWINGS.
5. WORK THIS DWG WITH DWGS M510 AND M511.

**SCOPE NOTES**

- 1 RELOCATE EXISTING AIR COMPRESSOR, DISCONNECT AND TUBING, AND RECONNECT TO EXISTING.
- 2 INSTALL NEW CHILLER (CH10-3).
- 3 INSTALL NEW CHILLED WATER PUMPS (P10-4, P10-5 AND P10-6).
- 4 INSTALL NEW BOILER (B10-3).
- 5 EXTEND COOLING TOWER PAD AND INSTALL BOLLARDS.
- 6 TEMPORARILY RELOCATE EXISTING WATER FOUNTAIN, FILTER, MOP SINK AND HOT WATER HEATER. DO NOT HOOK UP. TEMPORARILY RELOCATE EYE WASH STATION. RELOCATE FIRE EXTINGUISHER. REMOVE DRAIN PIPING.
- 7 TEMPORARILY RELOCATE EXISTING CONDENSER WATER CHEMICAL TREATMENT, CHEMICAL BARRELS, JERK PUMPS AND TUBING.
- 8 MAINTAIN MINIMUM MANUFACTURER RECOMMENDED DISTANCE FROM WALL.



**CENTRAL PLANT PLAN INSTALLATION PHASE 1**

SCALE: 3/16" = 1'-0"



drawing title CENTRAL PLANT PLAN INSTALLATION PHASE 1		STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
REVISIONS			
mark	date	description	drawing prepared by
Δ	12/21/18 02/06/19	ISSUE FOR BID ADDENDUM 2	WSP USA ONE PENN PLAZA NEW YORK, NY
project		date	scale
YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NIANTIC, CT		12/21/2018	3/16" = 1'-0"
CAD no.		approved by	drawing no.
189824		CT	M501

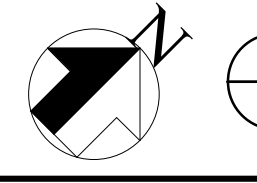
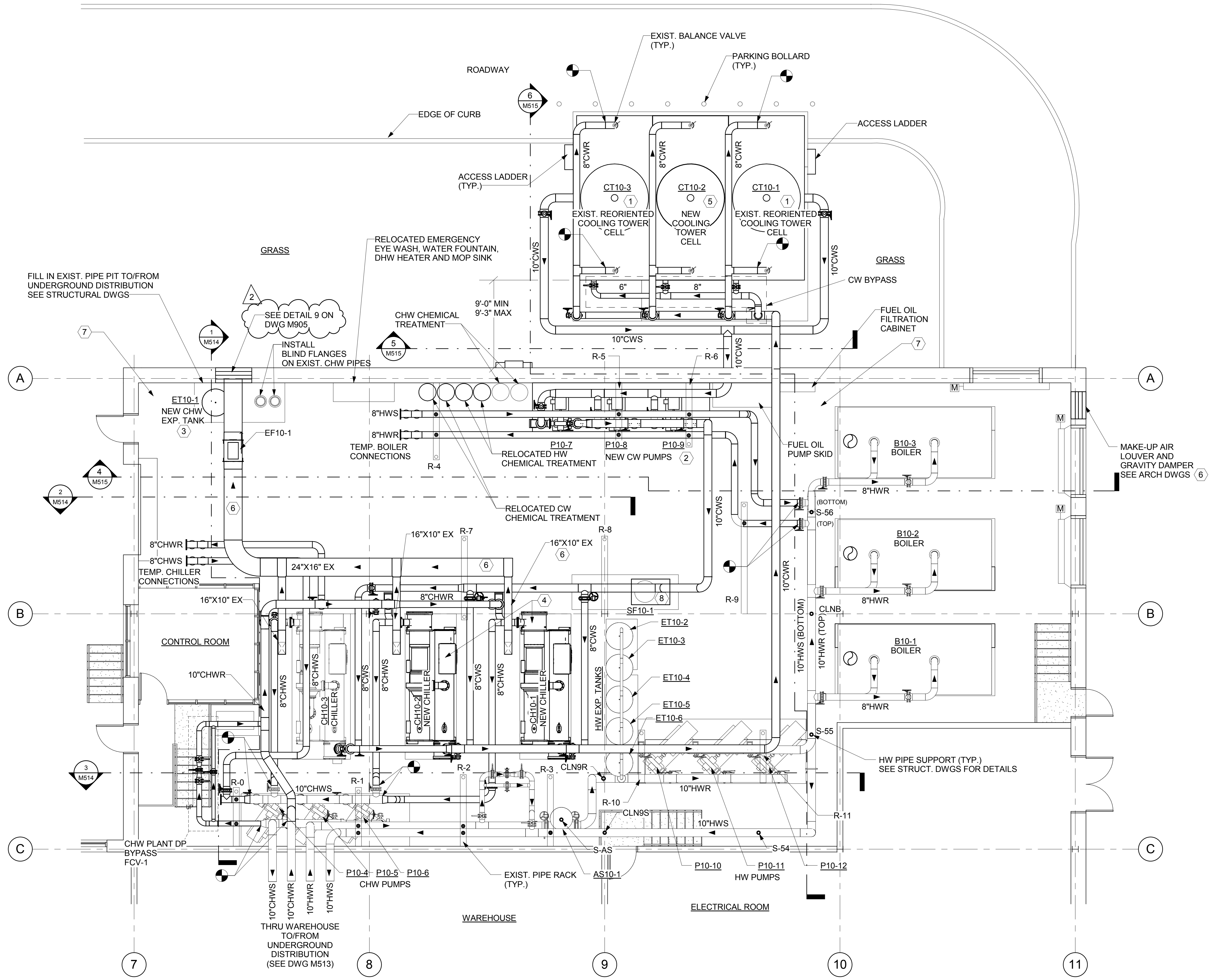


**GENERAL NOTES**

- 1. COORDINATE WORK IN THIS PHASE WITH PHASED FLOW DIAGRAMS.
- 2. COORDINATE PHASING WITH ALL OTHER TRADES.
- 3. NOT ALL SMALL BORE PIPING SHOWN FOR CLARITY. REFER TO FLOW DIAGRAMS.
- 4. RELOCATE EXISTING UTILITIES, SUPPORTS, EQUIPMENT, ETC, AS REQUIRED TO CLEAR NEW WORK.
- 5. WORK THIS DWG WITH DWGS M510 AND M511.

**SCOPE NOTES**

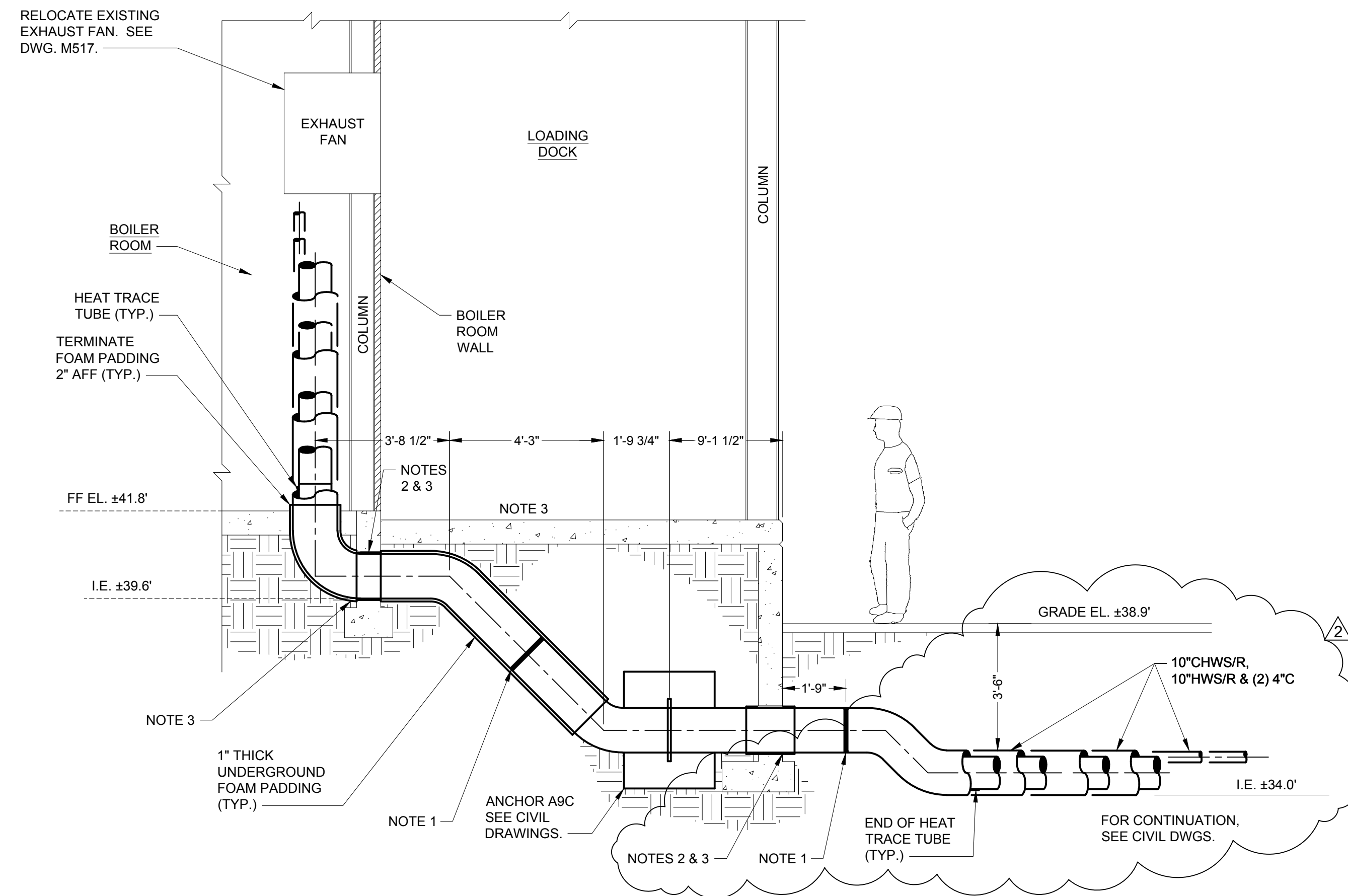
- ① RELOCATE EXISTING COOLING TOWER CELLS CT10-1 AND CT10-2. RELABEL CT10-2 AS CT10-3. INSTALL NEW COOLING TOWER IN BETWEEN EXISTING CELLS AND LABEL AS CT10-2.
- ② FURNISH AND INSTALL CONDENSER WATER PUMPS (P10-7, P10-8 AND P10-9).
- ③ FURNISH AND INSTALL CHILLED WATER EXPANSION TANK ATOP FILLED IN PIT.
- ④ FURNISH AND INSTALL CHILLERS (CH10-1 AND CH10-2).
- ⑤ FURNISH AND INSTALL COOLING TOWER CELL (CT10-2).
- ⑥ FURNISH AND INSTALL REFRIGERANT LEAK DETECTION AND PURGE SYSTEM. INSTALL MAKE-UP AIR LOUVER AND DAMPER.
- ⑦ RECONNECT CHILLED WATER AND CONDENSER WATER CITY WATER MAKE-UP PIPING. SEE CITY WATER FLOW DIAGRAM.
- ⑧ FURNISH AND INSTALL CONDENSER WATER SIDE STREAM FILTRATION SKID.



**CENTRAL PLANT PLAN INSTALLATION PHASE 5**

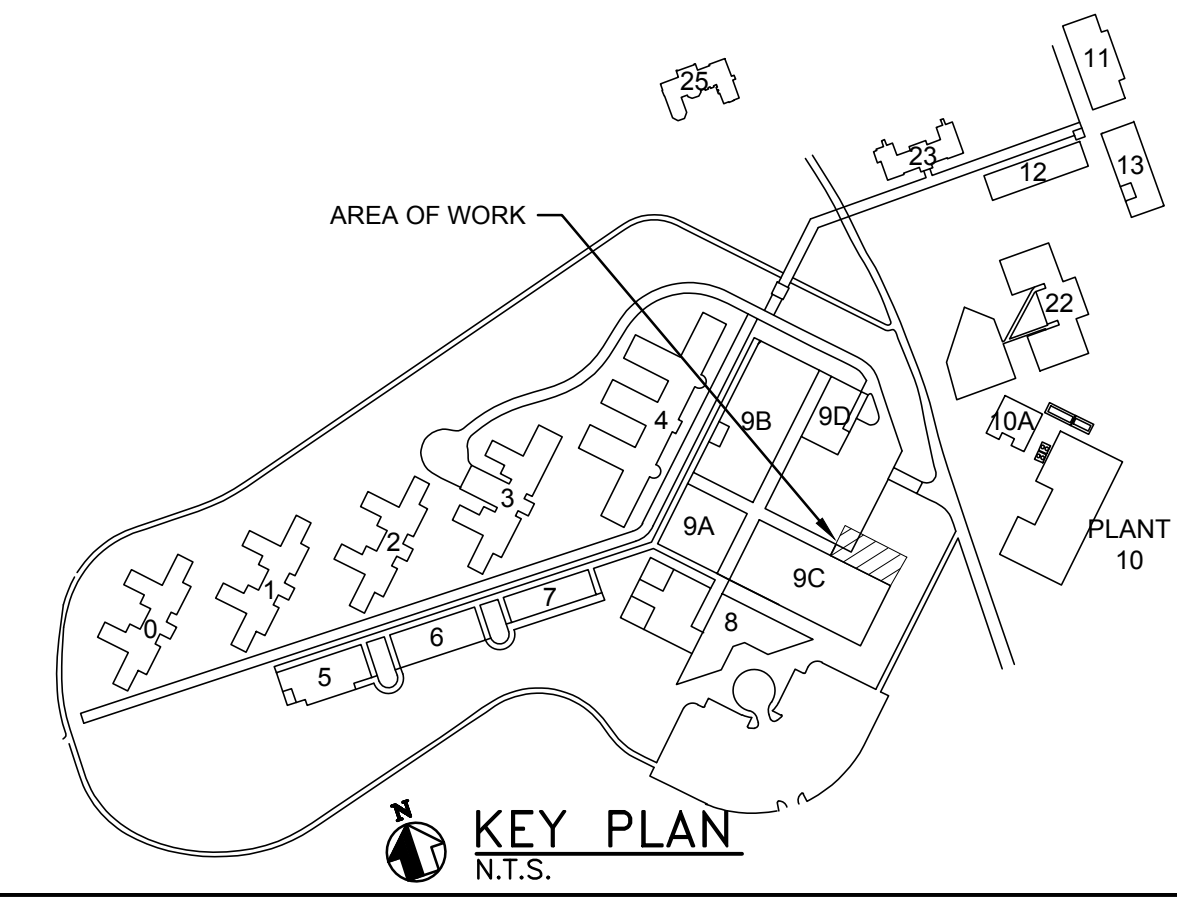
SCALE: 3/16" = 1'-0"  
SCALE IN FEET

drawing title			STATE OF CONNECTICUT		
CENTRAL PLANT PLAN INSTALLATION PHASE 5			DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS					
mark	date	description	drawing prepared by	date	scale
△	12/21/18	ISSUE FOR BID	WSP USA ONE PENN PLAZA NEW YORK, NY	12/21/2018	3/16" = 1'-0"
	02/06/19	ADDENDUM 2			
project			drawing no.	M505	
YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NIANTIC, CT			approved by	CT	
CAD no.			project no.	189824	

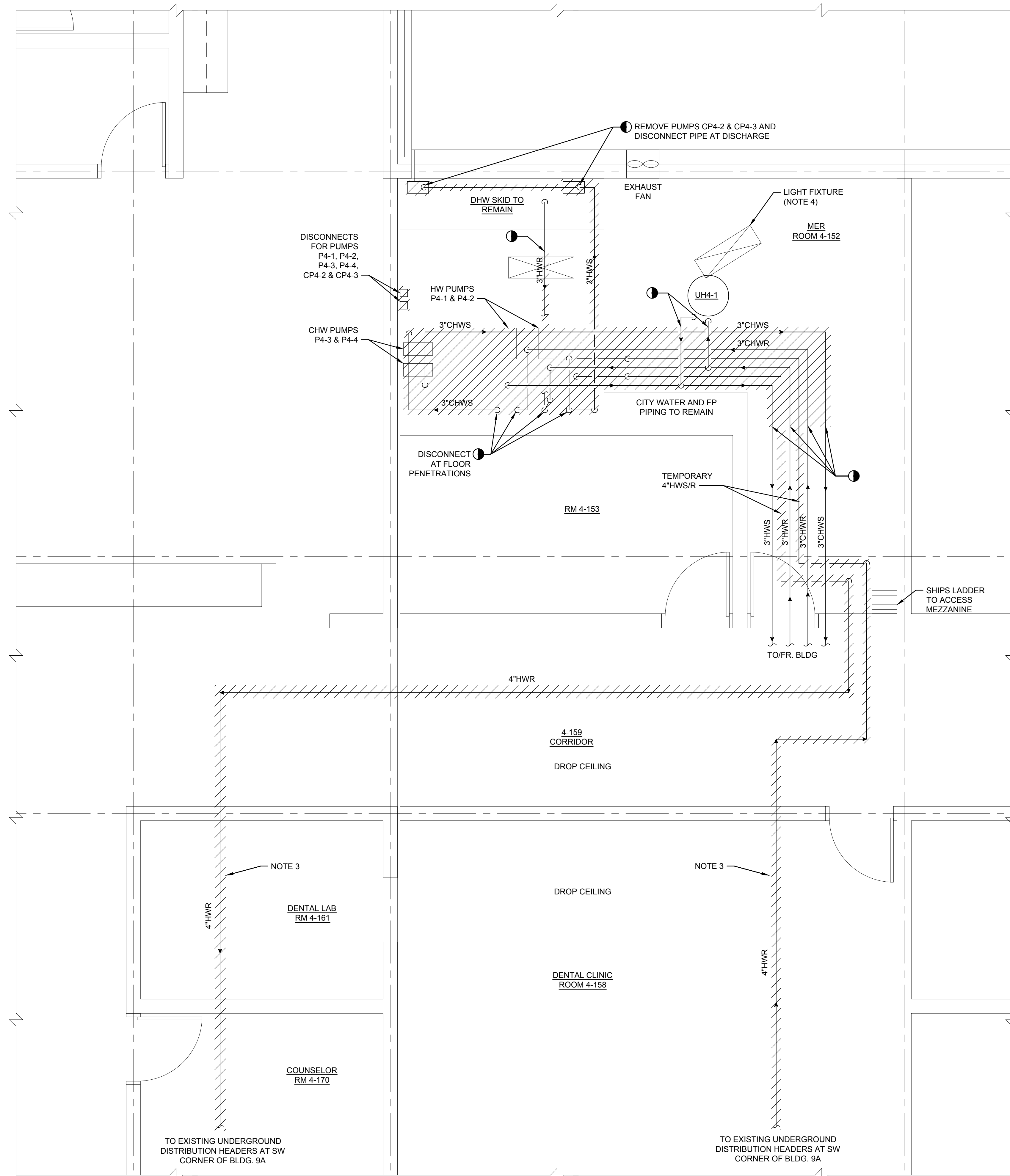


1 SECTION  
M517 SCALE: 3/8" = 1'-0"  
SCALE IN FEET

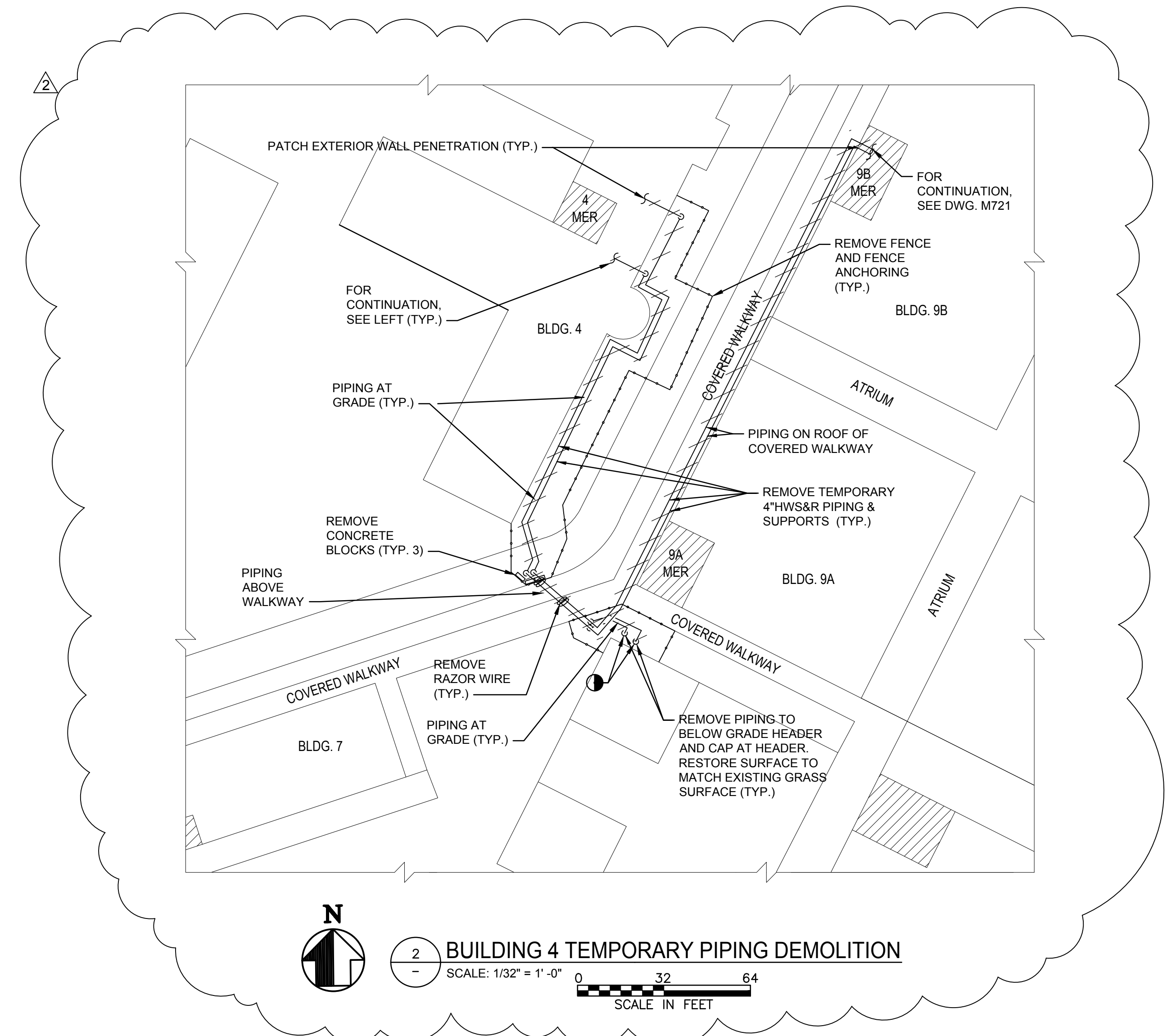
- NOTES:**
1. SUGGESTED DISTRIBUTION PIPE FIELD WELD LOCATION (TYP. 4) VERIFY IN FIELD.
  2. PROTECT PIPING THROUGH FOOTING WALL, FURNISH AND INSTALL 1/2" THICK UNDERGROUND FOAM PADDING AT PENETRATION (TYP.)
  3. SEE STRUCTURAL DRAWINGS FOR CORING OF EXISTING FOUNDATION WALLS, LOADING DOCK DEMOLITION AND RESTORATION.



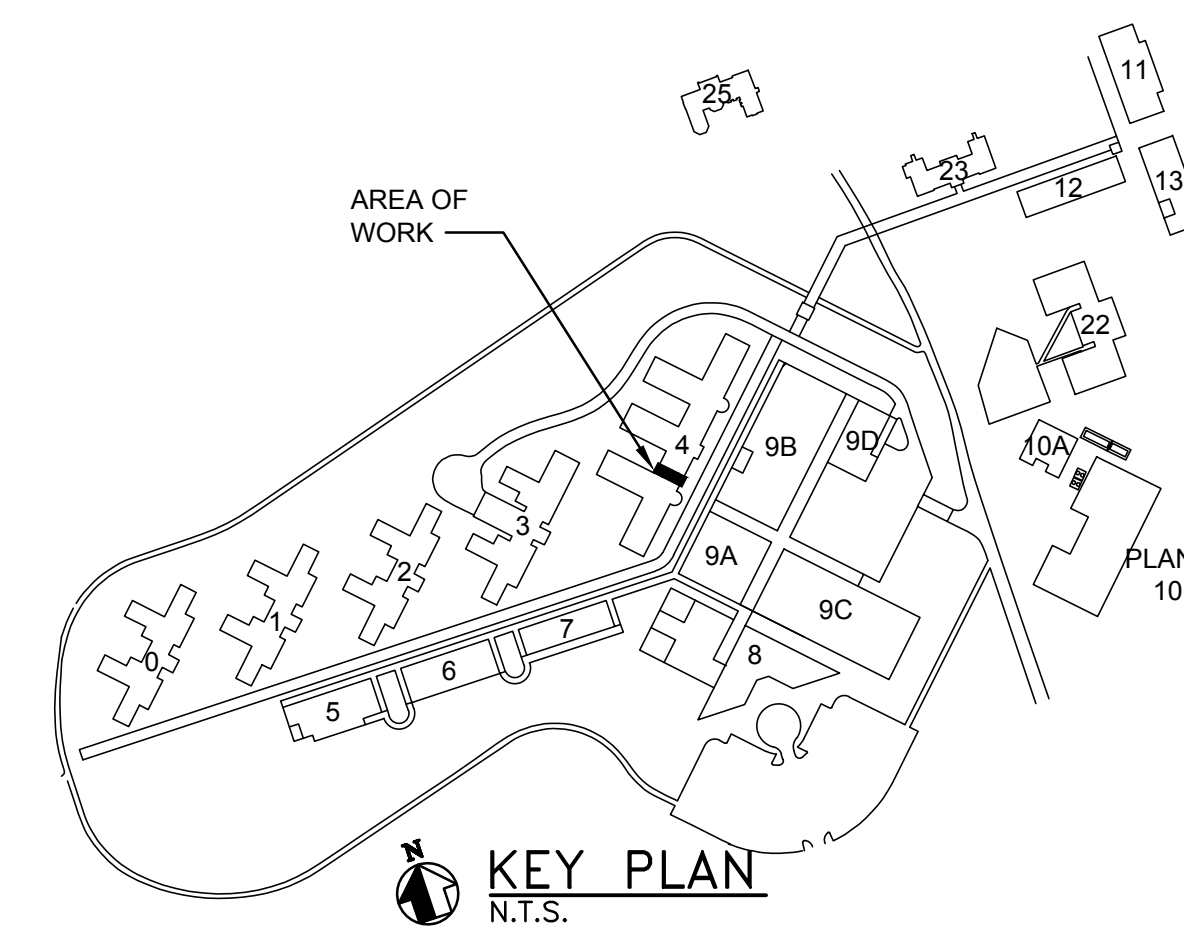
drawing title <b>BUILDING 9C BOILER ROOM INSTALLATION SECTION</b>			<b>STATE OF CONNECTICUT</b> DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS			drawing prepared by <b>WSP USA</b> ONE PENN PLAZA NEW YORK, NY		
mark	date	description	date 12/21/2018		
1	12/21/18	ISSUE FOR BID	scale AS NOTED		
2	1/28/19	ADDENDUM 1	drawn by EP		
3	2/06/19	ADDENDUM 2	approved by RB		
project <b>YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NIANTIC, CT</b>			drawing no. <b>M518</b>		
CAD no. cad file			project no. 189824		



**1** BUILDING 4 MER DEMOLITION  
SCALE: 3/8" = 1'-0"  
SCALE IN FEET



- NOTES:**
- REFER TO M002 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.
  - REMOVE PUMPS & PIPING SHOWN TO BE REMOVED INCLUDING SUPPORTS. REMOVE ASSOCIATED INSTRUMENTATION, CONDUITS & WIRING BACK TO ACTIVE PANEL.
  - REMOVE TEMPORARY 4" HWS&R PIPING AND SUPPORTS BACK TO EXISTING UNDERGROUND DISTRIBUTION HEADERS AND CAP BELOW GRADE. REMOVE FENCING, BRIDGING AND SUPPORTS. RESTORE GROUNDS TO MATCH EXISTING. VERIFY PIPE ROUTING ABOVE HALLWAY AND DENTAL CLINIC IN FIELD. PATCH WALL PENETRATION. SEE ARCH. DWGS.
  - RELOCATE EXISTING LIGHT FIXTURES AS REQUIRED.



drawing title			STATE OF CONNECTICUT	
BUILDING 4 PART PLAN			DEPARTMENT OF ADMINISTRATIVE SERVICES	
DEMOLITION			REVISIONS	
mark	date	description	drawing prepared by	date
1	12/21/18	ISSUE FOR BID	WSP USA ONE PENN PLAZA NEW YORK, NY	12/21/2018
	1/28/19	ADDENDUM 1		scale
	2/06/19	ADDENDUM 2	project	
			YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NIANTIC, CT	drawn by EP
				approved by RB
				drawing no. M709
			CAD no. cad file	project no. 189824

CHILLER SCHEDULE																						
CHILLER NO.	LOCATION	NOMINAL TONS	TYPE	REFRIGERANT	LBS OF REFRIGERANT	MAX NPLV (KW/TON)	EVAPORATOR					CONDENSER					ELECTRICAL			DESIGN BASIS MANUF. & MODEL	REMARKS	
							FLOW (GPM)	EWT	LWT	NO. OF PASSES	CHW ΔP (PSIG)	FLOW (GPM)	EWT	LWT	NO. OF PASSES	CW ΔP (PSIG)	V/PH/Hz	A	VFD			NOTES
CH10-1(E)	CENTRAL PLANT	350	ELECTRIC CENTRIFUGAL	-	-	-	700	57	45	-	-	1050	85	95	-	-	460/3/60	-	NO	-	TRANE	DEMOLISHED IN PHASE 4
CH10-2(E)	CENTRAL PLANT	350	ELECTRIC CENTRIFUGAL	-	-	-	700	57	45	-	-	1050	85	95	-	-	460/3/60	-	NO	-	TRANE	DEMOLISHED IN PHASE 4
CH10-1	CENTRAL PLANT	350	ELECTRIC CENTRIFUGAL	R-134a	1,343	0.385	700	56	44	2	4.5	1050	85	95	2	4.2	460/3/60	282	YES	UNIT MOUNTED VFD WITH HARMONIC FILTER	CARRIER 19XRVLFLF OPTION	INSTALLED IN PHASE 5 (NOTE 1)
CH10-2	CENTRAL PLANT	350	ELECTRIC CENTRIFUGAL	R-134a	1,343	0.385	700	56	44	2	4.5	1050	85	95	2	4.2	460/3/60	282	YES	UNIT MOUNTED VFD WITH HARMONIC FILTER	CARRIER 19XRVLFLF OPTION	INSTALLED IN PHASE 5 (NOTE 1)
CH10-3	CENTRAL PLANT	350	ELECTRIC CENTRIFUGAL	R-134a	1,343	0.385	700	56	44	2	4.5	1050	85	95	2	4.2	460/3/60	282	YES	UNIT MOUNTED VFD WITH HARMONIC FILTER	CARRIER 19XRVLFLF OPTION	INSTALLED IN PHASE 1 (NOTE 1)

- NOTES:
- FURNISH CHILLER WITH UNIT MOUNTED VFDs.

HEAT EXCHANGER SCHEDULE																												
UNIT NO.	LOCATION	SERVICE	TYPE	HEAT LOAD (MBH)	HOT SIDE						COLD SIDE						DIMENSIONS					OPER. WGT (LB.)	MAKE/MODEL	REMARKS				
					MEDIA	FLOW (GPM)	EWT (°F)	LWT (°F)	MAX PD (PSI)	FOULING FACTOR (hr*Ft²*/F/BTU)	MEDIA	FLOW (GPM)	EWT (°F)	LWT (°F)	MAX PD (PSI)	FOULING FACTOR (hr*Ft²*/F/BTU)	L (IN)	W (IN)	H (IN)	PLATES	PLATE CAPACITY							
BWH0-1	BUILDING 0	DOMESTIC HOT WATER	SEMI-INST.	945	HOT WATER	21	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH0-2	BUILDING 0	DOMESTIC HOT WATER	SEMI-INST.	945	HOT WATER	21	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH1-1	BUILDING 1	DOMESTIC HOT WATER	SEMI-INST.	945	HOT WATER	21	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH1-2	BUILDING 1	DOMESTIC HOT WATER	SEMI-INST.	945	HOT WATER	21	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH2-1	BUILDING 2	DOMESTIC HOT WATER	SEMI-INST.	945	HOT WATER	21	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH2-2	BUILDING 2	DOMESTIC HOT WATER	SEMI-INST.	945	HOT WATER	21	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH3-1	BUILDING 3	DOMESTIC HOT WATER	SEMI-INST.	1150	HOT WATER	25.5	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH3-2	BUILDING 3	DOMESTIC HOT WATER	SEMI-INST.	1150	HOT WATER	25.5	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH4-1	BUILDING 4	DOMESTIC HOT WATER	SEMI-INST.	1980	HOT WATER	44	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
BWH4-2	BUILDING 4	DOMESTIC HOT WATER	SEMI-INST.	1980	HOT WATER	44	180	90	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
HX7-1	BUILDING 7	DOMESTIC HOT WATER	PLATE AND FRAME	-	HOT WATER	-	-	-	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AERCO SMART PLATE	-	EXISTING TO REMAIN
HX7-2	BUILDING 7	HOT WATER	PLATE AND FRAME	650	HOT WATER	22	235	175	-	-	GLYCOL	65	160	180	-	-	-	-	-	-	-	-	-	-	-	-	-	DEMOLISH
HX9A-1	BUILDING 9A	HOT WATER	PLATE AND FRAME	2300	HOT WATER	78	235	173	-	-	GLYCOL	245	160	180	-	-	-	-	-	-	-	-	-	-	-	-	-	DEMOLISH
HX9A-1	BUILDING 9A	HOT WATER	PLATE AND FRAME	2300	HOT WATER	245	183	163	5	-	GLYCOL	245	160	180	5	-	-	-	-	-	-	-	-	-	-	DESIGN BASIS; B & G P21	-	-
HX9A-2	BUILDING 9A	DOMESTIC HOT WATER	SEMI-INST.	-	HOT WATER	-	-	-	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
HX9A-3	BUILDING 9A	DOMESTIC HOT WATER	SEMI-INST.	-	HOT WATER	-	-	-	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
HX9D-1	BUILDING 9D	HOT WATER	PLATE AND FRAME	1600	HOT WATER	54	235	173	-	-	GLYCOL	70	160	180	-	-	-	-	-	-	-	-	-	-	-	-	-	DEMOLISH
HX10A-1	BUILDING 10A	HOT WATER	PLATE AND FRAME	650	HOT WATER	23	235	173	-	-	GLYCOL	73	160	180	-	-	-	-	-	-	-	-	-	-	-	-	-	DEMOLISH
HX12-1	BUILDING 12	DOMESTIC HOT WATER	PLATE AND FRAME	-	HOT WATER	-	-	-	-	-	WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AERCO SMART PLATE	-	EXISTING TO REMAIN
HX12-2	BUILDING 12	HOT WATER	PLATE AND FRAME	650	HOT WATER	22	235	175	-	-	GLYCOL	65	160	180	-	-	-	-	-	-	-	-	-	-	-	-	-	DEMOLISH

COOLING TOWER SCHEDULE															
TANK NO.	LOCATION	SERVICE	TYPE	GPM	DRIVE	EWT (°F)	LWT (°F)	ENT AIR (W.B.)	OPERATION WT. LBS	MOTOR DATA			BASIN HEATER ELECTRICAL	DESIGN BASIS MANUF. & MODEL	REMARKS
										V/PH/Hz	HP	VFD			
CT10-1(E)	CENTRAL PLANT	CONDENSER WATER	INDUCED DRAFT, CROSSFLOW	4445 1050	GEAR	95	85	78	15,490	460/3/60	-15- 25	YES	18 KW	MARLEY NC8403PAN2GGF	EXISTING TO BE RELOCATED. UPGRADE MOTOR, VFD, COUPLING & GEARBOX AND SUPPORTS. (SEE NOTES 3, 4 & 5.)
CT10-2(E)	CENTRAL PLANT	CONDENSER WATER	INDUCED DRAFT, CROSSFLOW	4445 1050	GEAR	95	85	78	15,490	460/3/60	-15- 25	YES		MARLEY NC8403PAN2GGF	EXISTING TO BE RELOCATED. UPGRADE MOTOR, VFD, COUPLING & GEARBOX AND SUPPORTS. RELABEL AS CT10-3. (SEE NOTES 3, 4 & 5.)
CT10-3(NEW) (NOTE 2)	CENTRAL PLANT	CONDENSER WATER	INDUCED DRAFT, CROSSFLOW	1050	GEAR	95	85	78	15,490	460/3/60	25	YES	18 KW	MARLEY NC8043RAN1	INSTALLED IN PHASE 5

- NOTES:
- BASINS OF EXISTING AND NEW COOLING TOWER CELLS SHALL BE INTERCONNECTED WITH FLUMES. COOLING TOWER MANUFACTURER SHALL PROVIDE FLUME KITS AND SLUICE GATES AT EACH BASIN.
  - RELOCATE EXISTING CT CELLS CT10-1 & CT10-2 AND RELABEL AS CT10-2 AS CT10-3. INSTALL NEW CT IN BETWEEN EXISTING CELLS AND LABEL AS CT10-2.
  - REPLACE EXISTING HOT DECK HANDRAILS AND ACCESS LADDERS FOR EXISTING CELLS BEING UPGRADED, (SEE NOTE 5).
  - FURNISH AND INSTALL NEW BASIN ACCESS PLATFORMS, HANDRAILS, ACCESS LADDERS INSIDE EXISTING CELLS BEING UPGRADED, (SEE NOTE 5).
  - HANDRAILS, ACCESS LADDERS AND PLATFORMS TO BE PROVIDED BY COOLING TOWER MANUFACTURER (MARLEY) AND INSTALLED BY THE INSTALLATION CONTRACTOR.

drawing title EQUIPMENT SCHEDULES - 3			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS					
mark	date	description	drawing prepared by	date	scale
Δ	12/21/18 2/06/19	ISSUE FOR BID ADDENDUM 2	WSP USA ONE PENN PLAZA NEW YORK, NY	12/21/2018	NONE
project			drawing no.	M803	
YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NANTIC, CT			approved by RB		
CAD no. cad file		project no. 188824			



EXPANSION TANK SCHEDULE												
TAG	LOCATION	SERVICE	GROSS VOLUME (GAL)	ACCEPTANCE VOLUME (FT³)	LENGTH (IN.)	DIAMETER (IN.)	MIN. CHARGE PRESSURE (PSIG)	SYSTEM OPER. TEMPERATURE (°F)	MOUNTING	TYPE	MAKE/MODEL	REMARKS
ET9A-1	BUILDING 9A	GLYCOL	26	12	-	-	12	-	VERTICAL	BLADDER	-	EXISTING TO REMAIN INSTALL ON EXISTING HOUSEKEEPING PAD
ET9D-1	BUILDING 9D	GLYCOL	16	6	103	30	12	-	VERTICAL	BLADDER	CAX84	DEMOLISH
ET10-1	CENTRAL PLANT	CHILLED WATER	63	-	103	30	30	-	VERTICAL	BLADDER	TACO CA1400-125	DEMOLISHED IN PHASE 4
ET10-2	CENTRAL PLANT	HOT WATER	370	-	103	30	30	-	VERTICAL	BLADDER	TACO CA1400-125	DEMOLISHED IN PHASE 2
ET10-3	CENTRAL PLANT	HOT WATER	370	-	103	30	30	-	VERTICAL	BLADDER	TACO CA1400-125	DEMOLISHED IN PHASE 2
ET10-4	CENTRAL PLANT	HOT WATER	370	-	103	30	30	-	VERTICAL	BLADDER	TACO CA1400-125	DEMOLISHED IN PHASE 2
ET10-5	CENTRAL PLANT	HOT WATER	370	-	103	30	30	-	VERTICAL	BLADDER	TACO CA1400-125	DEMOLISHED IN PHASE 2
ET10-6	CENTRAL PLANT	HOT WATER	370	-	103	30	30	-	VERTICAL	BLADDER	TACO CA1400-125	DEMOLISHED IN PHASE 2
ET10-1	CENTRAL PLANT	CHILLED WATER	238	238	73½	30	23	44-56	VERTICAL	BLADDER	DESIGN BASIS; TACO CA900-125	INSTALL ON NEW HOUSEKEEPING PAD
ET10-2	CENTRAL PLANT	HOT WATER	475	475	83½	40	23	160-185	VERTICAL	BLADDER	DESIGN BASIS; TACO CA1800-125	INSTALL ON EXISTING HOUSEKEEPING PAD
ET10-3	CENTRAL PLANT	HOT WATER	475	475	83½	40	23	160-185	VERTICAL	BLADDER	DESIGN BASIS; TACO CA1800-125	INSTALL ON EXISTING HOUSEKEEPING PAD
ET10-4	CENTRAL PLANT	HOT WATER	475	475	83½	40	23	160-185	VERTICAL	BLADDER	DESIGN BASIS; TACO CA1800-125	INSTALL ON EXISTING HOUSEKEEPING PAD
ET10-5	CENTRAL PLANT	HOT WATER	475	475	83½	40	23	160-185	VERTICAL	BLADDER	DESIGN BASIS; TACO CA1800-125	INSTALL ON EXISTING HOUSEKEEPING PAD
ET10-6	CENTRAL PLANT	HOT WATER	475	475	83½	40	23	160-185	VERTICAL	BLADDER	DESIGN BASIS; TACO CA1800-125	INSTALL ON EXISTING HOUSEKEEPING PAD
ET10A-1	BUILDING 10A	GLYCOL	9	3	-	-	12	-	VERTICAL	BLADDER	-	DEMOLISH
ET12-1	BUILDING 12	GLYCOL	370	-	-	-	30	-	VERTICAL	BLADDER	-	DEMOLISH

EXHAUST FAN SCHEDULE												
TAG	LOCATION	SERVICE	FAN PERFORMANCE DATA					MOTOR DATA			DESIGN BASIS MANUF. AND MODEL	NOTES
			DESIGN FLOW (CFM)	EXT. STATIC PRESSURE (IN WG)	RPM	BHP	HP	UNIT POWER V/PH/Hz	RPM			
EF10-1	CENTRAL PLANT	REFRIGERANT PURGE	3,750	1.45	925	1.75	2.0	460/3/60	1725	GREENHECK TCB-1-24	-	

FUEL OIL PUMP SKID SCHEDULE																
UNIT NUMBER	LOCATION	DESCRIPTION	PUMP PERFORMANCE					CONSTR. DATA			MOTOR DATA			DESIGN BASIS MANUF. AND MODEL	NOTES	
			NO. OF PUMPS	NO. OF STAGES	FLOW (GPH)	DISCHARGE PRESSURE (PSIG)	BHP	FLUID TEMP. (°F)	PUMP TYPE	DESIGN PRESSURE (PSIG)	MHP	UNIT POWER V/PH/Hz	RPM			DRIVE
FOP10-1 & 2	CENTRAL PLANT	NO. 2 OIL DUPLEX BOILER FEED	2	1	780	50	-	50 TO 100	POSITIVE DISPLACEMENT	50	3/4	460/3/60	1750	TEFC	PREFERRED UTILITIES MODEL: ATPSF-203TPS	FLOW SHOWN IS FOR EACH PUMP FURNISH WITH SKID MOUNTED FUEL OIL HEATER
-	CENTRAL PLANT	AUTOMATIC FUEL OIL FILTRATION SET	1	-	2000	-	-	40 TO 80	POSITIVE DISPLACEMENT	-	1	115/1/60	1725	-	PREFERRED MFG. MODEL: PF-506	FILTER TO 5 MICRON

**NOTES:**

- FURNISH AND INSTALL FO SKID & AUTO FILTRATION SET EACH WITH SINGLE POINT POWER CONNECTION AND DISCONNECT

BOILER SCHEDULE																	
TAG	EWT (°F)	LWT (°F)	OPERATING PRESSURE (PSIG)	DESIGN PRESSURE (PSIG)	OPERATING WEIGHT (LBS)	MBH	FLOW RATE (GPM)	FUEL (PRIMARY/ SECONDARY)	GAS INPUT (SCFH)	GAS PRESSURE (PSIG)	OIL INPUT (GPH)	ELECTRICAL		DRAFT FAN (HP)	TYPE	DESIGN BASIS MANUF. & MODEL	REMARKS
												V/PH/Hz	A				
B10-1(E)	-	-	-	-	-	11,716	-	#2 FUEL OIL	-	-	-	460/3/60	-	-	-	-	DEMOLISHED IN PHASE 2
B10-2(E)	-	-	-	-	-	11,716	-	#2 FUEL OIL	-	-	-	460/3/60	-	-	-	-	DEMOLISHED IN PHASE 2
B10-3	163	183	138	150	47,800	11,716	1,172	NATURAL GAS/ #2 FUEL OIL	13,600	5 TO 10	94.2	460/3/60	47.1	20	FIRE TUBE (WETBACK)	JOHNSTON PFTA 350-4	INSTALLED IN PHASE 1
B10-1	163	183	138	150	47,800	11,716	1,172	NATURAL GAS/ #2 FUEL OIL	13,600	5 TO 10	94.2	460/3/60	47.1	20	FIRE TUBE (WETBACK)	JOHNSTON PFTA 350-4	INSTALLED IN PHASE 3
B10-2	163	183	138	150	47,800	11,716	1,172	NATURAL GAS/ #2 FUEL OIL	13,600	5 TO 10	94.2	460/3/60	47.1	20	FIRE TUBE (WETBACK)	JOHNSTON PFTA 350-4	INSTALLED IN PHASE 3

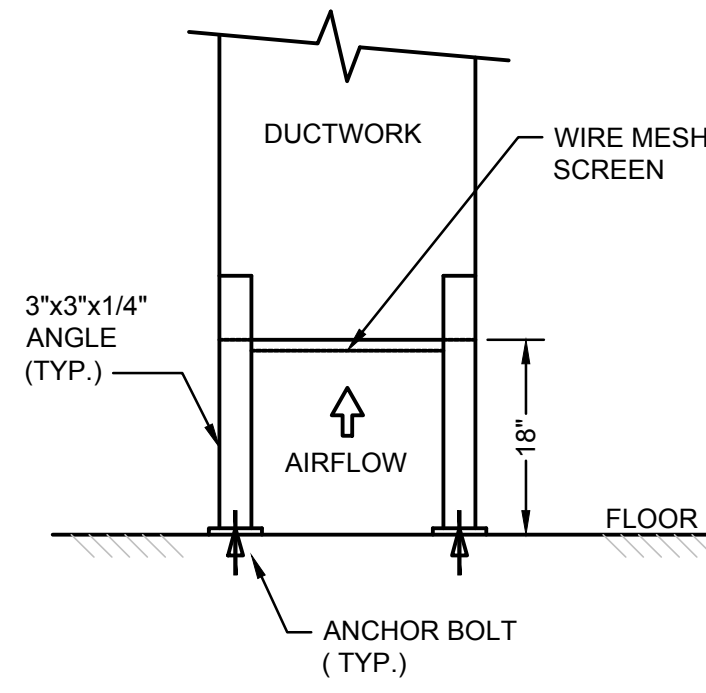
**NOTES:**

- BOILER CLASSIFICATION: ASME SECTION IV
- FURNISH AND INSTALL MANUFACTURER PROVIDED UL LISTED NATURAL GAS AND #2 FUEL OIL TRAINS.
- FUEL TRAINS SHALL BE DESIGNED TO 30 PPM NOx EMISSIONS REQUIREMENTS.
- FURNISH AND INSTALL MANUFACTURER PROVIDED ONBOARD AIR COMPRESSOR FOR ATOMIZATION.
- FURNISH AND INSTALL MANUFACTURER PROVIDED ONBOARD OIL PUMPS AND RE-CIRCULATION PUMPS, IF REQUIRED.
- INTERLOCK BOILER OPERATION WITH REFRIGERANT LEAK DETECTION.

AIR SEPARATOR SCHEDULE												
TAG	LOCATION	SERVICE	DESIGN FLOW (GPM)	PRESSURE DROP AT DESIGN FLOW (FT)	CONNECTION TYPE	VOLUME (GAL)	DRY WEIGHT (LB)	FLOODED WEIGHT (LB)	INTEGRATED STRAINER (LB)	SUPPORT TYPE	DESIGN BASIS MANUF. AND MODEL	NOTES
AS10-1	BUILDING 10	CHILLED WATER	-	-	-	-	-	-	-	-	-	REMOVED IN PHASE 4
AS10-2	BUILDING 10	HOT WATER	-	-	-	-	-	-	-	-	-	REMOVED IN PHASE 2
AS10-3	BUILDING 10	HOT WATER	2485	2.51	10" FLANGED	150	800	2,052	NO	BRACKETS INCLUDED	BELL & GOSSETT RL-10F	FURNISH & INSTALL SUPPLEMENTARY STEEL AS REQUIRED TO SUPPORT AIR SEPARATOR

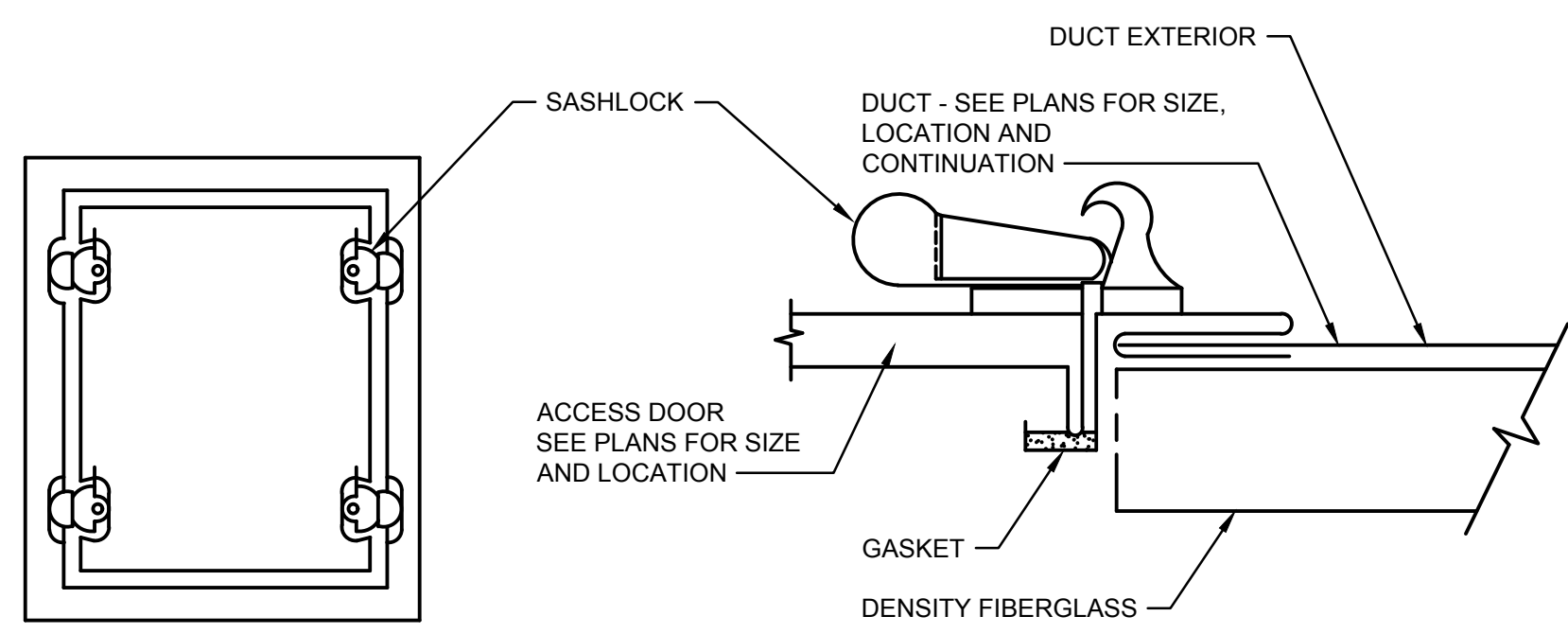
MOTORIZED VALVE SCHEDULE							
TAG	SERVICE	LOCATION	LINE SIZE (IN)	POWER	COMMENTS	ACTUATION	DWG. REFERENCE
MOV-101	CHILLED WATER CHILLER CH10-1	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M202
MOV-201	CHILLED WATER CHILLER CH10-2	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M202
MOV-301	CHILLED WATER CHILLER CH10-3	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M202
FCV-1	CHILLED WATER CHILLER BYPASS	CENTRAL PLANT	4	120 VAC	FAIL LAST POSITION	MODULATING	M202
FCV-2	HOT WATER SYSTEM BYPASS	CENTRAL PLANT	4	120 VAC	FAIL LAST POSITION	MODULATING	M206
MOV-102	CONDENSER WATER CHILLER CH10-1	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M204
MOV-202	CONDENSER WATER CHILLER CH10-2	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M204
MOV-302	CONDENSER WATER CHILLER CH10-3	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M204
MOV-103	CONDENSER WATER C. TOWER CT10-1	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M907 & M204
MOV-203	CONDENSER WATER C. TOWER CT10-2	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M907 & M204
MOV-303	CONDENSER WATER C. TOWER CT10-3	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M907 & M204
MOV-104	HOT WATER BOILER B10-1	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M206
MOV-204	HOT WATER BOILER B10-2	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M206
MOV-304	HOT WATER BOILER B10-3	CENTRAL PLANT	8	120 VAC	FAIL LAST POSITION	OPEN/ CLOSED	M206
MOV-1	CONDENSER WATER CT BYPASS	CENTRAL PLANT	6	120 VAC	FAIL LAST POSITION	MODULATING	M907
MOV-2	BUILDING 9A HOT WATER	BUILDING 9A	3	120 VAC	FAIL LAST POSITION	MODULATING	M908
MOV-3	BUILDING 9A GLYCOL	BUILDING 9A	2	120 VAC	FAIL LAST POSITION	MODULATING	M908

drawing title EQUIPMENT SCHEDULES - 4			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS			drawing prepared by WSP USA ONE PENN PLAZA NEW YORK, NY		
mark	date	description	date 12/21/2018		
△	12/21/18	ISSUE FOR BID	scale NONE		
	2/08/19	ADDENDUM 2	drawn by SC		
project YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NANTIC, CT			approved by RB		
CAD no. cad file			drawing no. M804		
project no. 188824					



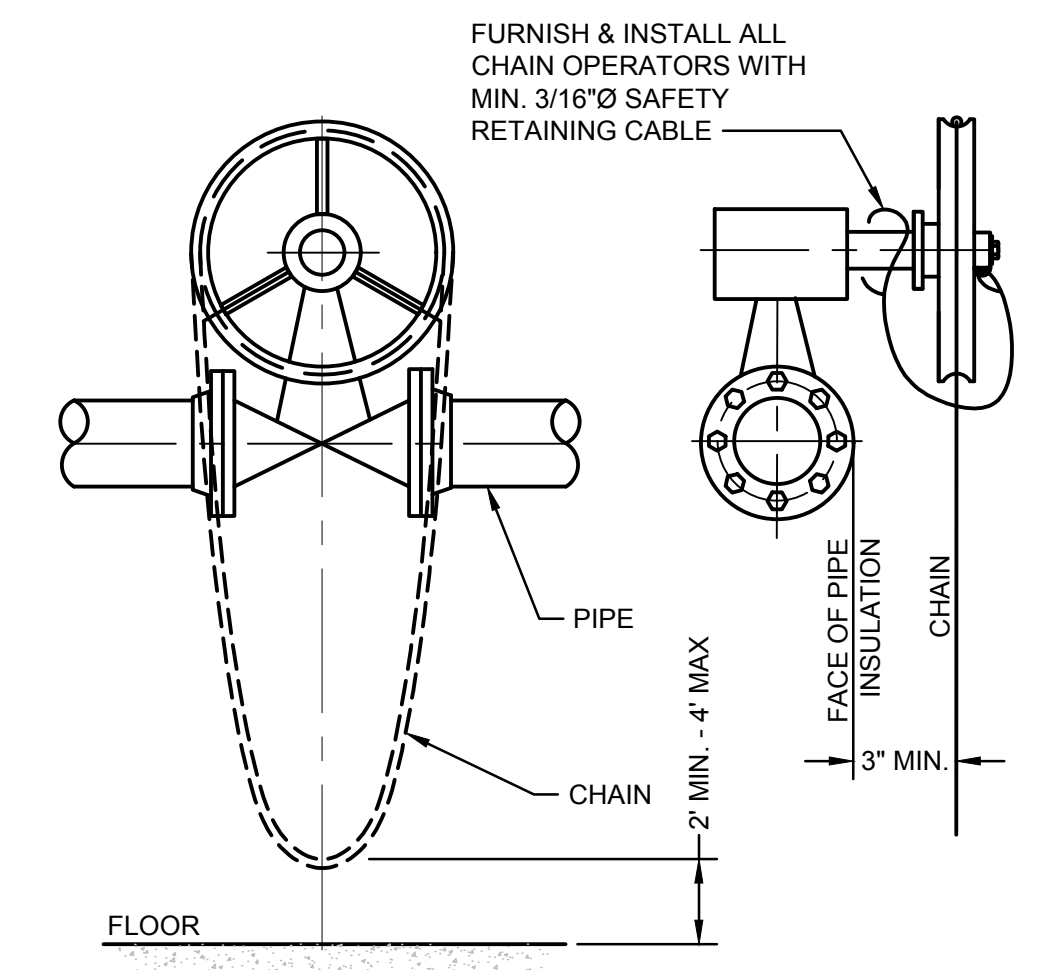
DUCT CONSTRUCTION						
DIMENSION OF LONGEST SIDE (INCHES)	SHEET METAL GA (ALL 4 SIDES)	MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	H MIN. IN INCH	TRANSVERSE REINFORCING (1)		
				DRIVE SLIP	HEMMED SLIP	ALTERN'T BAR SLIP
UP THRU 12	26	NONE REQUIRED	1	26	26	24
13 - 18	24	NONE REQUIRED	1	24	24	24
19 - 30	24	1"x1"x1/8" @ 60 IN	1	-	24	24
31 - 45	22	1"x1"x1/8" @ 60 IN	1	-	-	22

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.



MAXIMUM DIMENSION	GAUGE		
	DOOR	BACK	FRAME
6 X 6	26	26	26
12 X 12	26	26	24
16 X 16	24	26	22
24 X 24	22	26	22

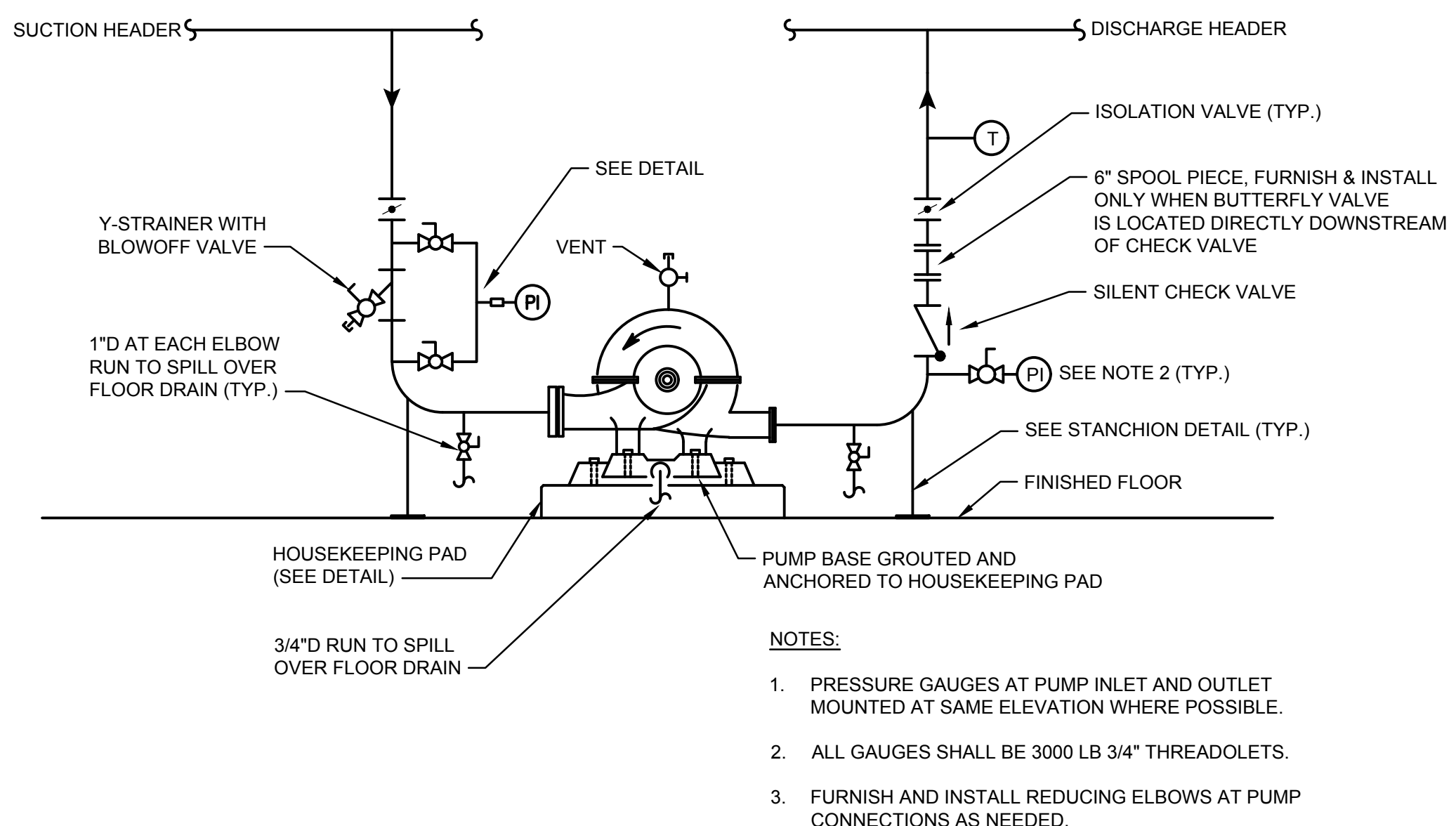
NOTES:  
1. IN ADDITION TO THOSE DOORS SHOWN IN THE CONTRACT DRAWINGS, THE SHEET METAL CONTRACTOR SHALL INSTALL AN ACCESS DOOR AT EACH FIRE DAMPER.



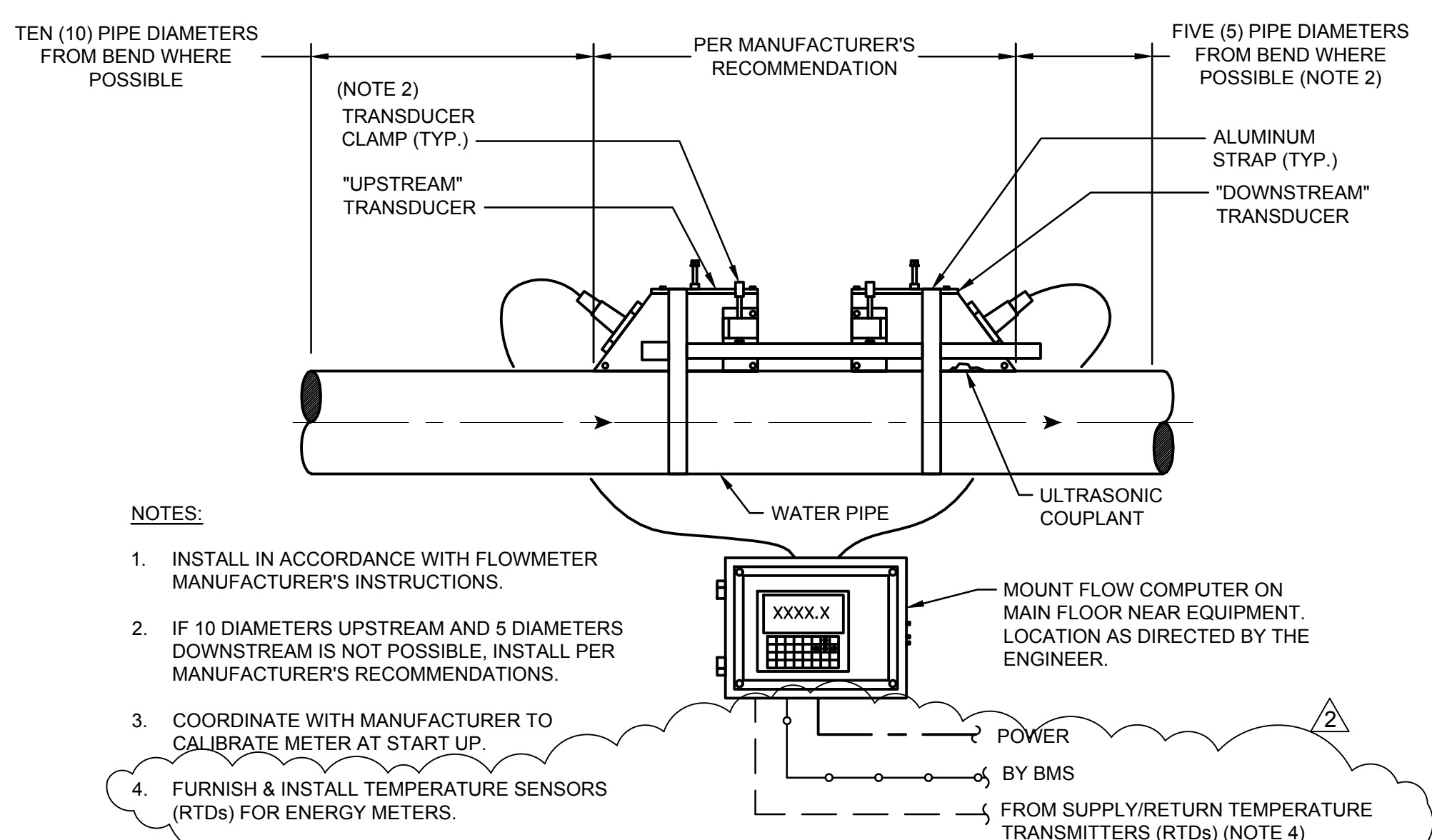
D 1 REFRIGERANT EXHAUST INLET  
NTS

D 2 DUCT ACCESS DOOR  
NTS

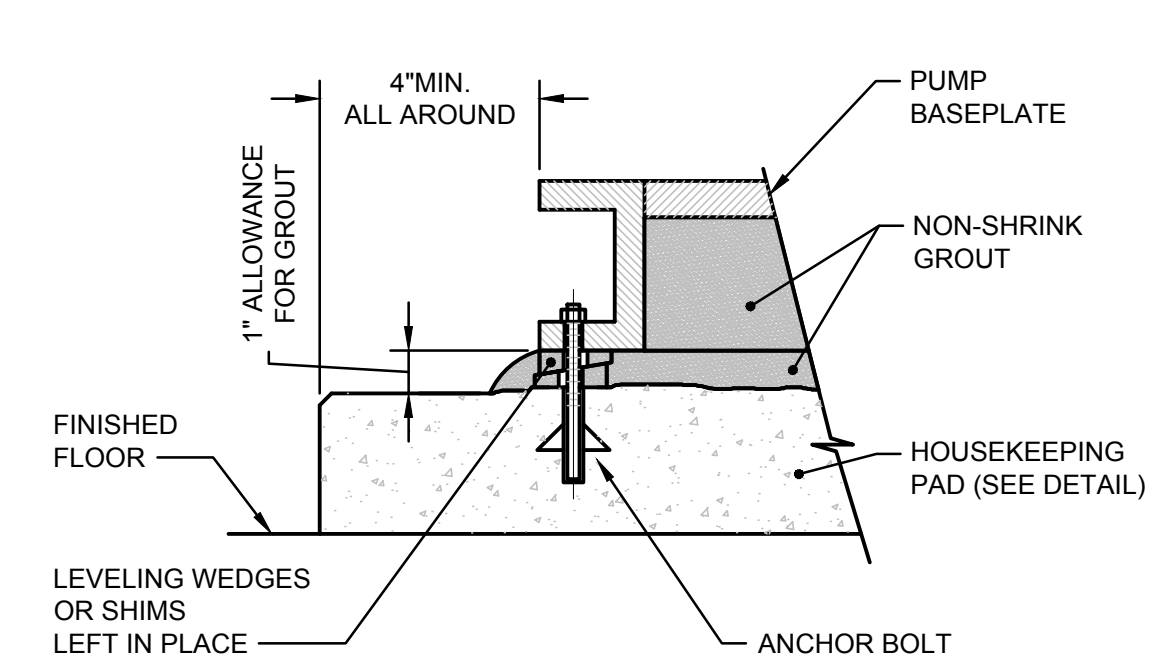
D 3 CHAIN OPERATOR  
NTS



NOTES:  
1. PRESSURE GAUGES AT PUMP INLET AND OUTLET MOUNTED AT SAME ELEVATION WHERE POSSIBLE.  
2. ALL GAUGES SHALL BE 3000 LB 3/4" THREADOLETS.  
3. FURNISH AND INSTALL REDUCING ELBOWS AT PUMP CONNECTIONS AS NEEDED.



NOTES:  
1. INSTALL IN ACCORDANCE WITH FLOWMETER MANUFACTURER'S INSTRUCTIONS.  
2. IF 10 DIAMETERS UPSTREAM AND 5 DIAMETERS DOWNSTREAM IS NOT POSSIBLE, INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
3. COORDINATE WITH MANUFACTURER TO CALIBRATE METER AT START UP.  
4. FURNISH & INSTALL TEMPERATURE SENSORS (RTDs) FOR ENERGY METERS.

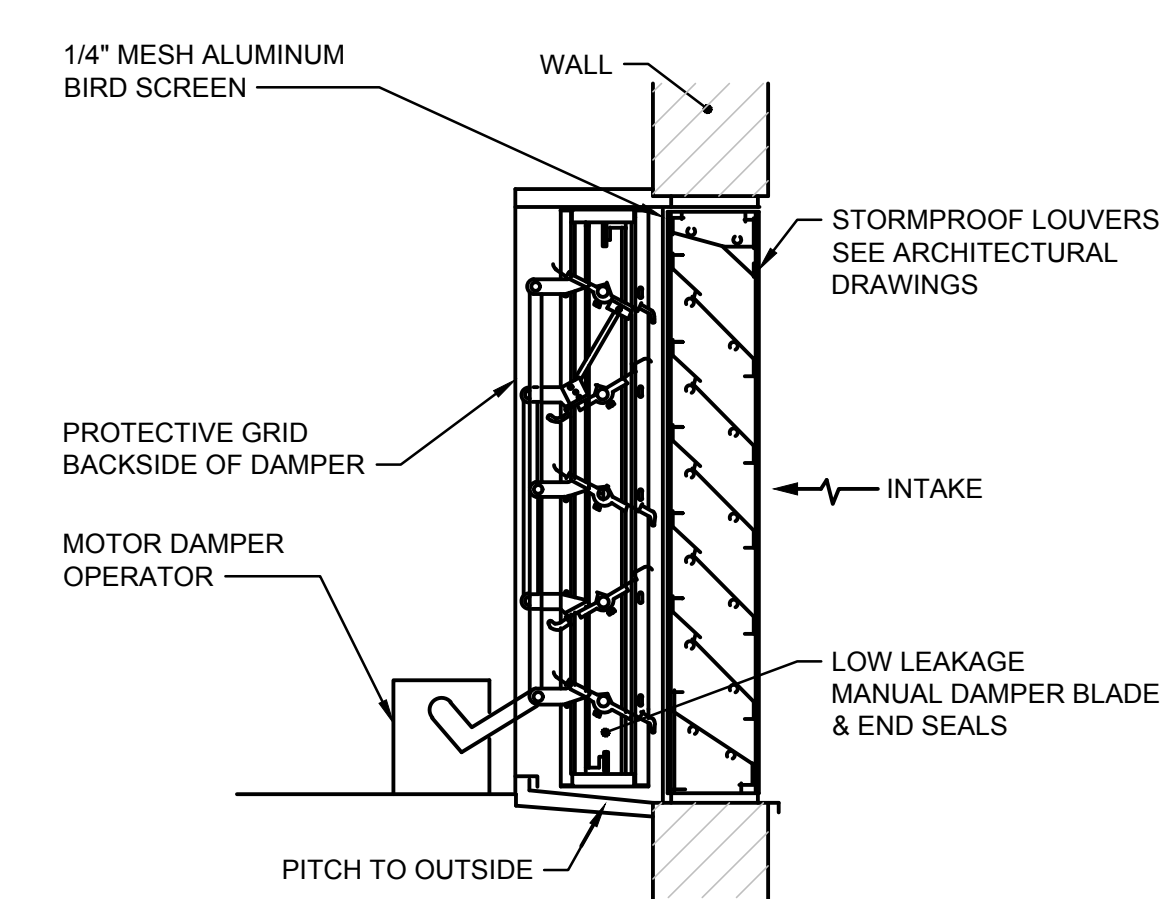


NOTES:  
1. NUMBER, SIZE AND LOCATION OF ANCHOR BOLTS PER MANUFACTURER'S RECOMMENDATIONS.  
2. FILL PUMP BASEPLATE WITH GROUT AFTER PUMP IS LEVELED AND SET IN PLACE.

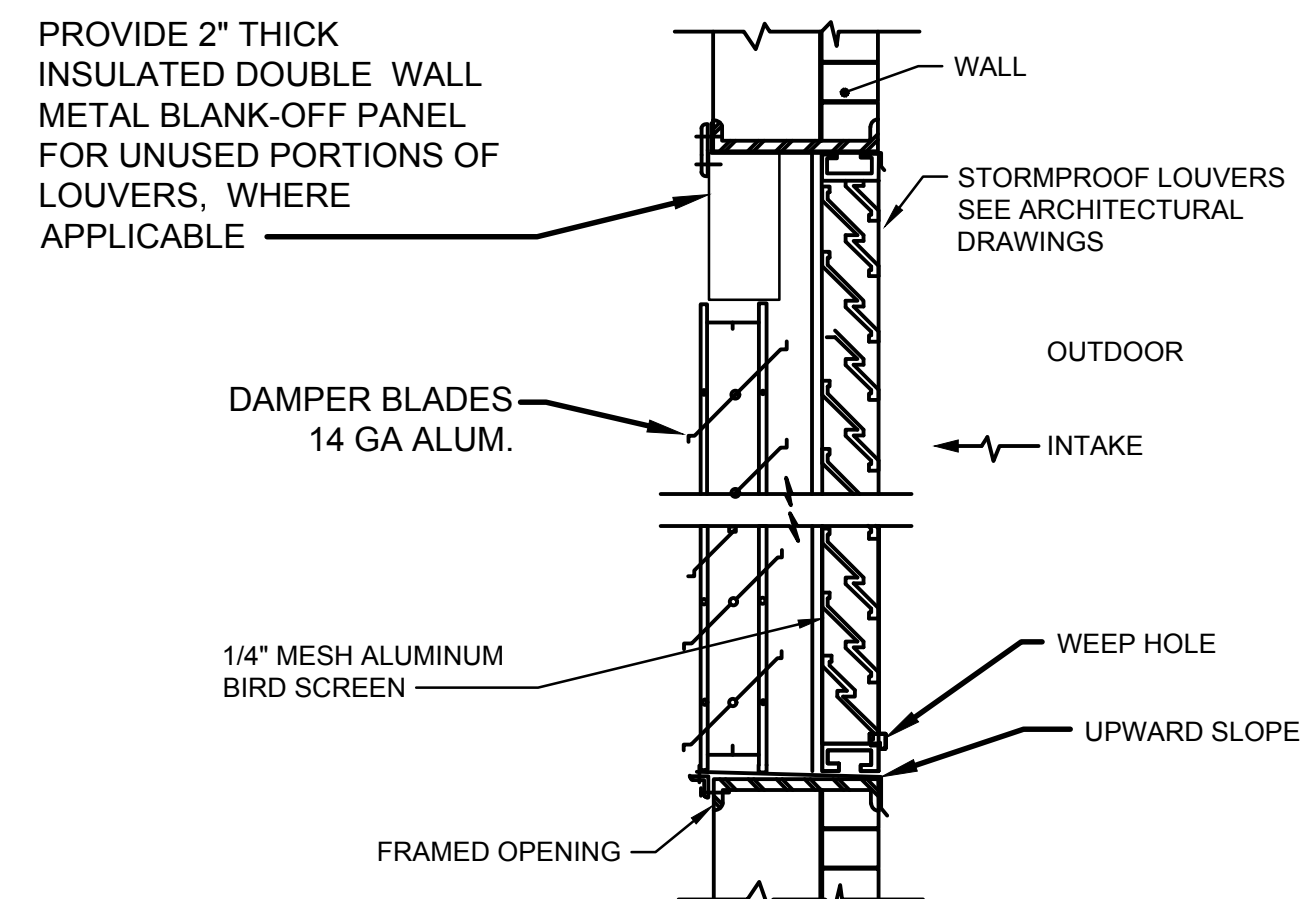
D 4 PUMP CONNECTION  
NTS

D 5 ULTRASONIC FLOWMETER/ENERGY METER  
NTS

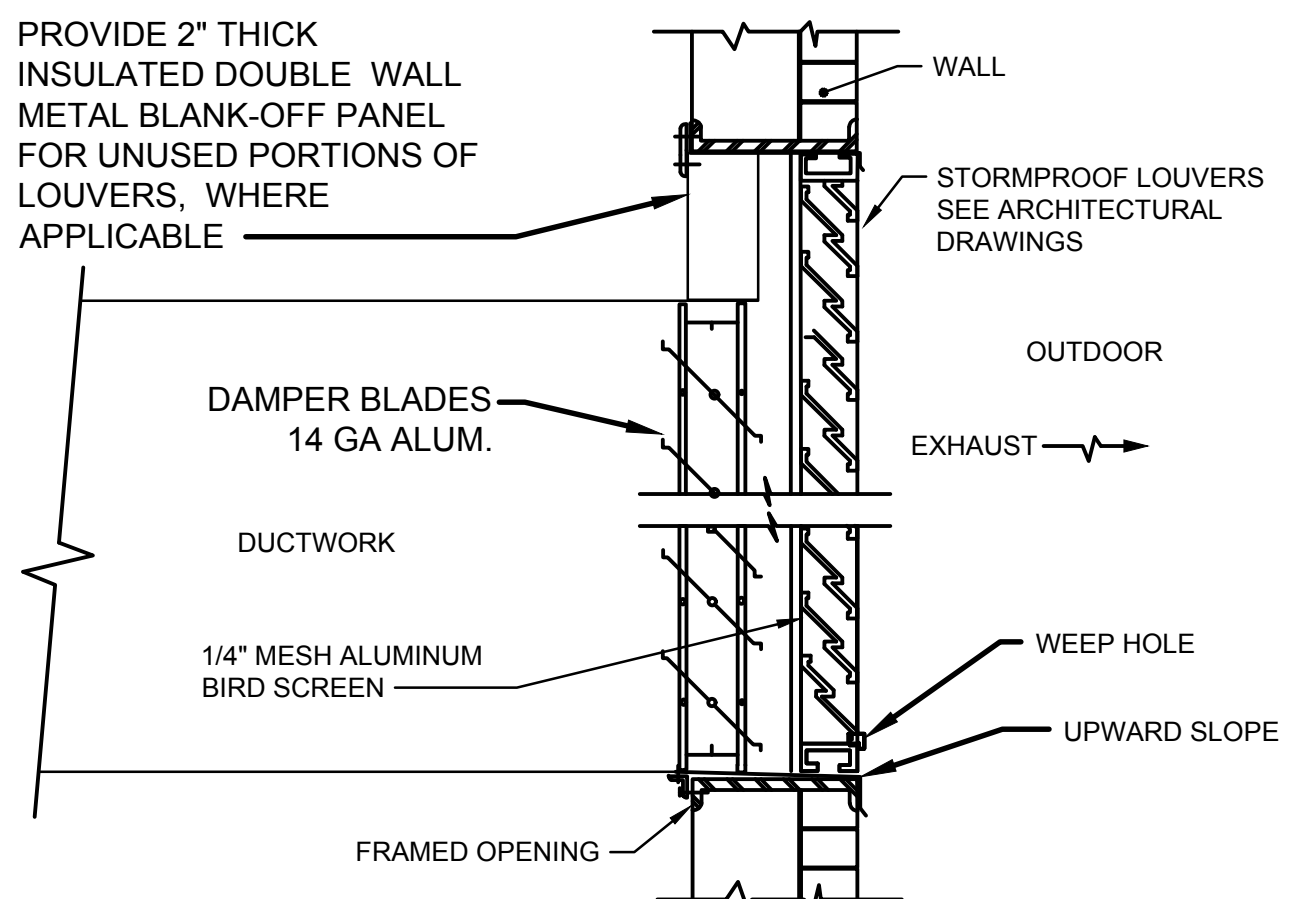
D 6 PUMP BASEPLATE  
NTS



NOTES:  
1. PROVIDE FLASHING AND SLOPE SILL TO PREVENT WATER LEAKAGE.  
2. NO WATER PENETRATION SHALL OCCUR AT VELOCITY OF 800 FPM.  
3. USE THIS DETAIL FOR COMBUSTION AIR INTAKE.



NOTES:  
1. PROVIDE FLASHING AND SLOPE SILL TO PREVENT WATER LEAKAGE.  
2. NO WATER PENETRATION SHALL OCCUR AT VELOCITY OF 800 FPM.  
3. USE THIS DETAIL FOR REFRIGERANT PURGE MAKE-UP AIR.



NOTES:  
1. PROVIDE FLASHING AND SLOPE SILL TO PREVENT WATER LEAKAGE.  
3. USE THIS DETAIL FOR REFRIGERANT PURGE.

D 7 MOTOR OPERATED OUTSIDE AIR LOUVER/DAMPER  
NTS

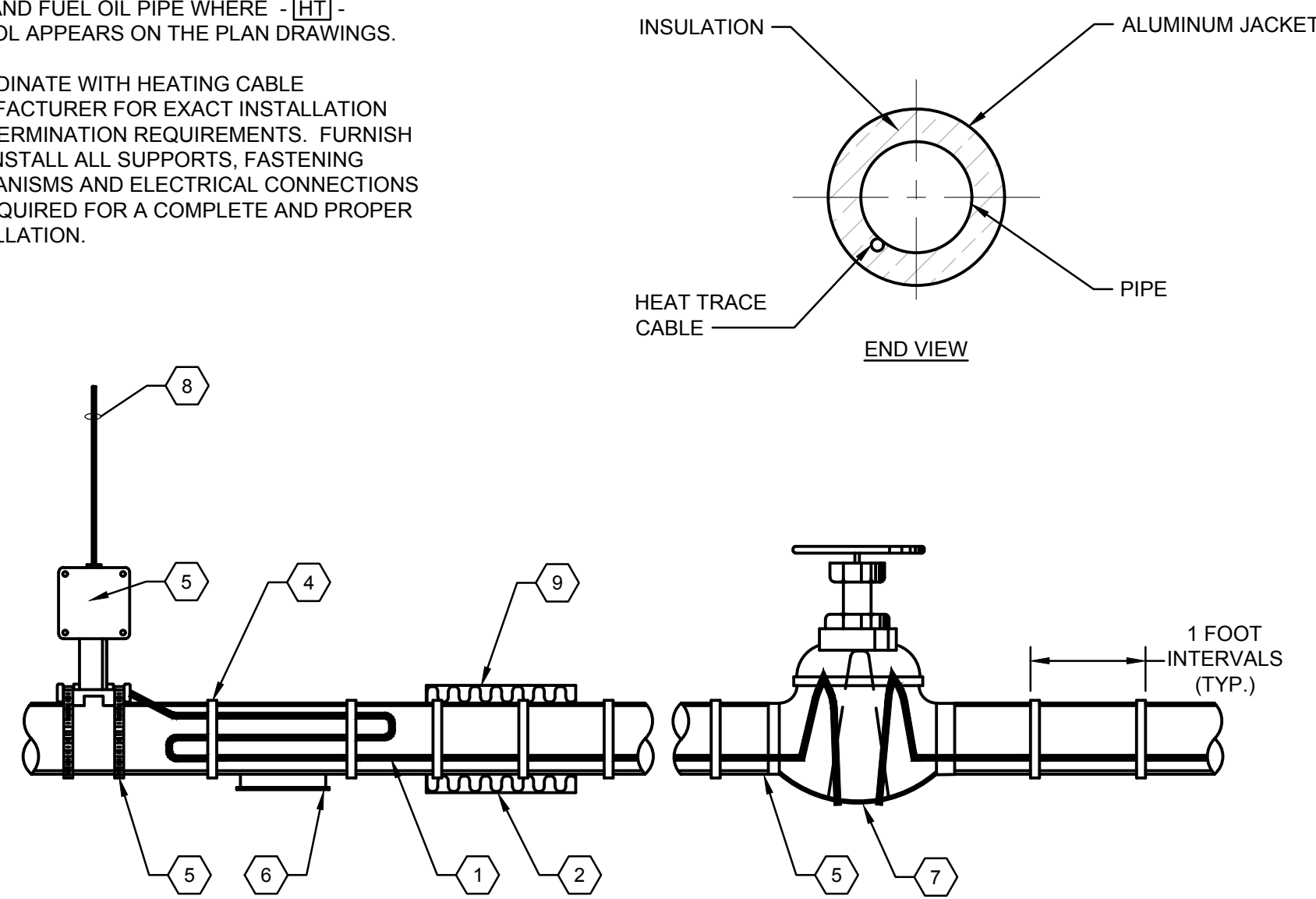
D 8 OUTSIDE AIR LOUVER/GRAVITY DAMPER  
NTS

D 9 REFRIGERANT PURGE LOUVER/GRAVITY DAMPER  
NTS

REVISIONS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES	
mark	date	description	drawing prepared by	date
1	12/21/18	ISSUE FOR BID	WSP USA ONE PENN PLAZA NEW YORK, NY	12/21/2018
	1/28/19	ADDENDUM 1		scale
	2/06/19	ADDENDUM 2	project	YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NIANTIC, CT
			drawing no.	M905
			CAD no.	project no.
			cad file	189824

**GENERAL NOTES:**

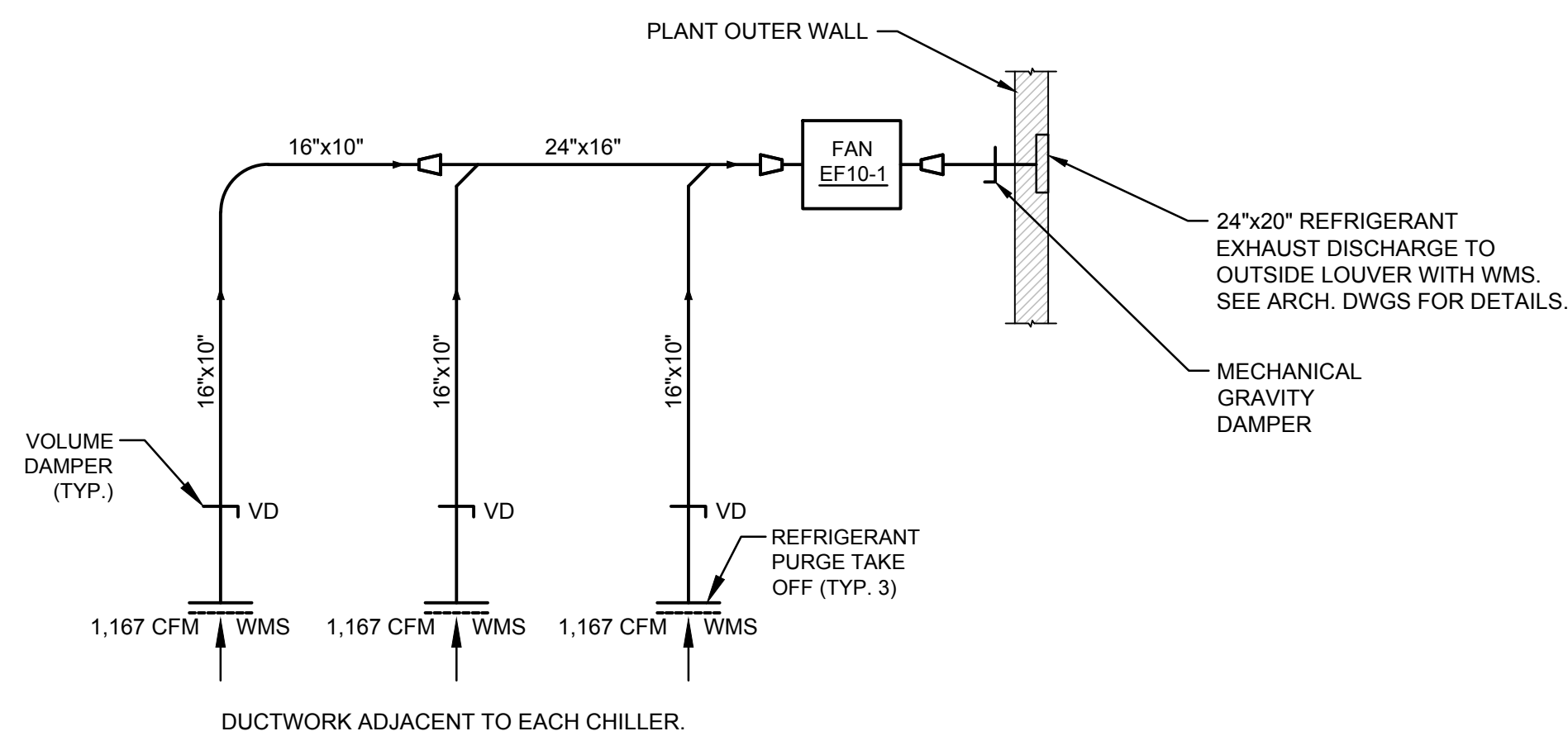
- FURNISH AND INSTALL HEAT TRACING ON HW, CHW AND FUEL OIL PIPE WHERE - [HT] - SYMBOL APPEARS ON THE PLAN DRAWINGS.
- COORDINATE WITH HEATING CABLE MANUFACTURER FOR EXACT INSTALLATION AND TERMINATION REQUIREMENTS. FURNISH AND INSTALL ALL SUPPORTS, FASTENING MECHANISMS AND ELECTRICAL CONNECTIONS AS REQUIRED FOR A COMPLETE AND PROPER INSTALLATION.



**NOTES:**

- |  |   |
|--|---|
| 1 HEATING CABLE                                  | 6 PIPE SUPPORT  |
| 2 PIPE INSULATION                                | 7 VALVE/FLOW METER  |
| 3 STAINLESS STEEL CLAMPS                         | 8 BRANCH CIRCUIT TO GFCI CIRCUIT BREAKER IN POWER PANEL. REFER TO ELECTRICAL CONTRACT DRAWINGS. |
| 4 FIBERGLASS TAPE                                | 9 0.016 INCH THICK ALUMINUM JACKETING.  |
| 5 POWER CONNECTION KIT WITH CABLE POWER SEAL KIT |   |

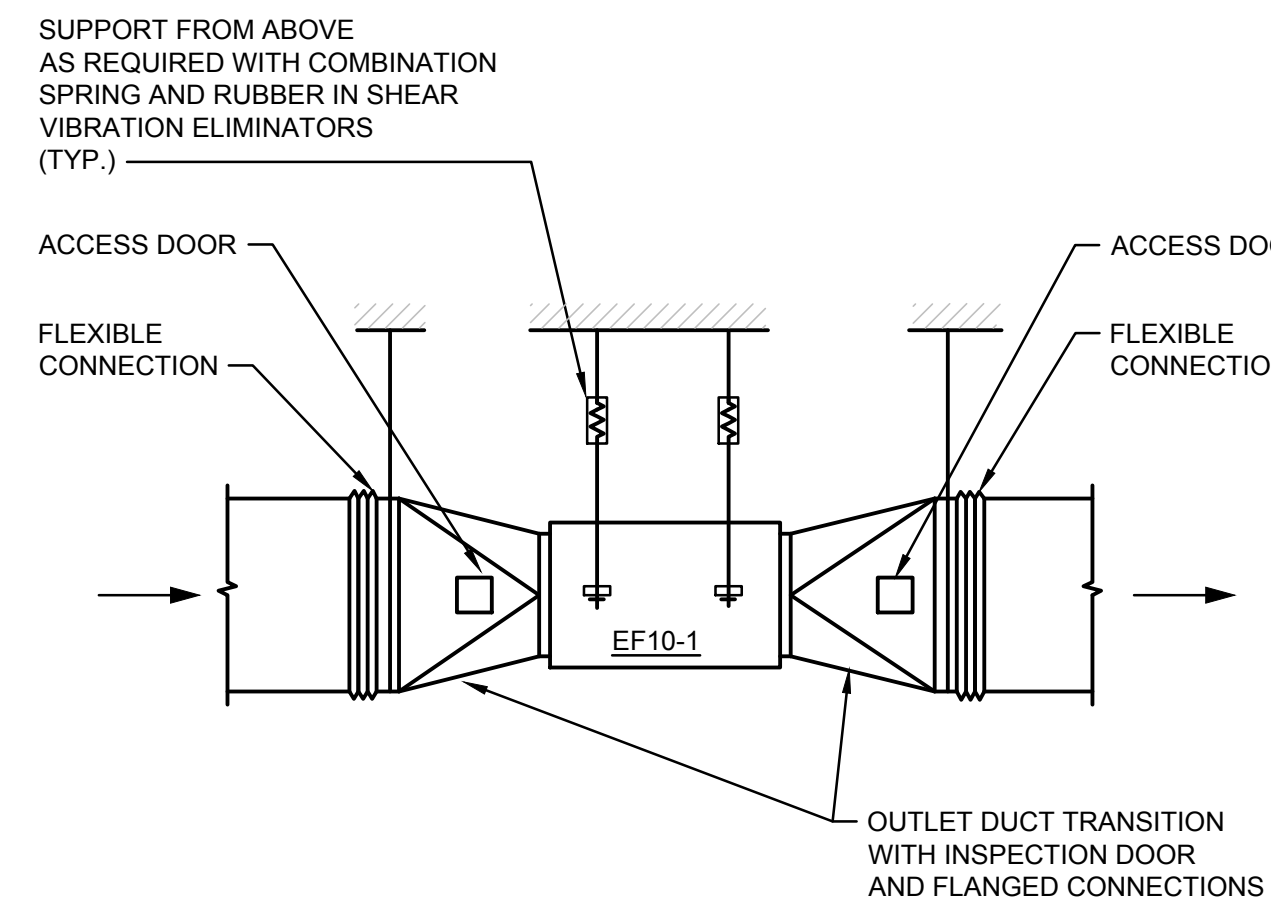
**D 1** FREEZE PROTECTION HEATING CABLE WIRING SCHEMATIC  
NTS



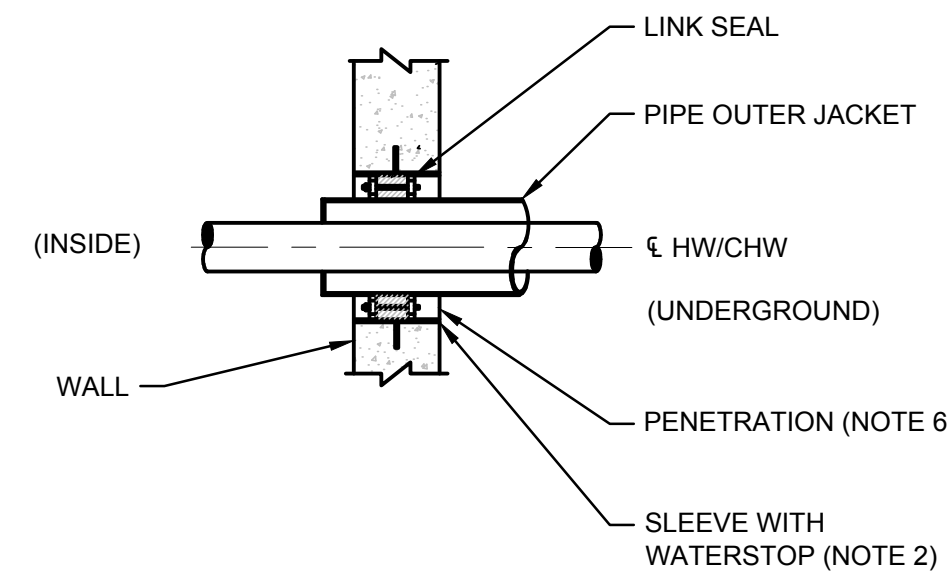
**NOTES:**

- REFER TO REFRIGERANT P&ID.
- SEE ARCHITECTURAL DRAWINGS FOR WALL PENETRATION DETAILS.
- BALANCE VOLUME DAMPERS TO THE QUANTITIES SHOWN AND LOCK POSITION.

**D 4** REFRIGERANT PURGE DUCTWORK  
NTS



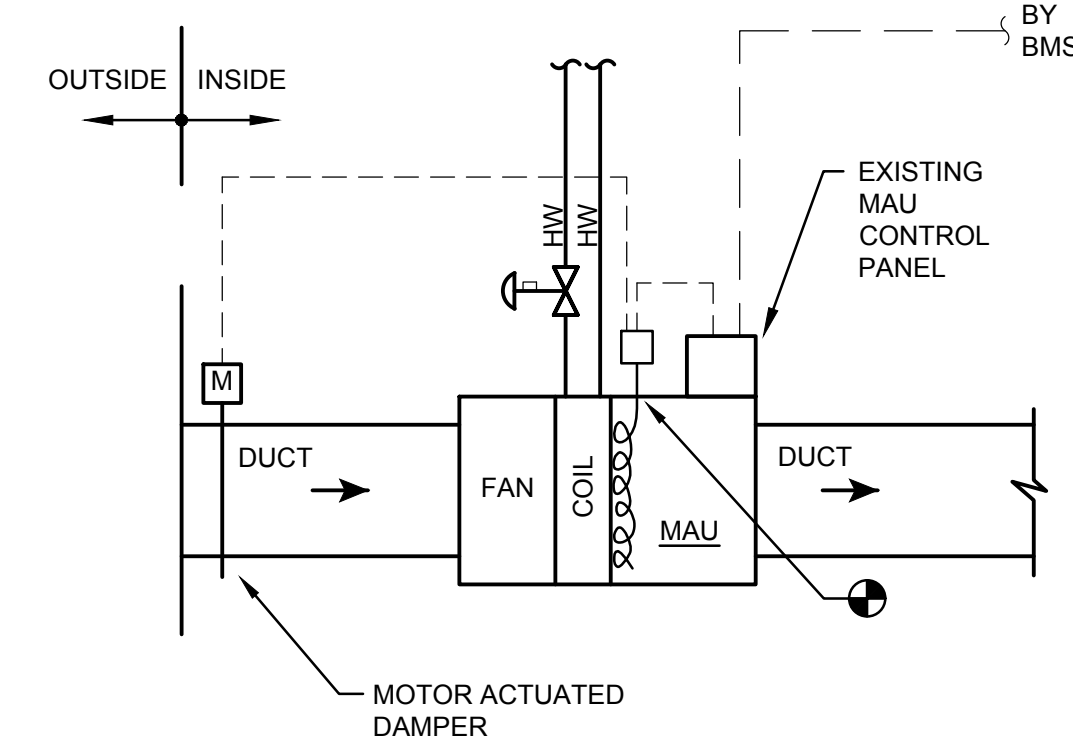
**D 2** REFRIGERANT EXHAUST FAN INSTALLATION  
NTS



**NOTES:**

- HOLE IN WALL SHALL BE PIPE OUTER JACKET + SLEEVE THK. + LINK SEAL THK. COORDINATE WITH CIVIL DWGS.
- SLEEVES SHALL BE CAST IN-PLACE FOR ALL BUILDING PENETRAITONS.
- ENTIRE ASSEMBLY SHALL BE WATER TIGHT.
- INSULATE INDOOR PIPING PER SPECIFICATIONS.
- LINK SEAL SHALL HAVE STAINLESS STEEL NUTS AND BOLTS AND DIELECTRIC SYNTHETIC RUBBER SEAL.
- AFTER PIPING IS INSTALLED AND TESTED, AND LINK SEAL IS TIGHTENED, GROUT PENETRATION FLUSH WITH OUTSIDE WALL. COMPLETELY FILL SPACE. SEE CIVIL DWGS FOR GROUT MATERIAL SPEC.

**D 5** UNDERGROUND FOUNDATION WALL PIPE PENETRATION  
NTS



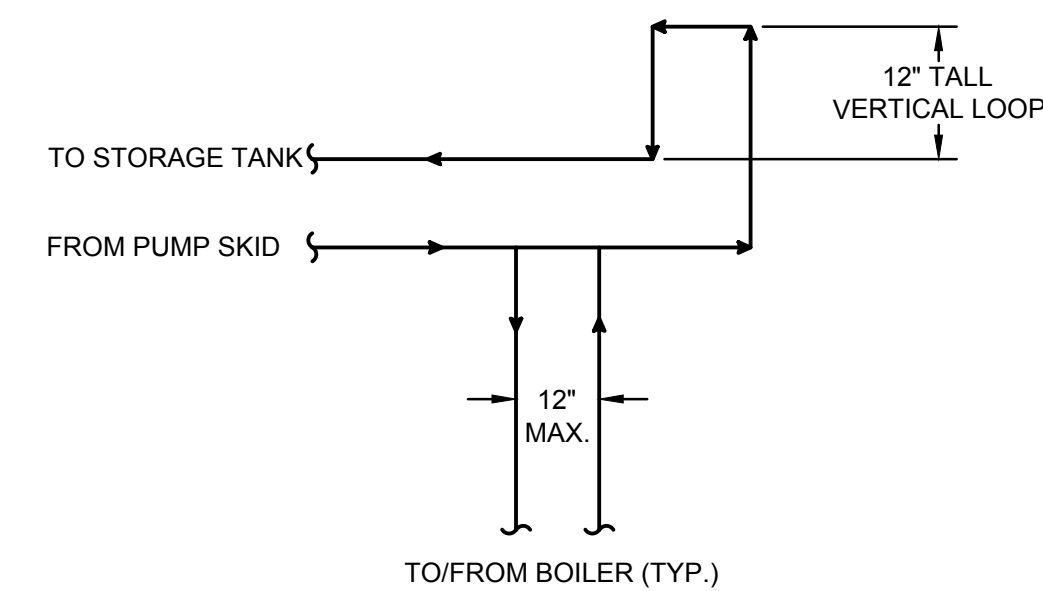
**NOTES:**

- TYPICAL FOR MAKE-UP AIR UNITS MAU7-1 IN BUILDING 7 AND MAU12-1 IN BUILDING 12.

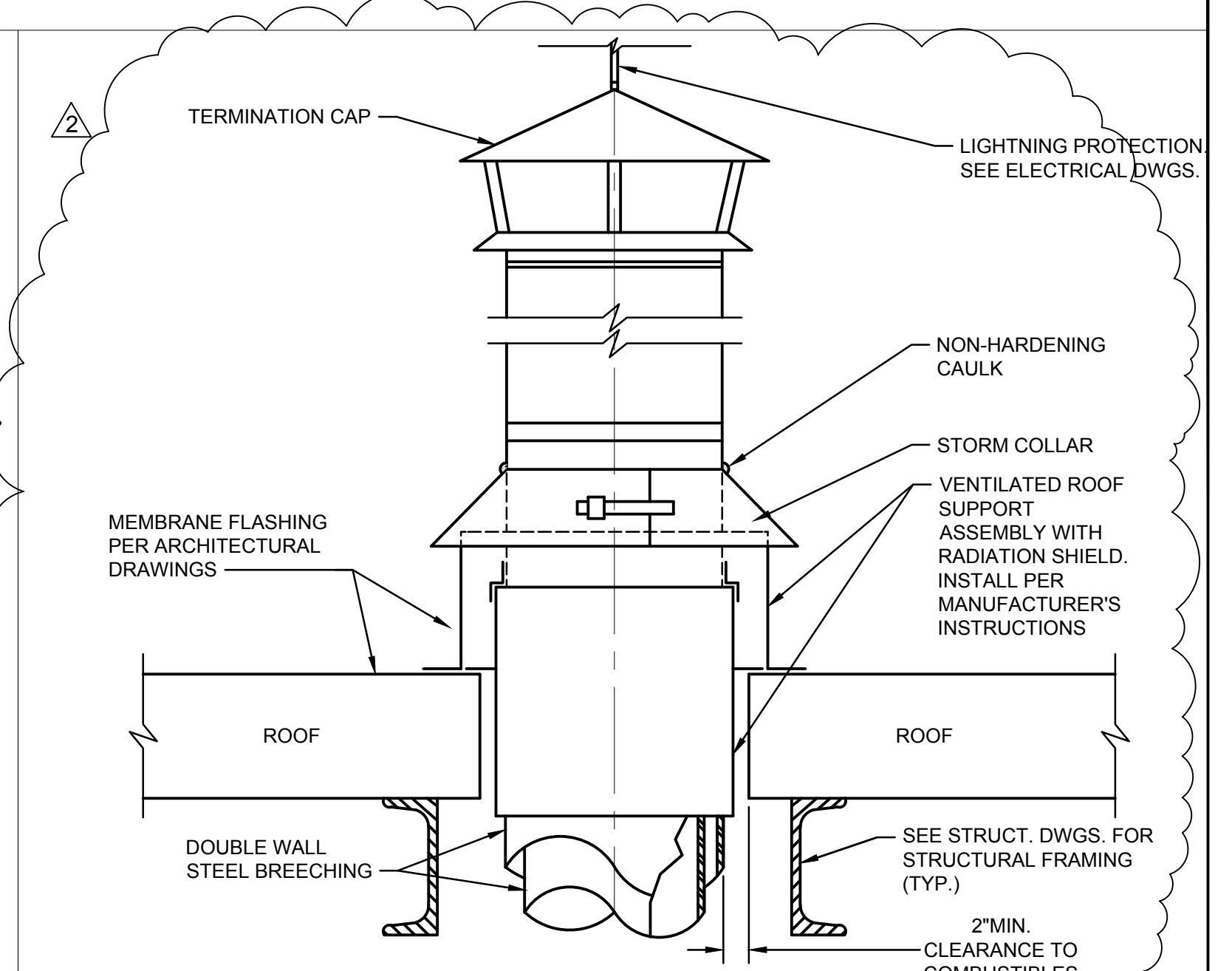
**SEQUENCE OF OPERATION:**

- AT 40 DEG F (ADJUSTABLE) AND BELOW, THE FAN SHALL STOP, OUTDOOR AIR DAMPER SHALL CLOSE AND A LOW TEMPERATURE ALARM SIGNAL SHALL BE SENT TO THE BMS.
- AT 45 DEG F (ADJUSTABLE) AND ABOVE, THE FAN SHALL BE PERMITTED TO OPERATE NORMALLY.

**D 3** MAKE-UP AIR UNIT FREEZE STAT  
NTS

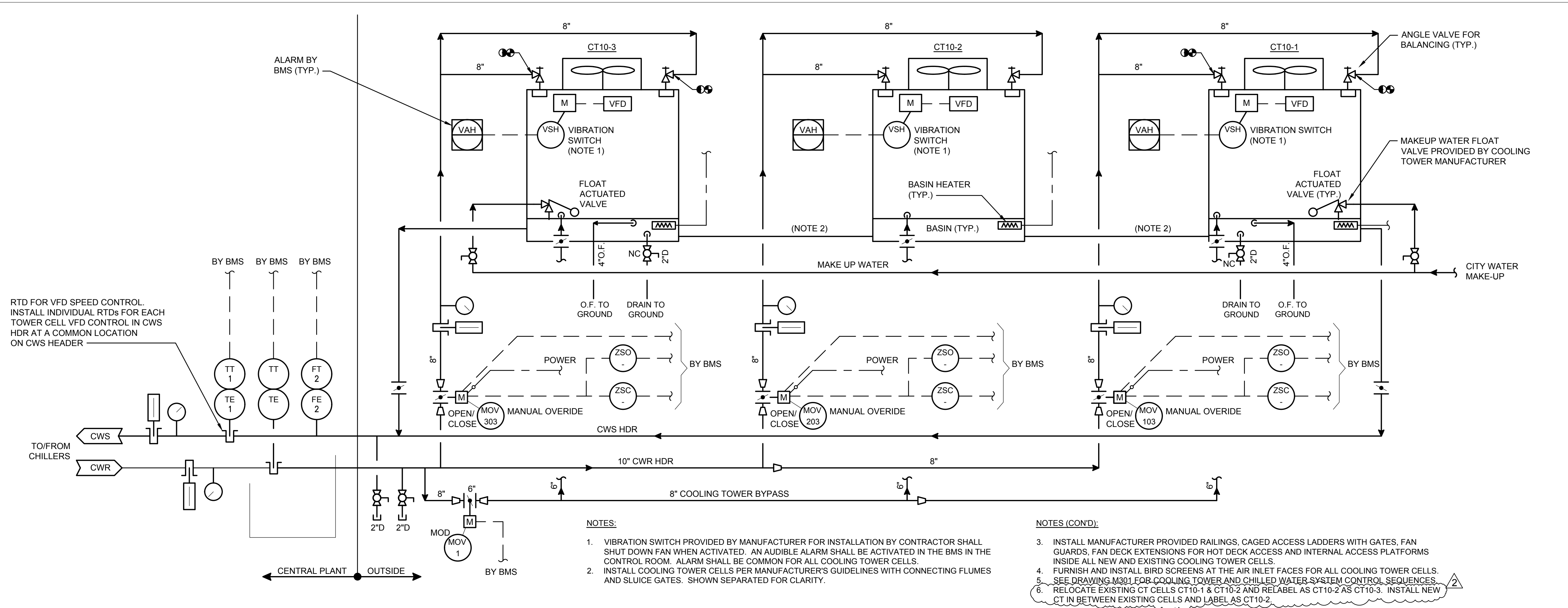


**D 6** FUEL OIL HEADER LOOP  
NTS

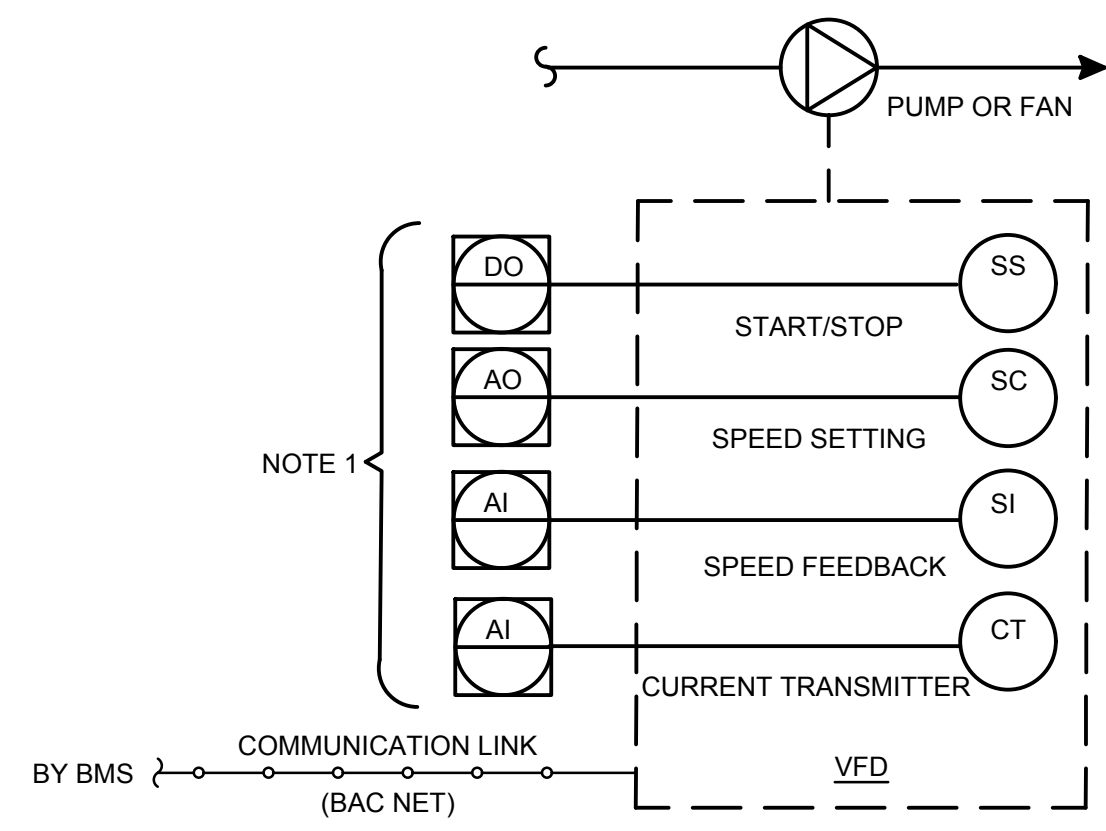


**D 7** BREECHING ROOF PENETRATION  
NTS

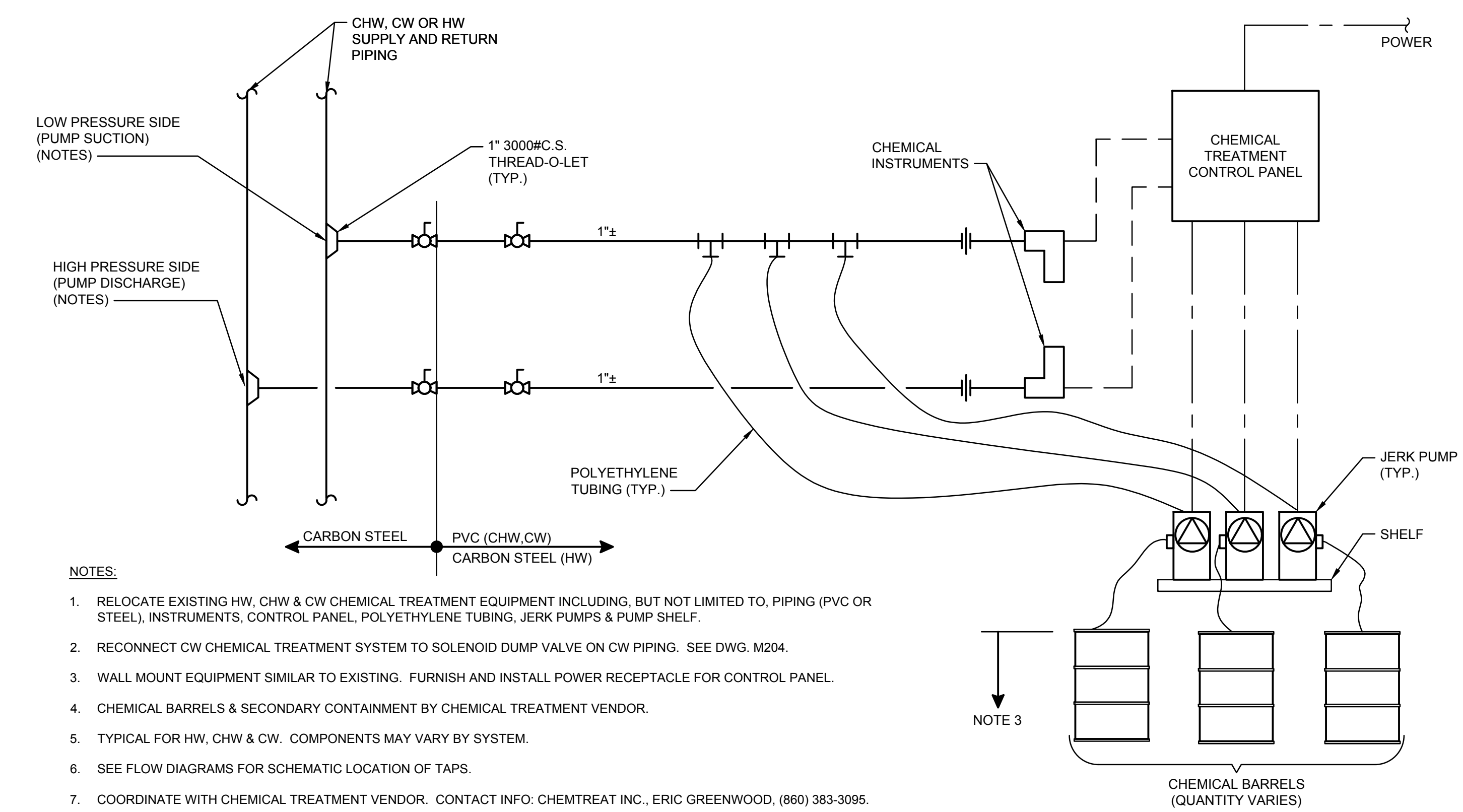
drawing title <b>DETAILS - 7</b>			<b>STATE OF CONNECTICUT</b> DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS					
mark	date	description	drawing prepared by	date	scale
Δ	12/21/18 2/06/19	ISSUE FOR BID ADDENDUM 2	WSP USA ONE PENN PLAZA NEW YORK, NY	12/21/2018	AS NOTED
project			drawn by	approved by	drawing no.
YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NANTIC, CT			SC	RB	M906
CAD no. cad file		project no. 189824			



**D 1** COOLING TOWER P&ID  
NTS



**D 2** VARIABLE FREQUENCY DRIVE  
NTS



**D 3** EXISTING CHEMICAL TREATMENT RELOCATION  
NTS

drawing title <b>DETAILS - 8</b>			<b>STATE OF CONNECTICUT</b> DEPARTMENT OF ADMINISTRATIVE SERVICES		
REVISIONS					
mark	date	description	drawing prepared by	date	scale
1	12/21/18	ISSUE FOR BID	WSP USA ONE PENN PLAZA NEW YORK, NY	12/21/2018	AS NOTED
	1/28/19	ADDENDUM 1			
	2/06/19	ADDENDUM 2			
project YORK CORRECTIONAL INSTITUTION CENTRAL PLANT AND DISTRIBUTION NANTIC, CT			drawn by SC	approved by RB	drawing no. <b>M907</b>
CAD no. cad file			project no. 188924		