



Office of General Services

**DESIGN & CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242**

ADDENDUM NO. 1 TO PROJECT NO. 46245

CONSTRUCTION, HVAC, AND ELECTRICAL WORK PROVIDE FACILITY-WIDE CCTV/AUDIO MONITORING SYSTEM & CIVILIAN PERSONAL ALARM SYSTEM & PA SYSTEM ORLEANS CORRECTIONAL FACILITY 3531 GAINES BASIN ROAD ALBION, NY

February 20, 2026

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

BIDDING REQUIREMENTS – COMMON DOCUMENTS

1. DOCUMENT 001114 ADVERTISEMENT FOR BIDS: Paragraph 4: CHANGE Paragraph to Read:
“Pursuant to Public Buildings Law § 8(6), effective January 11, 2020, for any projects where the project design commenced on or after January 1, 2020 and for any contracts over \$5,000 for the work of construction, reconstruction, alteration, repair, or improvement of any State building, a responsible and reliable NYS-certified Minority or Women-Owned Business Enterprise that submits a bid within ten percent of the lowest bid will be deemed the apparent low bidder provided that the bid is \$1,737,918 or less, adjusted annually for inflation as of March 1, 2026. If more than one responsible and reliable MWBE firm meets these requirements, the MWBE firm with the lowest bid will be deemed the apparent low bidder.”
2. DOCUMENT 002113 INSTRUCTIONS TO BIDDERS: Paragraph 13.5: CHANGE Paragraph to Read:
“13.5 Pursuant to Public Buildings Law § 8(6), effective January 11, 2020, for any projects where the project design commenced on or after January 1, 2020 and for any contracts over \$5,000 for the work of construction, reconstruction, alteration, repair, or improvement of any State building, a responsible and reliable NYS-certified Minority or Women-Owned Business Enterprise that submits a bid within ten percent of the lowest bid will be deemed the apparent low bidder provided that the bid is \$1,737,918 or less, adjusted annually for inflation as of March 1, 2026. If more than one responsible and reliable MWBE firm meets these requirements, the MWBE firm with the lowest bid will

be deemed the apparent low bidder. Refer to the Advertisement for Bids for applicability of projects subject to this criteria.”

3. DOCUMENT 002113 INSTRUCTIONS TO BIDDERS: Paragraph 17: CHANGE “\$1,680,923” to read “\$1,737,918”.

ELECTRICAL SPECIFICATIONS

4. SECTION 260545 TRENCHLESS DUCT BANK BY DIRECTIONAL BORING: Discard the Section bound in the Project Manual and substitute the accompanying Sections (260545 – 1 thru 260545 – 7) noted “Revised 2/18/26”.

ELECTRICAL DRAWINGS

5. Revised Drawing:
 - a. Drawing No. E-08-808, noted Addendum No. 1 dated 2/18/2026, accompanies this Addendum and supersedes the same numbered previously issued drawing.

END OF ADDENDUM

Brady M. Sherlock, P.E.
Director, Division of Design
Design & Construction

SECTION 260545

TRENCHLESS DUCT BANK BY DIRECTIONAL BORING

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. Portions of the new underground ductbanks for fiber shall be installed by the directional boring method as specified in this section. The directional boring installation shall provide a pathway underneath the existing grade, and county road. Excavating adjacent to either side and beneath any culvert is not acceptable due to risk of its collapse.
- B. This section includes materials, performance and installation standards, and Contractor responsibilities associated with the furnishing of all labor, materials, equipment and incidentals required to install, complete, required trenchless installation of pressure mains, as shown on the Drawings and as specified herein.
- C. HDD is a trenchless method for installing a product that serves as a direct conduit for liquids or gases, or a duct for pipe, cable or wire line products. It is a multistage process consisting of drilling a pilot bore along a predetermined path and then pulling the desired product back through the drilled space. The vertical profile of the bore alignment is typically in the shape of an inverted arc. When necessary, enlargement of the pilot bore hole to accommodate a product larger than the pilot bore cross section is accomplished by back reaming. This is done at the same time the product is being pulled back through the pilot bore space. Steering the bore is accomplished by proper orientation of the drill bit head as it is being pushed along an alignment by an above-ground hydraulic jack. Orientation and tracking of the drill bit is determined by an above-ground radio detection device that picks up a signal generated from a radio transmitted contained within the drilling bit. This radio signal is translated into depth and alignment. In order to minimize friction and provide a soil-stabilizing agent, a drilling fluid is introduced into the annular space created during the boring operation. The rotation of the bit in the soil wetted by the drilling fluid creates slurry. This slurry acts to stabilize the surrounding soil and prevents collapse of the bore hold and loss of lubrication. Drilling fluids must be designed for the soil and ground-water condition. In order to confine any free-flowing slurry at the ground surface during pull-back or drilling, sump areas are created to contain any escaping slurry that might damage or be hazardous in surrounding areas. All residual slurry shall be removed from the surface and the site restored to preconstruction conditions.
- D. Underground raceway shall be for HDPE w/ welded joints for spliced and to threaded NPT connector fittings.

1.2 EXPERIENCE

- A. The Contractor must demonstrate expertise in trenchless methods by providing a list of ten utility references for which similar work has been performed in the last five years. The references should include a name and telephone number where contact can be made to verify the contractor's capability. The Contractor must provide documentation showing successful completion of the projects used for reference. Conventional trenching experience will not be considered applicable.

- B. All supervisory personnel must be adequately trained and will have at least four years experience in directional boring. The Contractor will have to submit the names and resumes of all supervisory field personnel prior to construction.
- C. Because of time constraints, the Contractor may wish to provide multiple experienced directional boring crews.
- D. The directional boring equipment shall be the Guide Drill system manufactured by UTILX Corporation FlowMole service or approved equal, and capable of installing 4" nominal inside diameter pipe.

1.3 SUBMITTALS

- A. Submit technical data for equipment including clay slurry material, method of installation with working drawings, and proposed sequence of construction for approval by the Engineer.
- B. Prior to approval for directional boring, the Contractor must submit the names of supervisory field personnel and historical information of directional boring experience. In addition, the Contractor must submit for approval nameplate data for the drilling equipment, mobile spoils removal unit, and MSDS (Material Safety Data Sheets) information for the drilling slurry compounds. The Contractor is required to bring to the attention of the Engineer any known design discrepancies with actual tunneling methods that the Contractor will be performing. This shall be stated to the Engineer no later than the pre-construction meeting.

PART 2 – PRODUCTS

2.1 EQUIPMENT AND STAGING

- A. Materials must meet or exceed the following standards:

| Material Type | Nonpressure | Pressure |
|----------------------------------|---|--|
| High Density Polyethylene (HDPE) | ASTM D 2447 ASTM D 3350 ASTM F714 | ASTM D 2447 ASTM D 3350 ASTM F714 ASTM 2513 |

- B. Construction Site Requirements:
 - 1. Excavation for entry, recovery pits, slurry sump pits, or any other excavation shall be provided with sump areas. [AJ1]Sump areas are required to contain drilling fluids.
 - 2. After completing installation of the product, the work site shall be restored. The work site shall be cleaned of all excess slurry left on the ground. Removal and final disposition of excess slurry or spoils as the product is introduced, shall be the responsibility of the contractor.
 - 3. Excavated areas shall be restored. The cost of restoring damaged pavement, curb, sidewalk, driveways, lawn, storm drains, landscape and other facilities is borne by

the Contractor.

4. Methods to be used for marking utilities shall minimize impact on other construction or maintenance activities, including mowing operations, which may be conducted throughout the project on a cyclic basis. In order to accomplish this, marking by painting is preferred but not required.

C. Quality Control:

1. A representative of the Contractor must be in control of the operation at all times. The representative must have a thorough knowledge of the equipment and the procedures to be performed and is present at the job site during the installation.
2. The Engineer or Owner's Representative must be notified 48 hours in advance of starting work. The installation shall not begin until the construction manager is present at the job site and agrees that proper preparations have been made.

D. Specific Requirements:

1. Drilling Fluids and Reamer Hole Diameter: A mixture of bentonite clay or other approved slurry and potable water shall be used as the cutting and soil stabilization fluid. The viscosity shall be varied to best fit the soil conditions encountered. Water shall be clean and fresh, with a minimum pH of 6.

- E. Locating and Tracking: The Contractor shall describe the method of locating and tracking the drill head during the pilot bore. Walkover, wire line and wire line with surface grid verification (i.e., True-Trac), or any other system as approved by the Engineer's Representative, is the accepted methods of tracking directional bores. The locating and tracking system shall be capable of ensuring that the proposed installation is installed as intended. The locating and tracking system shall provide information on:

F. Clock and Pitch information.

1. Depth.
2. Transmitter temperature
3. Battery status
4. Position (x,y)
5. Azimuth, where direct overhead readings (walkover) are not possible (i.e., subaqueous or limited access transportation facility).

- G. Before commencement of a directional drilling operation, proper calibration of the equipment (if required) shall be undertaken.

- H. Alignment readings or pilot points shall be taken and recorded every five feet.

- I. All facilities shall be installed in such a way that their location can be readily determined by electronic designation after installation. For nonconductive installations, this shall be accomplished by attachment of a continuous conductive material, either externally,

internally or integrally with the product. Either a copper wire line or a coated conductive tape for this material may be used. Any break in the conductor must be connected by electrical clamp of brass or solder and coated with a rubber or plastic insulator to maintain the integrity of the connection from corrosion.

- J. Drilling Fluids: The Contractor shall identify the source of fresh water for missing the drilling mud. Approvals and permits are required for such sources as streams, rivers, ponds, or fire hydrants. Any water source other than potable water may require a pH test.
- K. Monitoring of the drilling fluids such as the pumping rate, pressures, viscosity and density is required during the pilot bore, back reaming, and pipe installation stages, to ensure adequate removal of soil cuttings and the stability of the borehole. Relief holes can be used as necessary to relieve excess pressure down hole. To minimize heaving during pull-back, the pull-back rate is determined in order to maximize the removal of soil cuttings without building excess down-hole pressure. Excess drilling fluids shall be contained at entry and exit points until they are recycled or removed from the site. Entry and exit pits shall be sufficient size to contain the expected return of drilling fluids and soil cuttings.
- L. The Contractor shall ensure that all drilling fluids are disposed of or recycled in a manner acceptable to the appropriate local, state or federal regulatory agencies. When drilling in suspected contaminated ground, the drilling fluid shall be tested for contamination and disposed of appropriately. Any excess material shall be removed upon completion of the bore.
- M. Restoration for damage to any transportation facility or non-transportation facility caused by heaving, settlement, escaping drilling fluid (fracout) or the directional drilling operation, is the responsibility of the Contractor.
- N. Any pavement heaving or settlement damage requires restoration/replacement of the pavement at the contractor’s expense. Damaged Pavement and Sidewalks shall be reconstructed as original.

| Maximum Back-Ream Hole Diameter | |
|---------------------------------------|----------------------------------|
| Nominal Inside Pipe Diameter (Inches) | Back-Ream Hole Diameter (Inches) |
| 2 | 4 |
| 3 | 6 |
| 4 | 8 |

- O. Equipment Requirements: The Contractor shall ensure that appropriate equipment is provided to facilitate the installation as follows:

| HDD Equipment | | | | |
|--------------------|-------------------------|--------------------|-------------------|-------------------------|
| System Description | Pipe (1) Diameter (in.) | Bore Length (feet) | Torque (ft./lbs.) | Thrust/ Pullback (lbs.) |
| Maxi-HDD | 18 and greater | 1,000+ | 10,000+ | 70,000+ |
| Midi-HDD | Up to 16 | Up to 1,000 | 1,900 to 9,999 | 20,001 to 69,000 |
| Mini-HDD | Up to 6 | Up to 600 | Up to 1,899 | Up to 20,000 |

- P. Equipment shall be matched to be size of pipe being installed. Installations differing from the above chart must be approved by the Engineer's Representative. The Contractor ensures that the drill rod can meet the bend radius required for the proposed installation.
- Q. Multiple pipe or conduit installations shall not exceed the total outside pipe diameters stated above.

2.2 HDPE (HIGH DENSITY POLYETHYLENE PRESSURE PIPE)

- A. The pipe shall be extruded using a melt homogenizing/plasticating extruder and "appropriate" die. The extruder screw design should be customized for the HDPE being processed to minimize melt fracture of the molecular structure thus reducing the molecular weight and changing some physical properties from resin to pipe. The resin should be processed at its melt temperature of 500°F to 525°F. The die will have an internally cooled mandrel and an externally cooled bushing. This die will cool the pipe to its solidification point such that it exits the die to specification size, shape, and wall thickness with a polished surface for smooth flow offering a Hazen Williams "C" factor of C=155.
- B. Pipe supplied under this specification shall have a nominal IPS (Iron Pipe Size) OD unless otherwise specified. The SDR (Standard Dimension Ratio), and the pressure rating of the pipe supplied shall be as specified by the Engineer.
- C. Materials used for the manufacture of polyethylene pipe and fittings shall be very high molecular weight, high density ethylene/hexene copolymer PE 3408 polyethylene resin meeting the listed physical property and pipe performance requirements:
 - 1. The pipe shall be extruded from pre-compounded resin. In plant blending of resin is unacceptable.
 - 2. The pipe shall meet all requirements of AWWA C906, latest revision.
- D. The polyethylene pipe MANUFACTURER shall provide certification that stress regression testing has been performed on the specific product. Said certification shall include a stress life curve per ASTM D-2837. The stress regression testing shall have been done in accordance with ASTM D-2837, and the manufacturer shall provide a product supplying a minimum Hydrostatic Design Basis (HDB) of 1,600 psi, as determined in accordance with ASTM D-2837.
- E. Design Make: Endot Industries, Dura-Line, or Approved Equal

PART 3– EXECUTION

3.1 INSTALLATION

- A. Installation shall be in a trenchless manner producing continuous bores.
- B. Contractor shall be responsible to repairing or restoring any and all utilities disturbed or interrupted during or in removing the boring device.
- C. The tunneling system shall be remotely steerable and permit electronic monitoring of tunnel depth and location. Accurate placement of pipe within a + 2-inch window is required both horizontally and vertically. Turning capability of 90-degrees in 40 feet is required. Continuous monitoring of the boring head is required, including across open water if necessary.
- D. Tunneling must be performed by a fluid-cutting process (high pressure-low volume) utilizing a liquid clay, i.e. bentonite. The clay lining will maintain tunnel stability and provide lubrication in order to reduce frictional drag while the pipe is being installed. In addition, the clay fluid must be totally inert and contain no environmental risk. The Contractor must also have a mobile vacuum spoils recovery vehicle on-site to remove the drilling spoils from the access pits. The spoils must then be transported from the job site and be properly disposed of. Under no circumstances will the drilling spoils be permitted to be disposed of into sanitary, storm, or other public or private drainage systems.
- E. Liquid clay type colloidal drilling fluid shall consist of at least 10 percent of high-grade, carefully processed bentonite to consolidate cuttings of the soil, to seal the walls of the hole, and to furnish lubrication for subsequent removal of cuttings. The slurry, which is heavier than the surrounding material, is high in colloids of the bentonite type and it will deposit a thin filter cake of low permeability material on the walls of the bore. This will allow only a small amount of the fluid to pass into the surrounding soil and will also stabilize the bore. The colloidal content of the fluid imparts excellent lubricating qualities to the slurry, which is a distinct aid to the removal of the soil cuttings.
- F. Mechanical, pneumatic, or water-jetting methods will be considered unacceptable.
- G. After an initial bore has been completed, a reamer will be installed at the termination pit and the pipe will be pulled back to the starting pit. The reamer must also be capable of discharging liquid clay to facilitate the installation of the pipe into a stabilized and lubricated tunnel.
- H. Upon completion of boring and pipe installation, the Contractor will remove all spoils from the starting and termination pits. All pits will be restored to their original condition.

3.2 HDPE PIPE

- A. Store on clean, level ground to prevent undue scratching or gouging of the pipe. If the pipe must be stacked for storage, such stacking shall be done in accordance with the pipe manufacturer's recommendations. The handling of the pipe shall be done in such a manner that it is not damaged by dragging over sharp objects or cut by chokers or lifting equipment. Fused segments of pipe shall be handled so as to avoid damage to the pipe. When lifting fused sections of pipe, chains or cable type chokers are not acceptable. Nylon slings are

preferred. Spreader bars are recommended when lifting long fused sections. Care must be exercised to avoid cutting or gouging the pipe.

- B. HDPE pipe may be installed by standard open trench procedures or trenchless directional boring methods.
- C. Butt Fusion:
 - 1. Polyethylene pipe and fittings shall be connected by means of butt fusion, which is done by utilizing a fusion machine that holds the pipe &/or fitting in a stationary position. A facer that has a cutting blade then trims the ends to be mated. A heater plate is positioned between the ends to be connected. The heater is then removed and the ends are brought together and allowed to cool.

3.3 RESTORATION OF PAVED, IMPROVED AND UNIMPROVED AREAS

- A. The shoulders, ditches, banks and slopes of roads and railroads crossed and paralleled shall be restored to their former condition and properly sodded so that they shall not wash out before becoming consolidated. Restoration shall be as required by the jurisdictional authority and as specified within the Contract Documents. Road and railroad crossings and parallel installations are to be continuously maintained until the completion of the work. No direct compensation shall be paid for Contractor's repair or maintenance of crossings and parallel installations.

3.4 DOCUMENTATION REQUIREMENTS

- A. Boring Path Report: The Contractor shall furnish a Bore Path Report to the owner at the completion of each bore path. The report shall include a cross-sectional scaled drawing of the completed bore(s).
- B. The contractors name and contact information.
- C. Identification of the detection method used.

END OF SECTION

