ADDENDUM NO. 1

WILKINSON COUNTY CORRECTION FACILITY GS#320-080
ARPA INFR. WCCF STORM
WILKINSON COUNTY, MISSISSIPPI

The following changes are hereby made to the Contract Documents for the referenced project.

CONTRACT DOCUMENTS AND SPECIFICATIONS

A. Section 33 01 30.11 Television Inspection of Sewers

Delete Section 33 01 30.11 in its entirety and replace with the attached revised Section 33 01 30.11.

B. Section 33 01 30.41 Cleaning of Sewers

Delete Section 33 01 30.41 in its entirety and replace with the attached revised Section 33 01 30.41.

C. Section 33 01 30.72 Cured-in-Place Pipe Lining

Delete Section 33 01 30.72 in its entirety and replace with the attached revised Section 33 01 30.72.

Also attached to this Addendum are the Attendees signed in sheet for Pre-Bid meeting, Pre-Bid Agenda Instruction to Bidders, and Pre-Bid Meeting Agenda (Civil Items) held on May 26, 2023, which are made a part of this Addendum.

The aforementioned revisions and the work affected hereby are subject to all provisions of the contract documents not specifically revised by the Addendum.

Approved

NEEL-SCHAFFER, INC.

By: _____

The recipient of this Addendum shall indicate receipt thereof by signature on the line below. **A signed copy of this Addendum shall accompany the proposal.**

_____
Signature and Title

_____
Company Name

_____
Date

33 01 30.11 – TELEVISION INSPECTION OF STORM SEWERS

PART 1 – GENERAL

1.01 Description

Includes internal television (TV) inspection of storm sewers.

A. Inspect storm sewer interior using color closed-circuit television (CCTV) camera, identify the location of service connections, defects, and other observations and document inspection on DVD or digital media with audio location and date information, DVD title information, and continuous tape counter. Provide hard copy of inspection logs.

B. Additional TV inspections may be required at other stages of operation, to meet requirements specified in Contract Documents.

1.02 Related Sections

A. Section 33 01 30.72, Cured-in-Pipe Lining.

B. Section 33 01 30.41, Cleaning of Storm Sewers.

1.03 Submittals

A. Inspection Logs: Unless otherwise indicated, submit inspection logs that include the following as a minimum:
   1. Project title
   2. Name of Owner
   3. Time of day
   4. Contract document sheet number
   5. Structure to Structure pipe section
   6. Pipe segment length
   7. Pipe material
   8. Line size
   9. Compass direction of viewing
   10. Direction of camera's travel
   11. Pipe depth
   12. Operator name
   13. Tape counter reading at beginning and end of each structure to structure pipe segment.

B. Media Storage: All digital inspection files (both after cleaning and rehabilitation) shall be submitted to the Owner and Engineer on a readable digital media storage device such as a USB thumb/flash drive or USB external hard drive. Digital content must be in a readable format compatible with Windows 10 (or higher) operating system.

C. Maintain copy of all inspection documentation (digital media files, databases, and logs) for duration of Work and warranty period.

PART 2 – PRODUCTS

2.01 Materials and Equipment

A. Digital Data Storage Device:
   1. Audio portion of composite DVD shall be sufficiently free from electrical interference and background noise to provide complete intelligibility of oral report.
   2. Store in an environmental so as to not corrupt the storage device (and files).
   3. Identify each storage device with labels showing Owner's name, Contractor's name, and each structure-to-structure pipe segment of storm storm sewer line stored on the device (or provide an index or table of contents if multiple segments are on one storage device).

B. Television Inspection Camera(s): Equipped with rotating head, capable of 90-degree rotation from horizontal and 360-degree rotation about its centerline.
   1. Minimum Camera Resolution: 400 vertical lines and 460 horizontal lines.
   2. Camera Lens: Not less than 140 degree viewing angle, with automatic or remote focus and iris controls.
   3. Focal Distance: Adjustable through range of 6 inches to infinity.
   4. Camera(s) shall be intrinsically safe and operative in 100 percent humidity conditions.
   5. Lighting Intensity: Remote-controlled and adjusted to minimize reflective glare.
   6. Lighting and Camera Quality: Provide clear, in-focus picture of entire inside periphery of storm sewer.

C. Footage Counter: Measures distance traveled by camera in storm sewer, accurate to plus or minus 2 feet in 1,000 feet.

D. DVD Titling: Each segment shown on the video should have its own Chapter or Unique ID titled with the beginning and end point of the pipe segment.

E. Database shall be an NASSCO-PACP (Current Version) certified Access database. CCTV Software shall be NASSCO-PACP (Current Version) certified.

PART 3 – EXECUTION

3.01 Storm Sewer Flow Requirements

A. Do not exceed depth of flow shown in Table 1 for respective pipe sizes as measured in structure when performing TV inspection.

B. When depth of flow at upstream structurer of storm sewer line section being worked

is above maximum allowable for TV inspection, reduce flow to level shown in Table 1, by plugging or blocking of flow, or by pumping and bypassing of flow.

Table 1. Maximum Depth of Flow for TV Inspection

Nominal Pipe Diameter	Maximum Depth of Flow
6" - 10"	20 percent of pipe diameter
12" and greater	25 percent of pipe diameter

3.02 Sequence of Work

Work shall be performed in the following sequence:

A. Clean storm sewer lines and inlet or junction boxes in accordance with requirements of **Section 33 01 30.41**, Cleaning of Storm Sewers.

B. Perform TV inspection to comply with requirements of this specification.

C. Install storm sewer pipe lining in accordance with requirements of **Section 33 01 30.72**, Cured-in-Place Lining.

D. Repeat TV inspection in same direction as previous inspection, after completed installation of storm sewer pipe lining in accordance with the requirements of this specification.

3.03 Inspection Requirements

A. Access: Owner and Engineer shall have access to observe monitoring and other operations at all times.

B. DVD Commentary: Record the following information on audio track of inspection media: narrative of location, direction of view, structure numbers, pipe diameter and material, date, time of inspection, and location of laterals and other key features.
   1. Digital media shall visually display this information at beginning and end of each structure-to-structure pipe segment.
   2. Digital media between inlet or junction boxes shall visually display length in feet from starting point of given segment.

C. Storm Sewer Identification: Digital media and inspection documentation shall include storm sewer line and inlet or junction box identifiers shown on Drawings provided by Engineer.

D. Image Perspective: Camera image shall be down center axis of pipe when camera is in motion.
   1. Provide 360-degree sweep of pipe interior at points of interest, to more fully document existing condition of storm sewer.
   2. Points of interest may include, but are not limited to the following: defects,

cracks, voids, connections, encrustations, mineral deposits, debris, sediment, and any location determined not to be clean or part of an improper liner installation, and defects in liner that include, but are not limited to bumps, folds, tears, and dimples.

3. Cabling system employed to transport camera and transmit its signal shall not obstruct camera's view.

E. Storm Sewer Reach Length: Physically measure and record length of each storm sewer reach from centerline of its terminal inlet or junction boxes.

F. Inspection Rate: Camera shall be pulled through storm sewer in either direction, but both inspections are to be in same direction. Maximum rate of travel shall be 30 feet per minute when recording.

3.04 Field Quality Control

A. Engineer will review videos and logs to ensure compliance with requirements listed in this specification, and **Section 33 01 30.41**, Cleaning of Storm Sewers.

B. If storm sewer line, in sole opinion of Engineer, is not adequately clean, it shall be recleaned and CCTV-inspected by Contractor at no additional cost.

C. If the liner, in sole opinion of Engineer, has not been properly installed, it shall be reinstalled and CCTV-inspected by Contractor at no additional cost.

END OF SECTION

33 01 30.41 – CLEANING OF STORM SEWERS

PART 1 – GENERAL

1.01 Description

A. Scope:
   1. CONTRACTOR shall furnish all labor, materials, equipment and incidentals as specified and required to remove sediment, rocks, debris, roots, grease accumulations, and obstructions from storm sewer line segments.
   2. Cleaning of storm sewer and inlet and junction boxes walls in segments to be lined shall remove grease, scale, encrustation, and loose mortar so that no foreign intrusion shall cause imperfections in lining (e.g., bumps, folds, dimples).
   3. Specific project sections shall be cleaned using hydraulically propelled, high velocity jet, or mechanically powered equipment as approved by ENGINEER.
   4. The Work includes, but is not limited to, the following:
      a. By-pass pumping, when necessary (cost absorbed).
      b. Cleaning of storm sewer mains.
      c. Removal and disposal of all debris resulting from pipeline cleaning.

B. ~~Related Work Specified Elsewhere:~~
   1. Section 01 55 26, Traffic Control.
   2. Section 33 01 30.11, Television Inspection of Storm Sewers
   3. Section 33 01 30.72, Cured-in-Place Lining.

1.02 Submittals

Submit letter that identifies methods that will be used to remove sediment, debris, grease, scale, encrustations, loose concrete, and roots throughout section of storm sewer to be cleaned. Include the following:

A. Detailed explanation of cleaning process.

B. Schedule of activities.

C. References where identified cleaning method has been used successfully in the past by Contractor.

D. List of the actions to mitigate impact to OWNER's system during cleaning operation.

PART 2 – PRODUCTS

2.01 Materials

CONTRACTOR shall not use chemicals without written approval of ENGINEER. Do not use chemical which may be considered hazardous or detrimental to organisms or equipment of wastewater treatment plant.

2.02 Equipment

Contractor shall provide all mechanically powered equipment necessary for proper rodding, bucketing, brushing, root cutting and flushing of the storm sewers in the sizes indicated in the Contract Documents.

A. High-Velocity Hydraulic (Hydro-Cleaning) Equipment: shall be capable of removing dirt, grease rocks, sand, roots, and other materials and obstructions from storm sewer lines, and inlets, and junction boxes.
   1. Equipment shall have selection of two or more high-velocity nozzles. Nozzles shall be capable of producing scouring action from 15 to 45 degrees in all size lines designated to be cleaned, with nozzle capable of producing flows from fine spray to solid stream.
   2. Equipment shall carry its own water tank with a minimum usable water capacity of 600 gallons, auxiliary engines, high pressure water pumps, and hydraulically driven hose reel.
   3. Combination Unit Pump: Capable of pumping at least 50 gallons per minute at 100 psi measured at beginning of hose reel. Pressure to the nozzle shall be regulated by a relief valve adjustable from 1 to 2,000 psi minimum.
   4. Water Pump: Able to run at 2,000 psi while pulling full vacuum, completely independent from vacuum system, with ability to vary vacuum without affecting water pressure.

2.03 Water

A. When water from fire hydrant is necessary, CONTRACTOR shall request permission from OWNER to use potable water source. If required by OWNER, all water consumed by CONTRACTOR shall be metered.

B. CONTRACTOR shall provide temporary piping, meter, valves, certified reduced pressure backflow preventors, air gaps, equipment, and other items necessary for handling potable water and wastewater.

C. Do not utilize water source until it has been approved for use by OWNER.

D. CONTRACTOR shall be responsible for all costs associated with procuring and purchasing of water from the local municipally owned waterworks.

PART 3 – EXECUTION

3.01 General

Contractor shall be aware of flow conditions and be able to identify potential access problems to storm sewer access points.

3.02 Application

A. Line Cleaning: Clean designated storm sewer lines using approved methods and equipment.
   1. Remove internal obstructions such as roots or gaskets by trenchless techniques when obstruction encountered prevents further pipe cleaning.
      a. Provide special attention during cleaning operation to assure almost complete removal of roots from joints.
      b. Procedures to remove internal obstructions may include use of equipment such as root saws, porcupines, and jet machines equipped with hydraulically driven cutters.
   2. Hydroflushing of all storm sewer lines shall include a minimum of two passes (each pass consists of running the hydroflush cleaning tool all the way to the next inlets or junction boxes and returning it to the entry inlet or junction boxes). The Contractor shall verify that the hydroflush cleaning tool reaches the next structure on each pass.
   3. If cleaning of entire section cannot be successfully performed from one structure, set up equipment at other structure and attempt cleaning again. The cost of multiple inlet or junction boxes setups shall be borne by the CONTRACTOR.
      a. If, again, successful cleaning cannot be performed or the equipment fails to traverse entire storm sewer line section, it will be assumed that major blockage exists and the cleaning effort shall be abandoned.
      b. Suspend cleaning effort and immediately notify ENGINEER.
   4. Employ satisfactory precautions to protect storm sewer line from damage that might be inflicted by improper use of cleaning equipment.
      a. Immediately notify ENGINEER if fresh soil, pieces of pipe, or other visible signs of potential problems occur during cleaning operation.
      b. Ensure that water pressure created does not cause damage due to flooding of property being served by storm sewer section(s) involved.

B. Inlet/Junction Box Cleaning: Include entire inlet or junction box interior, including inlet or junction box benches and walls. Incorporate into line cleaning operation by scouring walls with high velocity nozzle after pipe segment cleaning operation is complete.

C. Removal of Debris: The contractor shall install a trap in the outlet of the downstream inlet or junction box prior to cleaning each storm sewer line to contain sludge, dirt, sand, rocks, grease, roots, and any other foreign materials in the inlet or junction box. The contractor shall remove all trapped materials from the inlet or junction box prior to removal of the trap. Trapped materials shall be disposed of in accordance with local, state, and federal rules and regulations and shall not be discharged onto streets, or into ditches, catch basins or storm drains.

3.03 Field Quality Control

A. Inspection: Provide television inspection per Specification **Section 33 01 30.11**.

B. Where cleaning is in preparation for storm sewer line rehabilitation, cleaning shall meet requirements of Specification **Section 33 01 30.72**.

3.04 Cleaning

A. Keep premises free from accumulations of waste materials, rubbish and other debris resulting from Work.

B. Remove waste materials, rubbish, and debris from and about premises.

C. Remove tools, construction equipment and machinery, and surplus materials.

D. Restore to original condition portions of site not designated for alterations by Contract Documents.

END OF SECTION

33 01 30.72 – CURED-IN-PLACE LINING (CIPP)

PART 1 – GENERAL

1.01 Scope

In accordance with the requirements of these Technical Provisions, the Contractor shall furnish all labor, materials, accessories, and incidentals necessary for or incidental to the rehabilitation of the existing storm sewer lines by installing cured-in-place pipe (CIPP) as shown on the Contract Drawings.

The work shall include furnishing all materials, storage and protection of materials, testing, cleanup, and all other operations necessary to complete the work in accordance with the detailed specifications contained herein.

1.02 Reference Standards

A. Reference Standards: Comply with the latest edition of the following:
   1. ASTM F1216 – Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
   2. ASTM D638 – Test Methods of Tensile Properties of Plastics
   3. ASTM D790 – Test Methods of Flexural Properties of Un-reinforced and Reinforced Plastics and Electrical Insulating Materials

1.03 Contractor's Equipment

The Contractor shall provide & maintain the principal equipment necessary to prosecute the work in an orderly and safe manner. The equipment shall consist of approved units designed or selected to expedite all the work and incidental items of construction. The placement method for CIPP shall be by an inversion process to tightly fit the resin-impregnated flexible felt tube against the original conduit, & then heating the tube to cure the resin by circulating heated water through the CIPP.

1.04 Submittals

A. Product Data: Provide catalog materials for CIPP products.

B. Manufacturer's Installation Instructions: Indicate special procedures required to install Products specified.

C. Manufacturer's Certificate: Certify that products meet or exceed ASTM designations.

D. CIPP Installer Certification: Documentation that Installer has successfully installed CIPP on a minimum of five different projects over the last five years and provide references for each project for verification by Engineer. In addition, the Installer must have successfully installed at least 100,000 feet of CIPP (24" diameter and

larger) and had a combined minimum total of 1,000 successful internally reinstated, CIPP main line, lateral connections.

1.05 Protection of Property

A. Existing power lines, telephone lines, trees, shrubbery, fences, water mains, gas mains, storm sewers, cables, conduits, ditches, embankments and other structures in the vicinity of the work not authorized to be removed shall be supported and protected from injury by the Contractor during the construction and until completion of work affecting them. The Contractor shall be liable for all damages done to such existing facilities and structures, as herein provided, and shall save the city harmless from any liability or expense for injuries, damages or repairs to such facilities.

B. It shall be the responsibility of the Contractor to verify the existence and location of all underground utilities along the route of the work. The omission of utility locations on the Drawings is not to be considered as the nonexistence of existing underground utilities.

C. Should any utility be damaged during construction operations, the Contractor shall immediately notify the owner of the utility. The Contractor shall not attempt to make repairs. Duplicate copies of any written authorization given to the Contractor to make repairs shall be filed with the Engineer and shall be so worded as to save harmless the City of any responsibility whatsoever relative to the sufficiency of the repairs.

D. Reasonable care shall be taken during construction to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back (where appropriate) to minimize damage. Trees which receive damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with a tree dressing.

E. All work incidental to the construction of sewer lines under railroads and highways shall be done with extreme care to safeguard life and property. After the necessary permits and agreements for these crossings have been approved and executed, the Contractor shall confer with the representatives of the railroad company, the State Highway Department or the county owning these properties and arrange schedules and the manner for constructing the work in accordance therewith. Any necessary submittals required by the permits shall be prepared by the Contractor and submitted through the Engineer.

F. The Contractor shall be responsible for, without extra compensation, the maintenance of all storm sewers & structures to the lines and grades established for the construction, for the stability of all backfills & the finished grades above the storm sewers and around the structures and for the repair & replacement of all items which were damaged or removed during the construction.

1.06 Cured-In-Place Pipe

It is the intent of this specification to provide for the reconstruction of existing storm sewer lines by forming a new pipe within an existing structurally deteriorated pipe which has generally maintained its original shape. The cured-in-place pipe (CIPP) shall provide flow capacity equal to or greater than 100% of the original pipe's flow capacity when new. The process is defined as the reconstruction of storm sewer lines by installation of a thermosetting resin impregnated flexible felt fiber tube, coated on one side with a thermoplastic which is installed into the existing sewer line utilizing a water column. Curing is accomplished by circulating hot water throughout the length of the inverted tube to cure the thermosetting resin into a hard, impermeable pipe with the thermoplastic coating on the inside of the new pipe. The pipe shall extend the full length of the original pipe and provide a structurally sound, jointless, close-fitting, and corrosion resistant cured-in-place pipe.

1.07 Quality Control

Test methods of other approved equal processes shall be reviewed for approval by the Engineer. ASTM F1216 shall govern installation methods and materials.

1.08 Warranties

A. Contractor's Warranty: Contractor shall provide a warranty to be in force and effect for a period of one year from the date of written final acceptance. The warranty shall require the repair or replacement of the liner due to failure resulting from faulty materials or installation as deemed necessary by the City. All required work incidental or required as part of the repair or replacement shall be provided by the Contractor at no additional cost to the City.

B. Manufacturer's Warranty: Provide manufacturer's extended guarantee or warranty, with Owner named as beneficiary, in writing, as special guarantee. Special guarantee shall provide for correction, or at the option of the Owner, removal and replacement of Work specified in this Specification section found defective during a period of five years after the date of Substantial Completion. Duties and obligations for correction or removal and replacement of defective Work shall be as specified in the General Conditions.

PART 2 – PRODUCTS

2.01 Materials

A. The CIPP shall be fabricated from materials which when cured will be chemically resistant to withstand internal exposure to domestic sewage.

B. Resin:
   1. The resin used shall be high-grade corrosion resistant polyester, vinyl ester or epoxy resin specifically designed for the cured-in-place pipe (CIPP) being installed. Only premium, non-recycled resin shall be used.
   2. The resin vendor must be able to confirm that the grade of resin used has been extensively tested for corrosion resistance and has met the minimum

requirements of ASTM F1216, latest revision.

C. Tube:

1. The CIPP liner shall be a polyester, vinyl ester or epoxy resin vacuum impregnated flexible woven or non-woven tube. The tube shall be inverted into position by means of hydrostatic head. The tube, once installed, shall be cured to form a hard impermeable pipe, by circulating hot water through the entire length of the tube. When cured, the liner shall extend over the designated length of the existing storm sewer in a continuous, tight fitting and watertight pipe-within-a-pipe.
2. The flexible felt fiber tube shall be fabricated to a size that when installed will neatly fit the internal circumference of the conduit specified by the Owner. An allowance shall be made for some circumferential stretching during inversion.
3. The minimum length shall be that deemed necessary by the Contractor to effectively span the distance from the inlet to the outlet of the respective inlet or junction boxes unless otherwise specified. The Contractor shall verify the lengths in the field before impregnation of the tube with resin. Individual inversion runs can be made over one or more inlet or junction boxes sections as determined in the field by the Contractor and approved by the Engineer.
4. The outside of the tube, before installation, shall have an impermeable thermoplastic coating. This coating will form the inner layer of the finished pipe and is required for enhancement of corrosion flow, and abrasion properties.
5. The layers which constitute the pipe wall must be such that when the thermosetting resin cures, the total wall thickness must be homogeneous with no internal layer of plastic which might weaken the pipe wall and allow internal shear. When cured, the CIPP must form a mechanical bond with the conduit.
6. Unless otherwise specified, the Contractor shall furnish a general purpose, unsaturated, polyester resin and catalyst system compatible with the inversion process that provides cured physical strength specified herein.
7. The materials used shall result in an installed CIPP flow capacity which will be equal to or greater than 100% of the original pipe's flow capacity when new.
8. The existing storm sewers, where designated or required, shall be lined using material and workmanship which can be adapted to the restrictions of the work site. The Contractor shall not begin this phase of the work until there is sufficient material on hand to complete the job.
9. Prior to use of the lining material The Contractor shall furnish the Engineer, satisfactory certification from an approved testing laboratory as to the results of testing the proposed lining material to ensure that it meets the requirements of the referenced standards.

2.02 Liner Design Criteria

The Cured-In-Place Pipe thickness shall be calculated and designed upon the following physical conditions of the existing host pipe and per ASTM F1216, Appendix X.1:

A. All pipes shall be considered fully deteriorated.

B. All pipes shall be subjected to a soil load of 120 lbs./cu. ft., with applicable live load, and water table two (2) feet below the top of the ground.

C. Pipes in good condition shall have a minimum of 2% ovality in the circumference. A higher value of ovality shall be used if the pipe is deteriorated.

D. Factor of safety (N) of 2.0 shall be used for calculations.

Conditions A and/or B above may change after the initial TV inspection, if approved by the Engineer. The Engineer shall have the right to modify/change the required liner thickness, depending upon field conditions evident from the CCTV video and/or tested product values.

2.03 Cured-In-Place Pipe

A. Physical Strength:

1. The CIPP shall conform to the minimum structural standards as listed below:

Flexural Strength (Mod. ASTM D-790)	4,500 psi
Flexural Modulus of Elasticity (Mod. ASTM D-790)	250,000 psi

2. Values shown are for neat polyester resins commonly used in the United States. Values for filled polyester, non-polyester, vinyl ester, and epoxy resins may be substituted when applicable.

B. The Contractor shall submit his price proposal for the appropriate length, size and thickness designated in the proposal section.

PART 3 – EXECUTION

3.01 Access to Inlet or Junction Boxes and Access Points

It shall be the responsibility of the Owner or Engineer to locate and designate all inlet or junction boxes access points open and accessible for the work and provide rights of access to these points. If a street must be closed to traffic due to the orientation of the storm sewer, the Contractor shall institute the actions necessary to do this for the mutually agreed time period. The Owner shall also provide free access to water hydrants for cleaning, inversion and other work items requiring water.

3.02 Cleaning and Pre-CCTV Inspection

A. Pre-Inversion Cleaning: It shall be the responsibility of the Contractor to remove all loose debris, roots and other materials that would block proper inversion of the

cured-in-place pipe in accordance with Specification **Section 33 01 30.41**.

B. Pre-Inversion CCTV Inspection: Inspection of storm sewer pipe shall be performed by experienced personnel trained in locating breaks, obstacles, and service connections by closed circuit television inspection. The interior of the pipe shall be carefully inspected to determine the location of any conditions which may prevent proper installation of the CIPP, and it shall be noted so that these conditions can be corrected. An external hard drive or other electronic storage medium containing the inspection video and a suitable log shall be provided for later reference by the Owner and/or Contractor. CCTV inspection shall be in accordance with Specification **Section 33 01 30.11**.

C. All active laterals shall be identified and measured. A 360° Pan-and-Tilt view camera shall be used to inspect the pipe traveling upstream. At each connection the operator shall stop and turn the camera lens toward the lateral, thereby inspecting the first 8 to 12 inches of the connection. If there is still a doubt as to whether or not the connection is still live, additional "dye and flush" tests shall be performed. All live laterals shall be reinstated.

3.03 Bypass Pumping

The Contractor shall bypass the runoff around the sections of pipe designated to be lined. The bypass shall be made by plugging the line at an existing upstream inlet or junction boxes and pumping the flow into a downstream inlet or junction boxes or adjacent system. The Contractor will be required to provide adequate pumping equipment and temporary bypass lines in order to maintain continuous runoff flow at peak flow conditions. Under no circumstances shall flow be interrupted or stopped. The location of the pump(s), bypass lines, discharge point, etc. shall be approved by the Owner's Authorized Representative.

3.04 CIPP Installation Procedures

A. Line Obstructions: If inspection reveals an obstruction that cannot be removed by conventional storm sewer cleaning equipment, such as heavy solids, dropped joints, protruding service connection or a collapse that will prevent the inversion process, then a point repair excavation shall be made by the Contractor to uncover and remove or repair the obstruction. Point repairs shall be in accordance with Specification **Section 33 46 01**.

B. Wet Out: The Contractor shall designate a location where the tube will be impregnated or "wet-out" with resin, using distribution rollers and a vacuum to thoroughly saturate the tube's felt fiber prior to installation. The impregnated tube shall be free of pinholes, resin voids and other defects. If the cured-in-place pipe is impregnated at the manufacturing plant, it shall be delivered to the jobsite in a refrigerated truck and remain refrigerated prior to installation to prevent premature curing. The Engineer at his discretion shall have the right to inspect the designated wet-out facility and randomly draw samples of the resin used to wet-out the CIPP used under this contract.

C. Inversion: The impregnated tube shall be inverted through an existing inlet or junction boxes or other approved access by means of an inversion process and the application of a water column sufficient to fully extend it to the next designated inlet or junction boxes or termination point. The tube end shall initially be turned inside out and attached to a platform ring or standpipe. The inversion water column will be adjusted to be of sufficient height to cause the impregnated tube to invert from structure-to-structure and hold the tube tight against the existing pipe wall, produce dimples at laterals, and flared ends at the inlet or junction boxes.

D. Thermocouples shall be placed at the top, and if possible, the bottom interface of both ends of the liner and, if possible, at all intermediate inlet or junction boxes for monitoring the temperatures during the cure cycle.

E. Curing: After the inversion is completed, the Contractor shall supply a suitable heat source and water recirculation system capable of delivering hot water uniformly throughout the section to effect a consistent cure of the resin. The curing temperature shall be that recommended by the resin/catalyst system manufacturer. The heat source shall be fitted with suitable monitors to gauge the temperature of the incoming and outgoing water supply. This temperature reading shall be compared to the thermocouples to ensure that sufficient heat is being applied to the system. Initial cure shall be considered completed when the exposed portions of the CIPP appear to be hard and the remote temperature sensing device indicates the cure period to be of adequate duration as recommended by the resin/catalyst system manufacturer and modified for the inversion process.

F. Cool-Down: The Contractor shall cool the hardened CIPP to a temperature below 100 degrees Fahrenheit before relieving the water column. Cool water may be added to the water column while draining from a small hole at the opposite end of the CIPP so that a constant water column height is maintained until cool-down is completed. Care shall be taken in the release of the water column so that a vacuum will not be developed that could damage the newly installed CIPP.

G. Sealing at Inlet or Junction Box: If the CIPP fails to make a tight seal at a inlet or junction box, the Contractor shall apply a seal at that point. The seal shall be of a material compatible with the CIPP material.

H. Termination of the cured-in-place-pipe at the inlet or junction box is completed by trimming the inverted pipe end back within approximately 2 inches of the outlet connection.

3.05 Testing

A. The watertightness of the CIPP shall be gauged by monitoring the water level in the inversion tube during the processing and cool down cycles prior to reinstatement of laterals. The water testing must be done directly on the finished product and not on an intermediary hose which is not part of the final product.

B. For each installation the Contractor shall submit testing results on a sample of

cured liner. The sample shall be taken at termination point opposite the liner entry point. The testing shall be accomplished by an independent third-party laboratory approved by the Engineer.

3.06 Internal Reinstatement of Laterals

Lateral connections shall be reinstated robotically whereby a camera and robotic cutter are put into the newly rehabilitated line. Each lateral is identified by a dimple in the cured-in-place pipe or through pre-installation measurements. Initially, each lateral shall be received by cutting a 2 to 3 inch hole to insure that no services will be interrupted and there will be minimal risk of backed up lines. Once this is accomplished, each PVC fitting lateral shall be opened to a minimum of 90 percent, all other material laterals shall be opened to a minimum of 95 percent.

3.07 Clean-Up

Upon acceptance of the installation work and testing, the Contractor shall reinstate the project area affected by his operations.

3.08 Final Inspection

Upon completion of installation, storm sewers shall be CCTV inspected, providing both a video recording and log which identifies all service connections and openings. The entire pipe sections rehabilitated shall be recorded and placed on external hard drive or other electronic storage medium for presentation to Engineer for recordkeeping.

3.09 Field Quality Control

Engineer will review CCTV video and logs to ensure compliance with requirements listed in this specification. If the CIPP liner, in sole opinion of Engineer, has not been properly installed, the CIPP liner shall be reinstalled and CCTV-inspected by Contractor at no additional cost.

The finished CIPP coating shall be continuous over the entire length of an inversion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes and delamination. During the warranty period any defects which will affect the integrity or strength of the CIPP shall be repaired at the Contractor's expense in a manner mutually agreed to by the Owner and the Contractor.

END OF SECTION

ATTACHMENT A

PRE-BID MEETING

WILKINSON COUNTY CORRECTION FACILITY GS# 320-080
ARPA INFR. WCCF STORM
WILKINSON COUNTY, MISSISSIPPI

MAY 26, 2023, 10:00 A.M.

ATTENDEES

	Name	Company	Telephone #	Email Address
1.	Heith Newman	BoB	601-622-7245	heith.newman@dfa.ms.gov
2.	Danny Ryals	MS	601-898-8118	danny.ryals@mdot.ms.gov
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				

Note: Parking is limited, bidders will be required to pass through security, the official time clock is behind reception's desk of the Woolfolk Bldg on the 14th floor, and no bids will be accepted after 2:00:00 pm.

GS# 320-080

Project Name: ARPA Infr. – WCCF Storm

Bid Date: Tuesday, June 6, 2023

PRE-BID AGENDA
INSTRUCTIONS TO BIDDERS

SECTION 00100

PART 1 - GENERAL

1.01 **QUESTIONS:** Questions should be directed to the Professional. Should a Bidder find discrepancies in or omissions from, the Drawings or Project Manual, or be in doubt as to their meaning, the Bidder should immediately notify the Professional. The Professional will send written instruction(s) or interpretation(s) to all known holders of the documents. Neither the Owner, nor the Professional, will be responsible for any oral instruction or interpretation.

1.03 **NON-RESIDENT BIDDER:** When a non-resident Bidder (a Contractor whose principal place of business is outside the State of Mississippi) submits a bid for a Mississippi public works project, one of the following is required and shall be submitted with the Proposal Form:

A. Copy of Law: If the non-resident Bidder's state has a resident Bidder preference law, a copy of that law shall be submitted with the Proposal Form.
B. Statement: If the state has no such law then a statement indicating *the State of (Name of State) has non-resident Contractor preference law* shall be submitted with the Proposal Form.

1.08 **OBLIGATION OF BIDDER:** At tile bid opening, each Bidder will be presumed to have inspected the site, read and become thoroughly familiar with the Drawings and the Project Manual, including all addenda.

PART 2- PROPOSAL FORM

2.02 **PROPOSAL FORMS:** The Bidder shall make all proposals on forms provided and shall fill all applicable blank spaces without interlineations or alteration and must not contain recapitulation of the work to be done. No oral or telegraphic proposals will be considered.

- *Make sure your name at Secretary of State and Contractor's Board match.*

2.06 **ADDENDA:** Any addenda to the Drawings or Project Manual issued before or during the time of bidding shall be included in the proposal and become a part of the Contract. The Proposal Form will have ample space to indicate the receipt of addenda. When completing the Proposal Form, the Bidder shall list the Addendum number and the date received in spaces provided.

- *Note that all addenda's will be issued NO LATER THAN (48) forty-eight hrs before bid time.*
- *Ask Professional if any addenda's are planned.*

PART 4 - BID OPENING AND AWARD OF CONTRACT

4.03 **PROTEST:** Any protest must be delivered in writing to the Owner within twenty-four (24) hours after the bid opening.

- *Do not send any protest or errors to the project professional, both must be sent to Owner.*

4.04 **ERRORS:** Any claim of error and request for release from bid must be delivered in writing to the Owner within twenty-four (24) hours after the bid opening. The Bidder shall provide sufficient documentation with the written request clearly proving an error was made.

PART 5 - BIDDER'S CHECKLIST

The following checklist is for the Bidder's assistance only. It is not inclusive and **is not a part of the bid documents**; therefore, this checklist should not be included with the Proposal Form when submitting a bid proposal.

5.01 **PROPOSAL FORM**: (only one original proposal form to be submitted) (also see 3.01 and 600.42 of Manual)

Base Bid

( ) Write in the amount of the base bid in words and numbers. The written word shall govern.

Alternates

( ) Write in each alternates amount in words and numbers. The written word shall govern.

Addenda

( ) Acknowledge the receipt of each addendum by writing in the number of the addendum and the date received.

Acceptance

( ) Proposal is signed by authorized person

( ) Name of Business - complete spelling of bidder's name and address - exact as recorded at the Secretary of State [http://www.sos.state.ms.us/busserv/corp/soskb/csearch.asp] which should be the same as you applied for at the Mississippi State Board of Contractors [http://www.msboc.us/Search2.CFM] (see 2.07, 3.01, 5.01, proposal form)

( ) Legal address of the business listed above (at SOS and Contractor's Board)

( ) Correct Certificate of Responsibility Number(s) as it appears in the current Mississippi State Board of Contractors Roster

Certificate of Responsibility Number(s) on envelope (see below for on proposal form)

( ) Base Bid is under $50,000 and no number is required

( ) Base Bid is under $50,000 and the statement "bid does not exceed $50,000" is on the outside of the sealed envelope

( ) Base Bid is over $50,000 and number is required

( ) Joint Venture and *joint venture* number is required

OR ( ) Joint Venture participants' numbers are required

5.02 **BID SECURITY:**

( ) Included Bid Bond

OR ( ) Included Certified Check

5.03 **POWER OF ATTORNEY:**

( ) Included Power of Attorney

5.04 **NON-RESIDENT BIDDER:**

( ) Attached a Copy of Non-Resident Bidder's Preference Law

OR ( ) Attached a Statement

5.05 **SUB-CONTRACTORS NAME** **Refer to 1.04 for responsiveness**

( ) List your Mechanical and Electrical Contractors regardless of cost

* List name even for under $50,000
* Fire Protection Sprinkler Contractors do not have to be listed
* If there is a separate HVAC/Plumbing Contractor, so notate as mentioned herein
* If Mechanical, Plumbing, and/or Electrical Contractor is performed by the General, be sure the General has a COR for said discipline and list General's name on the line and COR number mentioned herein

OR * If there is no Mechanical, Plumbing, and/or Electrical Contractor, so notate "none" on the line

5.06 **SUB-CONTRACTORS' COR NUMBER** **Refer to 1.04 for responsiveness**

( ) * List Certificate of Responsibility Number for over $50,000.00 (also allowed, but not required, for under $50,000)

* If under $50,000 – so notate on the COR line "under $50,000" (or can still show COR#)

OR * If there is no Mechanical, Plumbing, and/or Electrical in Divisions 15 or 16, so notate "none" on the name line and the COR# line as mentioned herein

Senate Bill 3062, Laws of 2022
DFA – Bureau of Building, Grounds and Real Property Management
Miscellaneous Requirements – ARPA (PRE-BID)

1. **Suspension/Debarment:** Prior to any award, the Owner will verify that the potential vendor is not suspended or debarred according to SAM.gov (https://sam.gov/search)
2. **Affirmative Steps:** All necessary steps must be taken to assure that minority business enterprises, women's business enterprises, and labor surplus area firms are used when possible. The invitation to bid has been posted on the State Procurement Portal, advertised in the newspaper and e-mailed to list of MBE/WBE entities provided by MDA. The following are the affirmative steps identified by the Federal Government:
    a. Including qualified women's business enterprises and small and minority businesses on solicitation lists;
    b. Assuring that women's enterprises and small and minority businesses are solicited whenever they are potential sources;
    c. When economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum participation by small and minority business, and women's business enterprises;
    d. When the requirement permits, establishing delivery schedules which will encourage participation by women's businesses enterprises and small and minority business;
    e. Using the services and assistance of the Small Business Administration, and the U.S. Office of Minority Business Development Agency of the Department of Commerce; and
    f. If any subcontracts are to be let, requiring the prime Contractor to take the affirmative steps in a through e above.
3. **Domestic Preference:** This is not the Buy American Act. ARPA construction contracts include Section 00 7300 ARPA Supplementary Conditions referencing 2 CFR Section 200.322 which addresses the use of domestic products as appropriate and to the extent consistent with law, to the greatest extent practicable, and binds the Contractor to these requirements. Section 01 6000 Substitutions and Product Options includes language addressing procedures regarding use of non-domestic products.
4. **Recovered Materials:** ARPA construction contracts include Section 00 7300 ARPA Supplementary Conditions referencing 2 CFR Section 200.323 which addresses compliance with the Solid Waste Disposal Act that requires use of products containing the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, and binds the Contractor to these requirements. Section 01 6000 Substitutions and Product Options includes language addressing procedures regarding use of products with less recovered content.
5. **UEI:** All entities that will receive ARPA funds must have a current Unique Entity Identifier (UEI). This is not required at time of receipt of bids but will be necessary prior to making bid award, so bidders are encouraged to obtain a UEI number at SAM.gov if they do not already have one.

ATTACHMENT B

WILKINSON COUNTY CORRECTION FACILITY GS #320-080
ARPA INFR. WCCF STORM
WILKINSON COUNTY, MISSISSIPPI

PRE-BID MEETING AGENDA (CIVIL ITEMS)
MARCH 26, 2023

1. Welcome and Introduction

2. Advertisement for Bids

   a Date, time, and place of bid opening (06/06/23 at 2:00 p.m., Bureau of Building Suite 1401 B 501 North West Street Jackson, Mississippi)
   b Contract Time (150 calendar days)
   c Liquidated Damages ($250 per day)
   d Contact Information (Danny Ryals, phone number 601-898-8118, email danny.ryals@neel-schaffer.com

3. Commencement and Time of Completion – Commencement and time of completion will be noted in the Notice to Proceed.

4. Pre-Construction Conference – The date of the first Pre-Construction Conference will be noted in the Notice to Proceed.

5. Construction Items:

   a. The Contractor will be responsible for preparing a SWPPP.
   b. Work shall be performed in phases as noted on Drawing No. C02.0.
   c. Contractors shall work only in two phases at a time.
   d. The Contractor should notify the Correction Facility on-site representative and the Engineer's inspector 7 days in advance before starting a new phase of construction.
   e. Only one breach point in the perimeter security fence can work be performed. An armed guard will be provided by the Correction Facility when working at a breach point. The security fence cannot be cut or taken down. Installation of pipe at the security fence shall be done by trenching under the fence and sliding the pipe under the fence.
   f. All equipment, materials, debris, along with workers will be removed from within the security fence at the end of each day.
   g. It will be the responsibility of the Contractor to locate utilities within the work zone and be responsible for all damage that might occur to these utilities.
   h. Areas of erosion where flowable fill is used will be noted and marked during the onsite visit today.
   i. The Contractor shall submit shop drawings of all storm drainage inlets, junction boxes, headwalls, flared end section, etc. to the Engineer for approval before ordering material.
   j. All grates shall be traffic rated and lockable as noted on the plans. Contractor to submit shop drawings to Engineer and Correction Facility for approval before ordering material.
   k. All areas to be grassed shall be hydro seeded.
   l. All pipes are to be ADS HP Storm Pipe or approved equal.
   m. All inlets are to be ADS NYLOPLAST or approved equal unless otherwise noted on the plans.

n. Downspouts will be connected to the storm drainage system by watertight downspout adaptors/boots.
o. Limits of repair of eroded areas and the areas to be graded as noted on the grading and grassing plan shall be laid out in the field by the Engineer's inspector.
p. Grading near the security fence will be flush with the top of concrete security fence pad. Any erosion areas under the security concrete fence pad shall be filled with flowable fill. These areas will be noted during today's site visit as note in item h above.
q. The security perimeter road can be cut to allow the installation of the storm drainage pipe, but the road will have to be open for traffic at the end of each day. The Contractor shall notify the Correction Facility on-site representative and Engineer's inspector 7 days before cutting the roadway.
r. Stockpile areas and temporary office (if one is to be used) location shall be designated by the Correction Facility on-site representative.
s. No metal pin or clips can be used to anchor wattles, but wooden stakes are acceptable.
t. 1" stainless steel bars shall be required at the downstream end of each storm drainage pipe system embedded in the headwall of the flared end section as shown on the details.
u. No open trench can be left open at the end of each workday. A temporary connection between the old pipe and the new pipe shall be made at the end of each workday to allow drainage from the site.
v. Temporary Sanitary Facilities
w. Construction Debris Disposal
x. Work Hours
y. MBE/WBE Requirements

6. Questions and Answers

7. Discuss Site Visit

8. Adjourn