NORTH WALTERBORO SEWER IMPROVEMENTS
PHASE I GRAVITY

PREPARED FOR:

COLLETON COUNTY, SOUTH CAROLINA

T&H PROJECT NO.
J-29851.0000

ADDENDUM NO. 003 **3/10/2025**

This Addendum forms a part of the Contract Documents and hereby modifies them as follows:

- Bypassed pumping for installation of gravity sewer along Bells Hwy at I-95 intersection that required the removal of the existing gravity sewer is estimated to be a flow of 20,000 gallons per day.
- Section 02310 - Jack Bore added to technical specifications.

Ross Oakley, P.E.
Project Manager

End of ADDENDUM NO. 003

INDEX TO

SECTION 02310 – JACK AND BORE

SECTION 02310

JACK AND BORE

PART 1 – GENERAL

1.1 SECTION DESCRIPTION

A. 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 boring and jacking installations, or other trenchless methods for pipelines, as shown on the Drawings and as specified herein.

B. The provision of this section shall be the minimum standards for the installation of casing pipe by the boring and jacking method. Other types of trenchless methods may be acceptable and encouraged if the specific method is at least equal to the performance of typical jack and bores and is comparable in cost.

C. Payment for Jack & Bore will be made under the lump sum price for miscellaneous piping and fittings. Payment will include excavation, dewatering, backfilling, compaction, testing, and all equipment, labor and materials necessary to complete the work.

1.2 MEASUREMENT AND PAYMENT

A. Measurement and payment for Jack and Bore shall be made at the per linear foot unit cost as indicated on the bid form. Payment will include excavation, dewatering, backfilling, compaction, testing, and all equipment, labor and materials necessary for a complete installation. No compensation will be made for failed bore paths, products taken out of service, or incomplete installations.

PART 2 – PRODUCTS

2.1 CASING PIPE MATERIALS AND INSTALLATION

A. Casing shall be steel pipe conforming to the requirements of ASTM Designation A–139. The minimum casing pipe size and wall thickness shall be as shown herein. For sizes not included, or for special design considerations, approval shall be obtained from the Engineer of Record.

B. Casing ends shall be sealed with brick and mortar as detailed on the construction plans.

C. For crossing of state roads, casing materials and installation shall conform to SCDOT Standards, latest edition, or as minimum shall comply with the following table:

Minimum Steel Pipe Casing Dimensions
for
D.I.P

Carrier Pipe	Steel Casing Pipe Size		Highway & DOT Bores < 200 L.F.		Highway & DOT Bores > 200 L.F.		Railroad Bores		
I.D. (Nom.)	Pressure System	Gravity System	Minimum Wall Thickness (in)	Weight Class	Minimum Wall Thickness (in)	Weight Class	Minimum Wall Thickness (in)		Weight Class
							Pressure	Gravity	
4	12	16	0.375	STD	0.500	XS	0.500	0.500	XS
6	16	20	0.375	STD	0.500	XS	0.500	0.500	XS
8	18	24	0.375	STD	0.500	XS	0.500	0.500	XS
10	20	24	0.375	STD	0.500	XS	0.500	0.500	XS
12	24	30	0.375	STD	0.500	XS	0.500	0.500	XS
16	30	36	0.375	STD	0.500	XS	0.500	0.532	XS
18	36	36	0.375	STD	0.500	XS	0.532	0.688	XS
24	38	48	0.375	STD	0.500	XS	0.532	0.688	XS
30	48	54	0.375	STD	0.500	XS	0.688	0.781	XS
36	54	60	0.375	STD	0.500	XS	0.781	0.844	XS

2.2 CARRIER PIPES

OMITTED

2.3 CASING INSULATORS

OMITTED

PART 3 – EXECUTION

3.1 INSTALLATION

A. Casing pipes crossing under railroads shall be located at suitable approved alignments in order to eliminate possible conflict with existing or future utilities and structures, with a minimum 5.5–feet depth of cover between the top of the casing pipe and the base of rail. For casing pipe crossings under roadways/railroads, the Contractor shall comply with the regulations of said authority in regard to design, specifications, and construction. Casing installations shall be as specified for railroads by the American Railway Engineering Association.

B. The boring and jacking operations shall be done simultaneously, with continuous installation, until the casing pipe is in final position. Correct line and grade shall be carefully maintained. Add–on sections of casing pipe shall be full–ring welded to the preceding length, developing watertight total pipe strength joints. The casing installation shall produce no upheaval, settlement, cracking, movement, or distortion of the existing roadbed or other facilities. Following placement of the carrier pipe within the steel casing, end link seals are to be installed at each open end. Said end link seals shall be suitable for restraining the external earth load, while allowing internal drainage.

C. Casing pipe holes shall be mechanically bored through the soil by a cutting head on a continuous auger mounted inside the pipe. The distance between the leading end of the first auger section and the leading end of the casing shall be as necessary to maintain a solid plug of spoil material inside the forward portion of the casing.

D. The casing pipe shall be adequately protected to prevent crushing or other damage under jacking pressures. Backstops shall be provided for adequately distributing the jack thrust without causing deformation of the soil or other damage. Should the casing pipe be damaged, such damaged portion not in the hole shall be replaced; however, if installed, the encasement pipe shall be abandoned in place, grouted full, and suitably plugged, and an alternate installation made. An alternate installation will also be required if the casing alignment or elevation substantially deviates from the plan locations, and results in the installation being unusable, as determined by the Project Engineer.

E. Required boring and jacking pits or shafts shall be excavated and maintained to the minimum dimensions necessary to perform the operation. Said excavations shall be adequately barricaded, sheeted, braced and dewatered as required, in accordance with the applicable portions of Section 2204 – Earthwork, and the above–stated regulations/specifications. Boring and jacking pits will normally be no closer than five (5) feet from the edge of pavement, with the permitting agency having final determination of the required setback distance.

END OF SECTION