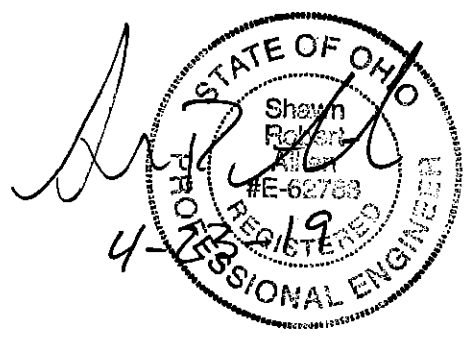


Midwest Materials Sanitary Sewer Improvements
Perry Joint Economic Development District
April 2019



170415

PERRY JOINT ECONOMIC DEVELOPMENT DISTRICT

BOARD OFFICIALS

Robert J. Dawson, Chairman

George Malec, Fiscal Officer

Mike Cutler

Wally Siegel

Jim Gessic

Tim Flenner

ADVERTISEMENT FOR BIDS/PUBLIC NOTICE TO BIDDERS

Sealed bids will be received at the Perry Township Office, 3740 Center Road, Perry, Ohio 44081 until 10:00 a.m. on May 17, 2019 and will be opened and read immediately thereafter for the

**MIDWEST MATERIALS SANITARY SEWER IMPROVEMENTS
OPINION OF PROBABLE CONSTRUCTION COST: \$615,000.00
COMPLETION DATE: NOVEMBER 1, 2019**

Bids must be in accordance with specifications and on forms available from CT Consultants, Inc., 8150 Sterling Court, Mentor, Ohio 44060 at a non-refundable cost of One Hundred Dollars (\$100.00) picked up or One Hundred Twenty-Five Dollars (\$125.00) mailed.

The bid specifications, drawings, plan holders list, addenda, and other bid information may be obtained via the internet at www.ctconsultants.com/bidinfo/index.html . The bidder shall be responsible to check for Addenda and obtain same from the web site.

Publish: *The News Herald*
April 26, 2019
May 3, 2019

TABLE OF CONTENTS

	<u>Page No.</u>
Title Page	i
Officials Page	ii
Advertisement for Bids/Public Notice to Bidders	iii
Table of Contents	iv - vi
SECTION 1 <u>BID DOCUMENTS AND BID FORMS</u>	
Instructions to Bidders	BD.1 - BD.7
Prices to Include	BD.8 - BD.16
<u>**ALL BID FORMS SHALL BE COMPLETED AND SUBMITTED WITH BID**</u>	
Form of Non-Collusion Affidavit	BF.1
Corporate Resolution	BF.2
Proposed Subcontractors	BF.3
Experience Record	BF.4
Insurance Agent Affidavit	BF.5
Supplemental Bond Acknowledgement	BF.6
Bid Security	BF.7
Proposal Forms	BF.8 - BF.11
SECTION 2 <u>CONTRACT FORMS</u>	
Notice of Award	CF.1
Contract and Certificates of Fiscal Officer & Legal Counsel	CF.2 - CF.3
Contract Bond, Certificates of Insurance & Worker's Comp.	CF.4
Delinquent Personal Property Statement	CF.5
Lobbying Affidavit	CF.6
Escrow Agreement for Contractor's Retainage	CF.7
Escrow Waiver	CF.8
Notice to Proceed	CF.9
Findings for Recovery & Notifications	N.1
SECTION 3 <u>GENERAL CONDITIONS, EJCDC No. C-700 (2007)</u>	1 – 68
SECTION 4 <u>SUPPLEMENTARY CONDITIONS</u>	SC.1 - SC.8

SECTION 5 SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

011100	SUMMARY OF WORK
011419	USE OF SITE
011423	ADDITIONAL WORK, OVERTIME
012100	ALLOWANCES
012300	ALTERNATES
013119	PROJECT MEETINGS
013216	CONSTRUCTION PROGRESS SCHEDULE
013223	SURVEY AND LAYOUT DATA
013233	PHOTOGRAPHIC DOCUMENTATION
013236	VIDEO MONITORING AND DOCUMENTATION
013319	FIELD TEST REPORTING
013323	SHOP DRAWINGS, PRODUCT DATA AND SAMPLES
013326	PRODUCT TESTING AND CERTIFYING
013543	ENVIRONMENTAL PROTECTION
014126	GENERAL REGULATIONS AND PERMITS
014223	INDUSTRY STANDARDS
014323	QUALIFICATIONS OF TRADESMEN
015526	TEMPORARY TRAFFIC CONTROL DEVICES
016600	PRODUCT HANDLING AND PROTECTION
017800	FINAL COMPLIANCE AND SUBMITTALS
017821	CLEANING AND PROTECTION
017823	MAINTENANCE MANUALS
017839	PROJECT RECORDS, DRAWINGS
018000	SYSTEM PERFORMANCES

DIVISION 2 – SITE WORK

024116	STRUCTURE DEMOLITION
--------	----------------------

DIVISION 27 - COMMUNICATIONS

271620	TRACER WIRE
--------	-------------

DIVISION 31 - EARTHWORK

310000	EARTHWORK
311201	SITE CLEARING

DIVISION 32 – EXTERIOR IMPROVEMENTS

329219 SEEDING

DIVISION 33 - UTILITIES

330507.14 HORIZONTAL DIRECTIONAL DRILLING

330507.37 PILOT TUBE MICRO-TUNNELING

330533.24 HDPE PIPE AND FITTINGS

333217 PROGRESSIVE CAVITY GRINDER PUMP STATION

	<u>Page No.</u>
SECTION 6 <u>STANDARD SPECIFICATIONS</u>	SS.1
SECTION 7 <u>SPECIFIC PROJECT REQUIREMENTS</u>	SR.3
SECTION 8 <u>PREVAILING WAGE RATES</u> State Prevailing Wage Rate Determination Schedule	PW.1 – PW.10
SECTION 9 <u>APPENDIX</u>	
A – Record Drawings	
B – Norfolk – Southern Occupancy Agreement	
C – Lake County Soil Survey Information	
D – Midwest Materials Gas & Oil Wells	
E – Ohio EPA Permit to Install (PTI)	
F - Gosel Sanitary Sewer Easement	

SECTION I
BID DOCUMENTS

INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

- 1.1 Sealed bids shall be received by the Owner at the location specified and until the time and date specified in the Advertisement for Bids/Public Notice to Bidders.
- 1.2 Each bid shall contain the full name and address of each person or company interested in said bid. If no other person be so interested, the Bidder shall distinctly so state the fact.
- 1.3 Bid forms must be completed in ink or by typewriter. Any corrections to the bid forms prior to submission must be initialed by the person signing the bid. Failure to submit any bid form(s) or other required document(s) may be cause for rejection of the bidder's bid at the sole discretion of the Owner.
- 1.4 Bids by Corporations must be executed in the corporate name by the President, Vice President, or other officer accompanied by evidence of authority to sign and the corporate seal must be affixed and attested by the Secretary on the Corporate Resolution form.
- 1.5 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature.
- 1.6 All names must be typed or printed below the signature.
- 1.7 The bid shall contain an acknowledgment of receipt of all Addenda.
- 1.8 If a Bidder wishes to withdraw their bid prior to the opening of bids, they shall state their purpose in writing to the Owner before the time fixed for the opening, and when reached it shall be handed to them unread.
- 1.9 After the opening of bids, no Bidder may withdraw their bid for a period of 60 days.

PART 2 EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- 2.1 Before submitting a bid, each Bidder must
 - A. Examine the Contract Documents thoroughly.
 - B. Visit the site to familiarize themselves with local conditions that may in any manner affect cost, progress, or performance of the work.
 - C. Familiarize themselves with Federal, State, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress, or performance of the work.
 - D. Study and carefully correlate Bidder's observations with the Contract Documents.

- 2.2 Reference is made to the Specific Project Requirements for the identification of any reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the work which have been relied upon by the Engineer in preparing the drawings and specifications. Owner will make copies of such reports available to any Bidder requesting them if not made available with the bid documents. These reports are not guaranteed as to accuracy or completeness; nor are they part of the Contract Documents. Before submitting their bid each Bidder will, at their own expense, make such additional investigations and tests as the Bidder may deem necessary to determine their bid for performance of the work in accordance with the time, price and other terms and conditions of the Contract Documents.
- 2.3 Upon request, the Owner will provide each Bidder access to the site to conduct such reasonable investigations and tests as each Bidder deems necessary for submission for their bid.
- 2.4 The lands upon which the work is to be performed, rights-of-way for access thereto, and other lands designated for use by Bidder in performing the work are identified on the Drawings.
- 2.5 The submission of a bid will constitute an incontrovertible representation by the Bidder that they have complied with every requirement of this section and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.

PART 3 ESTIMATED QUANTITIES

- 3.1 In Unit Price Contracts, the quantities of the work itemized in the bid are approximate only and the bidders are hereby notified that the estimated quantities made by the Engineer are merely for the guidance of the Owner in comparing on a uniform basis all bids received for the work.
- 3.2 The contract quantities, where itemized, are based on plan horizontal and vertical dimensions unless otherwise specified. It is the Contractor's responsibility to verify and determine actual quantities of materials such as pipe, pavement, subgrade, etc. in their ordering materials.
- 3.3 Payments, except for lump sum contracts and except for lump sum items in unit price contracts, will be made to the Contractor only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications.
- 3.4 The successful Bidder will be required to furnish the Owner with a complete breakdown of the lump sum bid items, to the satisfaction of the Engineer/Architect, before signing the Contract documents.

PART 4 CONTRACTOR'S QUALIFICATION

- 4.1 Bidder shall provide detailed information relating to similar projects completed within the past 5 years which demonstrates the bidder's capability, responsibility, experience,

skill, and financial standing to undertake this type of project and shall include a list of all projects currently under construction including status and contact person.

- 4.2 Bidder shall own, have rental or lease agreements for, or otherwise have readily available any and all equipment and tools necessary for proper execution of the work. The Owner reserves the right to request lists of equipment or tools available for the project including sources.
- 4.3 Bidder shall provide pertinent information to the Owner relative to any pending suits or outstanding liens. If no information is provided by the Bidder, the Owner shall assume that any such suits or liens do not exist.
- 4.4 The Owner may require similar information on any or all subcontractors proposed by the Bidder.
- 4.5 Bids of corporations not chartered in the state in which the work will take place must be accompanied by proper certification that the corporation is authorized to do business in that state.

PART 5 SUBCONTRACTORS

- 5.1 The Bidder shall state on the appropriate bid form the names of all Subcontractors proposed and the items of work they are to be assigned. All work not assigned to a Subcontractor shall be assumed by the Owner to be performed by the Bidder.
- 5.2 The Owner reserves the right to approve all subcontractors proposed by the Bidder. If the Owner, after due investigation, rejects the use of a proposed subcontractor, the apparent successful Bidder may either submit an acceptable substitution without increase in bid price or decline substitution and withdraw their bid without sacrificing their bid security. Any listed subcontractor to whom the Owner does not make written objection prior to award of contract, shall be deemed acceptable to the Owner.
- 5.3 Requests for changes of Subcontractor by the Bidder after the award shall be subject to the Owner's approval and shall not change the contract bid prices.
- 5.4 No contractor shall be required to employ any Subcontractor, person or organization against whom they have reasonable objection.

PART 6 BID REVIEW BY OWNER

- 6.1 The Owner reserves the right to reject any and all bids, to waive as an informality any and all irregularities, and to disregard all nonconforming, nonresponsive or conditional bids.
- 6.2 All extensions and totals of unit prices and quantities submitted as part of the bid shall be considered informal until verified by the Owner. All bids must be made on the forms contained herein and the bid prices must be written therein, in figures only. Unit prices shall be separately written for "Unit Price Labor," "Unit Price Material," and "Total Unit Price" for each item listed. Should an error in addition and/or multiplication

be determined while checking the Contractor's math and verifying their total bid, the "Unit Price Labor" and the "Unit Price Material" figures shall govern in determining the correct "Total Unit Price" and the correct "Item Total."

- 6.3 Each bidder must bid on all Items, Alternates, Deductions, and Additions contained in the Bidding Forms. All bids not in conformity with this notice may be considered non-responsive and may be rejected.
- 6.4 In evaluating bids, the Owner may consider:
 - A. The qualifications and experience of the Bidder, proposed subcontractors, and principal material suppliers as outlined in the plans and specifications.
 - B. Financial ability and soundness of the Bidder and proposed subcontractors.
 - C. Completeness of all bid forms and bid requirements.
 - D. Alternates and unit prices requested in the Bid Forms.
 - E. Unit prices or schedules of values that are or appear to be unbalanced.
 - F. Previous contractual experience with the Owner.
 - G. Whether or not the bid package complies with the prescribed requirements.
 - H. The proposed completion date, if applicable.
 - I. Any other matter allowed by law or local ordinance or resolution.
- 6.5 Owner may conduct further investigations as they deem necessary to assist in the evaluation of any bid and to establish the responsibility, qualifications, and financial ability of the Bidders, proposed Subcontractors, and other persons and organizations to do the work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.
- 6.6 Owner reserves the right to reject the bid of any Bidder who does not pass any such evaluation to Owner's satisfaction.
- 6.7 The Contract award shall be based on the lowest and best bid or lowest responsive and responsible bid (as applicable for the public contracting agency receiving bids) for the base bid and selected alternate items (if any) for this project.

PART 7 BID SECURITY

- 7.1 Each bid must be accompanied by a certified or cashier's check in the amount of 10% of the amount bid, an irrevocable letter of credit in the amount of 10% of the amount bid or an original bond in the amount of 100% of the amount bid per ORC 153.54 and 153.571. The certified or cashier's check, or irrevocable letter of credit shall be from a financial institution authorized to transact business in the State of Ohio and acceptable to the Owner. The bond shall be underwritten by a Surety Company authorized to transact business in the State of Ohio having an Ohio agent and listed on the most current Department of the Treasury Circular 570, "Surety Companies Acceptable on

Federal Bonds." The bond shall be a "Bid Guarantee and Contract Bond" ("rollover bond") per O.R.C. sections 153.54 and 153.571 submitted for the full amount of the bid **including all alternates**, if any.

If bid security is made by bond, the Bidder and their Surety shall sign the Supplemental Bond Acknowledgement form and submit with their bid.

- 7.2 The certified or cashier's check, irrevocable letter of credit, or bond shall be made payable to the Owner and shall serve as a guarantee that in the event the bid is accepted and a contract is awarded to the successful Bidder, the contract will be executed by the bidder including any certifications, certificates or additional bonds required by the contract.
- 7.3 Failure on the part of the successful Bidder to execute the contract documents will cause the certified or cashier's check, irrevocable letter of credit, or bond to be forfeited to the Owner as damages.
- A. If the Owner awards the contract without rebidding, the Bidder (and the Surety on their bond if a bond was submitted) shall be liable to the Owner for a penal sum not to exceed the difference between the low bid and the next lowest bidder or 10% of the amount of the bid, whichever is less.
- B. If the Owner does not award the Contract to the next lowest Bidder, but resubmits the project for bidding; the Bidder (and the Surety on their bond if a bond was submitted) shall be liable to the Owner for a penal sum not to exceed the costs in connection with the resubmission of bids or 10% of the amount of the bid, whichever is less.
- 7.4 Checks or letters of credit for bid security of all bidders will be returned in the manner and timeframe stipulated in the Ohio Revised Code.

PART 8 CONTRACT BOND

- 8.1 As security for faithful performance and payment of all obligations under the Contract, the Owner shall require and the successful Bidder shall furnish either:
- A. *If submitted as Bid Security at time of bid:* "Bid Guarantee and Contract Bond" (AKA "rollover bond") per O.R.C. sections 153.54 and 153.571.
- B. *If a cashier's check or irrevocable letter of credit is submitted as Bid Security at time of bid:* Contract Bond per Ohio Revised Code Sections 153.54 and 153.57, in the amount of 100% of the Contract Price. The Contractor and their Surety shall sign the Supplemental Bond Acknowledgement form and submit with the Contract forms
- 8.2 The bond shall be underwritten by a Surety Company authorized to transact business in the State of Ohio having an Ohio agent and listed on the most current Department of the Treasury Circular 570, "Surety Companies Acceptable on Federal Bonds."

- 8.3 The contract bond shall cover correction of the work for the period stated in the specifications and the correction period shall start upon Final Acceptance of the entire project and final payment by the Owner.
- 8.4 Nothing in the performance of the Engineer's service to the Owner in connection with this project shall in any way imply any undertaking for the benefit of the successful Bidder, its subcontractor(s), or the surety of any of them.

PART 9 AWARD AND EXECUTION OF CONTRACT

- 9.1 After the Owner's legislative body awards the project, the successful bidder will receive the unsigned contract documents. Within 10 days after their receipt, the successful Bidder shall sign and deliver to the Owner said contract documents including any certifications, certificates, or additional bonds required by the contract.
- 9.2 The Owner shall execute the Contract within 60 days after the day of the bid opening. When necessary and by mutual consent between the Owner and the Successful Bidder, this 60-day period may be extended.
- 9.3 The date of the Owner's signature on the Contract Agreement shall be the effective contract date.
- 9.4 The Owner shall execute and deliver to the successful Bidder one set of fully executed contract documents.

PART 10 INSURANCE

- 10.1 Verification of limits for public liability, property damage, automobile, Worker's Compensation, or any other insurance required by the provisions of this Contract must be submitted to the Owner prior to execution of the Contract.
- 10.2 All insurance shall be endorsed so that it cannot be cancelled for non-payment of premium for 10 days or cancelled or non-renewed for any other reason in less than 30 days after a written notice of such proposed action by the insurer is given to the Owner. The cancellation clause on the Certificate(s) of Insurance shall read as specified in the Supplementary Conditions and failure to submit an insurance certificate and/or policy endorsement verifying same shall be reason for the Owner to consider the Contractor non-responsive in complying with the requirements for contract execution and may be cause for forfeiture of the Bid Security to Owner.
- 10.3 The Contractor's Liability Insurance policy(s) shall be endorsed such that limits are on a Per Project basis.
- 10.4 The Contractor shall also provide an Owner's and Contractor's Protective Policy.

PART 11 NON-COLLUSION AFFIDAVIT

- 11.1 Each bid must be accompanied by a completed Noncollusion Affidavit provided within the contract documents.

- 11.2 Where there is reason to believe collusion or combination among bidders exists, the Owner reserves the right to reject the bid of those concerned.

PART 12 DELINQUENT PERSONAL PROPERTY STATEMENT

- 12.1 Included with the contract documents is a Delinquent Personal Property Statement to be filled out by the successful Bidder.
- 12.2 The statement shall be sent to both the County Auditor and the County Treasurer. A signed copy shall remain in the contract documents as well.

PART 13 ORIGINAL DOCUMENTS

- 13.1 All bid forms, contract forms, bonds and any other bid documents or contract documents requiring signatures shall be submitted with original signatures. No photo copies or faxed copies of signed documents shall be accepted.

PART 14 ADDENDA

- 14.1 The bidder shall be responsible to obtain Addenda from the web at www.ctconsultants.com/bidinfo/index.html .

END OF SECTION 04/22/2019

PRICES TO INCLUDE

PART 1 - GENERAL

Any work shown on the plans or required in the specifications but not paid for separately as a bid item shall be included in the cost of other bid items. The amount bid for each Bid Item shall include the following:

- 1.1 All labor, materials, tools, equipment, and transportation necessary for the proper execution of the work in accordance with the Contract Documents.
- 1.2 All assistance required by the Engineer to verify compliance with the Contract Documents, including measuring for final pay quantities.
- 1.3 Project coordination and scheduling.
- 1.4 Detailed breakdown of lump sum bid items as requested by the Engineer.
- 1.5 All provisions necessary to protect workmen, the general public, and property along the work in accordance with the Contract Documents.
- 1.6 Protection and/or replacement of existing property corner monuments.
- 1.7 Record drawings of the locations of all installed or repaired underground utilities, including: sanitary sewers including tees, wyes, and test tees; force mains including bends and/or other special fittings; drain pipes; electrical conduit; etc.
- 1.8 Materials testing.
- 1.9 Reimbursement to Owner for costs of re-inspection or re-testing of any work not installed in compliance with the Contract Documents.

PART 2 - ITEMS

All work proposed by this contract shall be quantified and paid for in accordance with the pertinent O.D.O.T. specification except as specifically altered by other provisions of this contract.

BASE BID

- 2.1 PRECONSTRUCTION VIDEO DOCUMENTATION, AS PER PLAN

Basis of Payment

The lump sum price shall include all costs associated with hiring a professional videography firm to document in detail the existing conditions of the entire work area and potential disturbed areas and submitting a high quality DVD with audio commentary and video log.

2.2 BONDS AND INSURANCES, AS PER PLAN

Basis of Payment

A "Bonds and Insurances" item (including "Owner/Contractor Protective Policy," "All Risk Builder's Risk Insurance," and/or "Installation Floater Insurance", and/or endorsements to fully comply with all contract requirements) has been included in the bid proposal.

2.3 DEMOLITION OF EXISTING WASTEWATER TREATMENT SYSTEMS

Method of Measurement and Payment

The lump sum price bid shall include, but is not limited to the following: pre-investigation to verify subsurface conditions, size and depth of existing tanks, location of underground piping and electrical conduits; dewatering and disposal of all tank wastewater, sludge and sand; remove all tank and structure walls to a minimum of three (3) feet below existing ground grade; break or core drill bottom slabs of all tanks so that water will not pond in abandoned below grade concrete structures; place and compact approved backfill material ground grade; finish grade, seed and mulch entire disturbed area; and remove and replace pavement if necessary at the trash trap.

Note: All work shall be performed in accordance with the guidelines and requirements of the Lake County Department of Health, Ohio EPA and/or local jurisdiction, whichever is the more stringent.

2.4 ACCESS ROAD, AS PER PLAN

Method of Measurement

The number of square yards of access road to be paid for shall be the actual number of square yards of access road installed in accordance with the contract drawings, specifications and standard details.

Basis of Payment

The unit price stipulated per square yard of access road shall be irrespective of the finished grade of the access road. The unit price shall include; but is not limited to; access road excavation; removal and disposal of excess excavated materials; access road subgrade compaction; geotextile fabric; compacted aggregate, clearing and grubbing (as required), and the furnishing of all labor, tools, materials and appliances to complete the work.

2.5 2-INCH SANITARY FORCE MAIN, AS PER PLAN

Method of Measurement

The number of lineal feet of horizontal 2" HDPE force main to be measured for payment under this item shall be actual length installed as measured along the horizontal centerline of the force main without any deduction for manholes. Payment will only be made for force main that is accepted and part of the final approved installation.

Basis of Payment

The unit price per lineal foot of specified force main stipulated in the proposal shall include earth and/or rock excavation; disposal of soil; boring and receiving pit design and installation; maintenance of drilling fluids; 2" HDPE pipe and fittings; temporary sheeting and shoring; dewatering; spill containment; excavation, bedding, backfill and compaction; clearing and grubbing; pavement removal and replacement; restoration; seeding and mulching and the furnishing of all labor, materials, tools, equipment and appliances necessary to complete the work as specified or shown.

The unit price stipulated shall also include field staking of improvement and staking of easements.

The unit price shall include verification of the location and elevation of all critical vertical alignment utility crossings prior to the installation of any new improvements. The Contractor shall be responsible for the replacement of all items damaged by the Contractor outside of the limits shown on the Standard Details and/or Contract Drawings.

The unit price stipulated shall also include any and all costs associated with any special requirements incorporated into select easement documents whether specifically addressed on the plans or not.

Note:

1. The force main within the railroad right-of-way must be installed by horizontal directional drilling (HDD) methods. In addition, all streams and ditches crossed will be by 2" HPDE force main shall be installed by trenchless horizontal directional drilling (HDD) methods. All force mains will be a minimum of 4' below the bottom of the stream or ditch. The Contractor may install the force main on the remainder of the project by HDD or open-cut excavation.
2. Pavement and subbases removed to facilitate the installation of new work shall be replaced in kind per the details shown on the plans. All existing pavement markings shall be recorded prior to the start of work and replaced in kind in accordance with O.D.O.T. standards.

2.6 6-INCH SANITARY SERVICE LATERAL, AS PER PLAN

Method of Measurement

The method of measurement shall be the horizontal length from the center of the new test tee to the center of the new 8" sanitary sewer.

Basis of Payment

The unit price to be paid shall include 6" SDR 26 PVC pipe and fittings; test tees and caps; DIP riser pipes (where shown on the drawings) including DIP pipe, fittings, couplings and cutting into installed pipe; removal and or abandonment of existing service laterals; connections to new 8" sanitary sewer including fittings, bends, couplings, and pipe cutting (if required); excavation,

bedding, backfill and compaction; trench dewatering; trench support; removal and replacement of pavement per plan details; exploratory excavation, and verification of existing utilities prior to laying conduit; temporary pavement and/or sidewalks; and the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown.

Note: Pavement and subbases removed to facilitate the installation of new work shall be replaced in kind per the details shown on the plans. All existing pavement markings shall be recorded prior to the start of work and replaced in kind in accordance with O.D.O.T. standards.

- 2.7 6-INCH SANITARY SEWER, AS PER PLAN
- 2.8 8-INCH SANITARY, AS PER PLAN
- 2.9 8-INCH PILOT TUBE MICROTUNNEL, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the number of linear feet installed per the plans and specifications measured by the plan difference in horizontal distance between centerlines of manholes unless otherwise indicated or shown on the plans. Any increase in installed length due to change in length of pipe or location of structures not directed by the Engineer shall not be measured for payment.

Basis of Payment

The unit price shall be irrespective of the depth of pipe and if not called out as a separate pay item shall include the furnishing and laying of pipe; field location, exploratory excavation, and verification of existing utilities prior to laying conduit; earth and/or rock excavation; sheeting; shoring; disposal of undesirable and excess material; all pumping required for adequate handling of flow bypassing, underground water and/or surface water; over-excavation; foundation; bedding; compacted backfill material; Owner's costs related to re-inspection or re-testing of failed or re-compact backfill material; special fittings, bends, tees, plugs, stoppers, cleanouts, and bulkheads; jointing material; protection of existing trees or vegetation to be saved; protection and/or replacement of all existing utilities; connection to existing conduit or structures; leakage testing; internal videotaping; removal and replacement of poles, posts, signs, mailboxes, paper boxes, fences, landscape timbers, guardrails, sign wiring, fixtures, and/or other appurtenances; surface grading; temporary pavement and/or sidewalks; seeding and mulching, pavement removal and replacement (as per plan) and the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown.

Note: Pavement and subbases removed to facilitate the installation of new work shall be replaced in kind per the details shown on the plans. All existing pavement markings shall be recorded prior to the start of work and replaced in kind in accordance with O.D.O.T. standards.

- 2.10 SAMPLING AND METERING MANHOLE, AS PER PLAN
2.11 TYPE A SANITARY MANHOLE, AS PER PLAN

Method of Measurement

The number of each (EA) sanitary manholes to be paid for shall be the actual number furnished and built in place in accordance with the contract drawings and with these specifications.

Basis of Payment

The unit price bid for sanitary manholes shall be irrespective of the depth of the manhole and shall include the furnishing and construction in place of the manholes complete with excavation; foundation; backfill; frame and cover; steps; concrete; steel reinforcement; lining material; bricks; mortar; plastering; precast manhole sections; transition; flexible joints; granular backfill under proposed or existing pavements, walks, drives, existing drainage structures, and disposal of all undesirable material; testing and inspections; and the furnishing of all labor, materials, tools and appliances necessary to complete the work as specified or as shown. Adjustments in final casting elevations of plus or minus one (1) foot shall be included in the price for each manhole.

Note: The Contractor shall be responsible for field verifying the ground elevation for each manhole prior to submitting shop drawings for approval. Shop drawings shall clearly indicate this information for each manhole. Shop drawings submitted without field verified elevations will be rejected.

- 2.12 SANITARY MANHOLE DROP CONNECTIONS, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the number each of inside or outside drop connections installed per the plans and specifications.

Basis of Payment

The unit price stipulated per each (EA) drop connection shall include: ductile iron pipe and fittings, fabricated 316 SS 6" x 4" x 6" tee, core drilling, link seal, Sch. 80 PVC drop pipe, S.S. wall anchors and straps, Sch. 80 PVC fittings, flexible manhole connections, connections to existing manhole, approved transition fitting, concrete encasement or support for the drop pipe, anchor hooks, additional excavation or backfill (if so required by LCDU) and the furnishing of all labor, tools and appurtenances required to complete the work.

- 2.13 MAINTAINING TRAFFIC, AS PER PLAN

Basis of Payment

Payment shall be made progressively throughout the contract period in proportion to the percentage of work complete or as otherwise approved by the Engineer.

2.14 MOBILIZATION, AS PER PLAN

Basis of Payment

The lump sum (LS) price shall include all labor to transfer all equipment, materials, personnel, storage area, sanitary facilities, and incidentals to the project site as required to complete the project per plans and specifications.

The lump sum price shall be included for payment in the monthly progress estimates after the following conditions have been met.

1. One-third (1/3) of the lump sum upon delivery to the site of all equipment to be utilized on the first 1000 lineal feet of force main installation.
2. One-third (1/3) of the lump sum after the force main through Norfolk Southern railroad property is installed, backfilled and tested.
3. One-third (1/3) of the lump sum for all other preliminary work, but not limited to site clearing, temporary access drives, utility services, material storage facilities, underground utility verification and other miscellaneous items required to begin construction.

2.15 PIPELINE SIGN AND POST, TYPE F, AS PER PLAN

Method of Measurement and Payment

The unit price stipulated per each (EA) pipeline sign and post shall include the furnishing and installation of signs as shown on the drawings or as directed by the Engineer.

2.16 STORM WATER POLLUTION PREVENTION PLAN

Method of Measurement and Payment

Measurement and Payment shall be in accordance with the latest version of ODOT Supplemental Specification 832.

2.17 TEMPORARY SEDIMENT AND EROSION CONTROL

Method of Measurement and Payment

Measurement and Payment shall be in accordance with the latest version of ODOT Supplemental Specification 832.

2.18 UTILITY ALLOWANCE

Basis of Payment

A Utility Allowance has been included in the bid proposal to be utilized as directed by the Engineer for direct costs charged by utility company(s) associated with the temporary removal, relocation or support of utility poles, existing overhead lights, utility wires overhanging the proposed sewer,

cables, anchors, water main or service connections, gas main or service connections, or other work which can be performed only/exclusively by the utility company. Payment shall be made for only work which has the prior approval of the Engineer.

The amount to be paid to the Contractor and the amount utilized in the allowance shall be the invoice amount from the utility company without any mark up by the Contractor and per the contract provisions regarding retainer. Any costs to the Contractor due to this item for insurance, bonding, etc., shall be reflected in the cost of other items.

Invoices for all for all work completed by the utility company(s) or others shall be submitted as evidence of the work completed on the project.

No payment for this item will be made to the Contractor for utility work required when resulting from the Contractor's construction methods or rework due to his negligence or construction methods.

Any portion of the allowance not utilized shall be credited to the Owner.

2.19 NORFOLK SOUTHERN INSPECTION AND FLAGMEN ALLOWANCE

An Allowance has been included in the bid proposal to be utilized as directed by the Engineer for direct costs charged by Norfolk Southern Railway Company associated with inspection and/or flagmen provided by the railroad for work associated with the installation of improvements within the railroad right-of-way. Payment shall be made for only work which has the prior approval of the Engineer.

The amount to be paid to the Contractor and the amount utilized in the allowance shall be the invoice amount from Norfolk Southern without any mark up by the Contractor and per the contract provisions regarding retainer. Any costs to the Contractor due to this item for insurance, bonding, scheduling, etc., shall be reflected in the cost of other items.

Invoices for all for all work completed by Norfolk Southern or others shall be submitted as evidence of the work completed on the project.

No payment for this item will be made to the Contractor for work required when resulting from the Contractor's construction methods or rework due to his negligence or construction methods.

Any portion of the allowance not utilized shall be credited to the Owner.

2.20 PUMP STATION NO. 1

2.21 PUMP STATION NO. 2

Basis of Payment

Payment for the work indicated in the bid shall be the lump sum price bid for the work completely performed and accepted in accordance with the contract proposal, detailed plans and specifications.

The lump sum price bid shall cover and shall be full compensation for the furnishing of all labor, materials and equipment necessary to complete in every detail the construction and installation of the pump station and associated appurtenances specified herein.

The price bid shall include all actual energy costs incurred during construction, testing and start-up to date of final estimate. The price shall also include all service charges and/or connection charges levied by CEI for electric charges relative to the pump station connection.

The successful bidder will be required to furnish a breakdown of his bid, by labor and materials, for each item in the Contract. This will be due two (2) weeks after the award of the contract.

The price bid shall also include all costs incurred for testing and startup to date of final estimate.

This item is intended to include all labor and materials that are not specifically addressed as a line item in the proposal. This item includes, but is not limited to, the following components of work:

1. Installation of new duplex explosion proof pump stations and controls.
2. New electrical service including power panel, service disconnect, conduit and wire.
3. Clearing and grubbing.
4. Steel posts (i.e. - pipe bollards) at Pump Station No. 1.
5. Final restoration of the pump station sites.

Note:

1. Only one (1) pump is to be installed in Pump Station No. 2 at this time. The second pump will be packaged for storage and delivered to a location as directed by the Perry Joint Economic Development District (JEDD).
2. Midwest Materials will provide 240 Volt, 1 Phase electrical service for Pump Station No. 1 and 2 from the Maintenance Building and Bar Building, respectively.

2.22 REMOVE AND REPLACE STORM INLET

Method of Measurement

The number of inlets to be paid for shall be the actual number each (EA) furnished and built in place in accordance with the contract drawings and with these specifications.

Basis of Payment

The unit bid price for inlets shall include the removal of existing inlet basin, furnishing and construction in place of the new inlet basin complete with excavation, backfill, frame and cover, concrete, steel reinforcement, bricks, mortar, plastering, inlet sections, granular backfill under proposed or existing pavements, walks, drives, existing drainage structures and disposal of all undesirable material, and the furnishing of all labor, materials, tools and appliances necessary to complete the work as specified or as shown. The unit price shall also include reconnection of existing pipes to the structure. Adjustments in final casting elevations of plus or minus one (1) foot shall be included in the price for each inlet.

ALTERNATE A

2.23 FLUSHING MANHOLE, AS PER PLAN

Method of Measurement

The number of each (EA) flushing manholes to be paid for shall be the actual number furnished and built in place in accordance with the contract drawings and with these specifications.

Basis of Payment

The unit price bid for sanitary manholes shall be irrespective of the depth of the manhole and shall include the furnishing and construction in place of the manholes complete with excavation; foundation; backfill; frame and cover; steps; concrete; steel reinforcement; lining material; bricks; mortar; plastering; precast manhole sections; transition; flexible joints; granular backfill under proposed or existing pavements, walks, drives, existing drainage structures; interior pipe, valves and fittings; piping supports; pressure relief valves; repair clamps; concrete anchor blocks; core drill and link seal; disposal of all undesirable material; testing and inspections; and the furnishing of all labor, materials, tools and appliances necessary to complete the work as specified or as shown. Adjustments in final casting elevations of plus or minus one (1) foot shall be included in the price for each manhole.

Note: The Contractor shall be responsible for field verifying the ground elevation for each manhole prior to submitting shop drawings for approval. Shop drawings shall clearly indicate this information for each manhole. Shop drawings submitted without field verified elevations will be rejected.