Galalina Area Storm Sewer Improvements – Phase 2

OWDA Funded Project

City of Eastlake

May 2020



15060901



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James Overstreet, At Large

Tracy Simons, Council Clerk

ADVERTISEMENT FOR BIDS/PUBLIC NOTICE TO BIDDERS

Sealed bids will be received at the office of the Finance Director, Eastlake City Hall, 35150 Lakeshore Boulevard, Eastlake, Ohio 44095 until 12:00 p.m. Noon on June 6, 2020 and will be opened and read immediately thereafter for the

GALALINA AREA STORM SEWER IMPROVEMENTS – PHASE 2

OWDA FUNDED PROJECT

OPINION OF PROBABLE CONSTRUCTION COST: BASE BID AND ALTERNATES: \$2,600,000.00

COMPLETION DATES: SUBSTANTIAL – JULY 31, 2021 RESTORATION – SEPTEMBER 10, 2021

Bids must be in accordance with drawings and specifications and on forms available from CT Consultants, Inc. at a non-refundable cost of One Hundred Twenty-Five Dollars (\$125.00) mailed. Documents may be ordered by forwarding a copy of a check with shipping information, email and phone contact to <u>is@ctconsultants.com</u> and confirmed by calling 440-530-2272. Checks shall then be mailed to CT Consultants, Inc., 8150 Sterling Court, Mentor, Ohio 44060.

The bid specifications, drawings, plan holders list, addenda, and other bid information (but not the bid forms) 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*

May 6, 2020 May 13, 2020

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SECTION 1
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 his bid for a period of 90 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.
- 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.
- More than one bid for the same work from an individual or entity under the same of different names will not be considered. Reasonable grounds for believing that that any bidder has an interest in more than one bid for the work may be cause for disqualification of that bidder and the rejection of all bids in which the bidder has an interest. A subcontractor or supplier is not a bidder, and may submit prices to multiple bidders.
- 6.5 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.
- 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.
- 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 90 days after the day of the bid opening. When necessary and by mutual consent between the Owner and the Successful Bidder, this 90-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.

- 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 Collusion between bidders will be cause for rejection of affected bids and may be cause for rejection of all bids. Multiple bids submitted by one bidder under the same name or different names, whether as an individual, firm, partnership, corporation, profit or non-profit, affiliate, or association will be cause for rejection of bids. A subcontractor is not a bidder, and may submit prices to multiple bidders.
- All bidders shall submit an affidavit that their bid is genuine and not collusive or sham; that such bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to put in a sham bid, or that such other bidder or person shall refrain from bidding; that such bidder has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Owner or any person or persons interested in the proposed contract; that such bidder is the only party (or parties) who has an interest with the bidder in the profits of any contract which may result from the herein contained proposal; that no individual affiliated with the Owner, including but not limited to the head of any department, any employee, or any other official or officer of the Owner, is or will be directly or indirectly interested in this bid, and/or the profits from this bid if successful; that no individual affiliated with the Owner, including but not limited to the head of any department, any employee, or any other official or officer of the Owner, has or will receive anything of value as a result of the submission of this bid or its award; that no individual affiliated with the Owner, including but not limited to the head of any department, any employee, or any other official or officer of the Owner, has been solicited to provide assistance and/or provided assistance to the bidder which might give the bidder a competitive advantage or circumvent the competitive bidding process; and that all statements contained in said proposal are true; and further, that such bidder has not, directly or indirectly submitted this bid, or the contents thereof, or divulged information or data relative thereto to any association or to any member or agent thereof.

- 11.3 Each bid must be accompanied by a completed Noncollusion Affidavit provided within the contract documents.
- 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 02/2020

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 installed location of all underground electrical conduit, sewers, tees, wyes, laterals, etc.
- 1.8 Reimbursement to Owner for costs of re-inspection or re-testing of any work not installed in compliance with the Contract Documents.
- 1.9 Materials testing.
- 1.10 Replacement of all existing pavement striping removed or marred on improvement and adjacent streets due to construction.
- 1.11 Reference to ODOT 401.20 "Asphalt Binder Price Adjustment" is to be deleted and will not apply to this Contract.
- 1.12 Water main inspection fees to Lake County Department of Utilities.
- 1.13 Review of existing storm and sanitary sewer videos and subsequent coordination of repair and/or replacement locations in order to carry out the plan intent.

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.

2.1 PRECONSTRUCTION VIDEOTAPE DOCUMENTATION, AS PER PLAN

Basis of Payment

The lump sum price shall include all costs associated with hiring a professional videographing 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 (SPC) 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 (201) CLEARING & GRUBBING

Method of Measurement

Measurement shall be in accordance with ODOT Item 201.

Basis of Payment

Payment shall be made in accordance with ODOT Item 201.

2.4 (202) EXCAVATION AND REMOVAL OF EXISTING PAVEMENT AND BASE, AS PER PLAN

The work, method of construction, and materials for excavation including embankment construction and removal including disposal of existing pavement, curbs and base shall be in accordance with ODOT Items 201, 202, 203 and 204, except as modified herein.

- 1. Measurement and pavement will be irrespective of the type or thickness of pavement removed, either flexible or rigid.
- 2. Necessary excavation or embankment construction outside of the new pavement limits will not be paid separately. All work to be included in this bid item.
- 3. Subgrade preparation, compaction and proof-rolling for areas under new pavement shall be performed in accordance with ODOT 204 and any plan note provided. Cost of this work to be included in this bid item.

Method of Measurement

Excavation including removal and disposal of existing rigid and/or flexible pavement, curbs, base and including embankment construction will be paid for on a lump sum basis which shall include all areas where new pavement is to be constructed as designated on the contract drawings and as directed by the Engineer.

Basis of Payment

The lump sum price shall be full compensation for preparation of areas upon which embankments are to be placed; clearing and grubbing; excavation for the roadway, including the removal of all material encountered not being removed under some other item; constructing embankments with the excavated material and material from other sources necessary to complete the planned embankments; furnishing and incorporating all water required for compacting embankment and subgrade; disposing of unsuitable and surplus material; preparing and compacting the subgrade; testing the stability and uniformity of compaction of the subgrade; proof rolling; finishing shoulders, slopes and ditches; removal and disposal of the existing flexible pavement, rigid pavement or base patches or trench caps and curbs; and furnishing all labor, material, tools and appliances necessary to complete the work in accordance with ODOT Items 201, 202, 203 and 204 and modifications herein and in reasonable close conformity with the lines, grades, thickness and typical section shown on the plans or as specified. All excavation shall be considered as unclassified excavation.

2.5 (202) PIPE REMOVED, 24-INCH AND UNDER AND ASBESTOS PIPE REMOVED

Method of Measurement

The quantity to be paid shall be the lineal horizontal footage of pipe removed (24" inside diameter and under).

Basis of Payment

Payment shall be made in accordance with ODOT Item 202. Any pipe removed containing asbestos material shall be paid under the "Asbestos Pipe Removed" bid item and shall include the proper removal, handling and disposal per ODOT Item 202.

2.6 (202) CATCH BASIN REMOVED

Method of Measurement

Measurement shall be per EACH in accordance with ODOT Item 202 where indicated on the plans. This work shall include all bulk-heading and caps required to accomplish the removals, excavation, backfill per requirements and restoration as required.

Basis of Payment

Payment shall be made per EACH in accordance with ODOT Item 202.

2.7 (202) PUMP STATION ABANDONED, AS PER PLAN

Method of Measurement

The quantity to be paid for each pump station abandoned shall be the actual number abandoned in accordance with the contract drawings and ODOT Item 202.

Basis of Payment

The unit price bid shall include the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown on the drawings.

2.8 (204) EXCAVATION OF SUBGRADE AND EMBANKMENT WITH GRANULAR MATERIALS, CCS, FABRIC, AS PER PLAN

The work, method of construction and materials for undercut and backfill unsuitable subgrade, as directed, shall conform to ODOT Item 204, with the following modifications:

- 1. The following items of work shall be considered incidental costs to be included in the bid item:
 - a. Excavation to depth required by the Engineer to remove unstable materials.
 - b. Backfill and compaction to a level equal to the proposed subbase with No. 304 stone under new pavement. The unit price in the bid shall be for crushed limestone.

Method of Measurement

The quantity to be paid of cubic yards of undercut and backfill unsuitable subgrade, as directed, shall be the number of cubic yards excavated and backfilled, complete and accepted, measured and calculated by surface area of the payment above the undercut times the depth directed to be undercut. This item ins included as a contingency and should only be used as directed.

Basis of Payment

The unit price shall be full compensation for furnishing and placing all materials and furnishing all labor, tools and equipment necessary to complete the work as specified or as shown on the contract drawings.

2.9 (SPC) TEMPORARY SEDIMENT AND EROSION CONTROL, AS PER PLAN

Method of Measurement

Measurement shall be Lump Sum LS in accordance with project plan intent

Basis of Payment

The lump sum price shall include any and all labor, equipment, and materials including but not limited to inlet protection, street sweeping, silt fence, check dams, silt ponds, and temporary seeding to provide sediment and erosion control commensurate with the Contractor's means, methods, work schedule, and in accordance with plan details and specifications, if any.

2.10 (SPC) PAVEMENT REPLACEMENT TYPES A THRU F, AS PER PLAN

Method of Measurement

The method of measurement shall be as per ODOT 253 or 255 as applicable with the exception that lengths used for calculation of each individual repair area shall not exceed the maximum pay area indicated on the drawings.

Basis of Payment

The basis of payment shall be as per ODOT 253 or 255 as applicable with the following additions:

The unit price shall also include removal of existing pavement (flexible and/or rigid) and the furnishing, installation, maintenance, removal, and disposal of temporary road materials or temporary pavement courses; preparation for permanent pavement courses; tack and/or prime coat as needed, and any additional expenses for cold weather protection.

2.11 (407) TACK COAT, TRACKLESS TACK

The work, method of construction and materials for tack coat shall conform to ODOT Item 407 with the following modifications:

- A. Tack coat shall be applied at a minimum rate as specified in ODOT Table 407.06-1.
- B. Tack coat shall be non-tracking emulsified asphalt meeting the requirements of ODOT 702.12.

Method of Measurement

Bituminous material will be measured by the gallons furnished and placed. No measurement will be made for sand cover aggregate (if required).

Basis of Payment

The unit price stipulated per gallon of tack coat as directed for accepted quantities complete in place with no additional payment for sand cover aggregate and shall include the furnishing and placing of all materials; and furnishing of all labor, materials, tools and appliances necessary to complete the work as specified or as shown on the contract drawings.

2.12 (441) ASPHALT CONCRETE SURFACE COURSE, (TYPE) AS PER PLAN

The work, method of construction and materials for asphalt concrete surface course shall be in accordance with ODOT Item 441 with the following modifications:

- A. Compacted thickness shall be as detailed on the plans.
- B. All gutters, street castings and joints shall be sealed with an approved liquid bituminous material 4 inches in width and the cost is to be included with the bid item.

- C. Necessary butt or tapered edge joints and pavement saw cuts shall be considered incidental costs to be included in this bid item.
- D. Reclaimed or recycled material shall not be used. Only new materials shall be used.
- E. Replacement of all pavement striping removed or marred on improvement and adjacent streets shall be considered incidental costs to be incurred in the Bid Item.

Method of Measurement

The measurement of asphalt concrete surface course of the thickness specified shall be the number of cubic yards of asphalt concrete surface course completed and accepted in place. The area for measurements will be as shown on the plans, or as otherwise directed in writing by the Engineer. The plan quantities as adjusted for changes, errors and deviation in excess of allowable tolerances will be the method of measurement.

Basis of Payment

The accepted quantities of asphalt concrete surface course of the thickness specified shall be full compensation for furnishing and placing all materials, including sealing materials, pavement striping, and furnishing all labor, tools, appliances, equipment and all other appurtenances necessary to complete the work as specified or as shown; including feathering at drives as necessary and butt or taped edge joints and necessary pavement saw cuts.

2.13 (441) ASPHALT CONCRETE INTERMEDIATE COURSE, AS PER PLAN

The work, method of construction and materials for asphalt concrete surface course shall be in accordance with ODOT Item 448 with the following modifications:

A. Compacted thickness shall be as detailed on the plans.

Method of Measurement

The measurement of asphalt concrete intermediate course of the thickness specified shall be the number of cubic yards of asphalt concrete intermediate course completed and accepted in place. The area for measurements will be as shown on the plans, or as otherwise directed in writing by the engineer. The plan quantities as adjusted for changes, errors and deviation in excess of allowable tolerances will be the method of measurement.

Basis of Payment

The accepted quantities of asphalt concrete intermediate course of the thickness specified shall be full compensation for furnishing and placing all materials, including furnishing all labor, tools, appliances, equipment and all other appurtenances necessary to complete the work as specified or as shown; including any necessary pavement saw cuts.

2.14 (608) CONCRETE DRIVES, APRONS, WALKS, CURB AND CURB RAMPS, AS PER PLAN

The work method of construction and materials for concrete walk, concrete curb, sidewalks, curb ramps and concrete pavement for drives shall conform to ODOT Items 608, 452, 304, 203 and 202, except as modified herein or as shown on the contract drawings.

- A. There will be no separate measurement or payment for removal and disposal of existing curb, walk or concrete drives or subbase, crushed limestone base, and subgrade compaction. These items of work shall be included in the furnishing and installation of new walks, curbing, curb ramps or concrete payment for drives.
- B. ODOT Item 499 Concrete, QC MS mix shall be used in drives and drive aprons.
- C. ODOT Item 499 Concrete, QC 1 shall be used for walks, curb and curb ramps.
- D. Each and every sidewalk, drive slab and joint shall be edge tooled after texturing surface.
- E. ODOT 304 Aggregate Base, utilizing crushed limestone, shall be provided with these items.
- F. Truncated domes shall be included in the cost for sidewalk installation where existing ramp are being removed and replaced.

Method of Measurement

The quantity to be paid of concrete walk, concrete curb, curb ramps, and concrete for drives to the thickness and class of concrete specified shall be the actual square dimension, square feet, linear foot or square yards as indicated in the Proposal of finished surface complete in place.

Basis of Payment

The unit price stipulated per square foot or square yards (as indicated in the Proposal) for concrete walk, concrete curb, curb ramp and concrete pavement for drives or aprons of the thickness and class of concrete specified shall be full compensation for furnishing all materials, grading, forming, finishing of the walk, curb ramp and pavement including removal and disposal of existing grass, sod, topsoil, bushes, trees, walk or pavement and curbs, necessary pavement saw cutting, clearing and grubbing, excavation and/or backfill to required line and grade, subgrade compaction as required, furnishing and installing subbase or base material, integral curbing, adjustment of water/gas service valves, concrete, curing compound, and expansion joint material; wire and/or mesh reinforcing as required; furnishing of all labor, tools, materials and equipment necessary to complete the work as specified or as shown.

The unit price shall also include all costs for the location referencing and saw cut marking of sewer lateral markings with the appropriate symbol of the curb line once paving operations are complete.

2.15 (611) 6-INCH SANITARY SEWER LATERAL, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the lineal footage of sanitary sewer laterals adjusted and replaced. This item is included as contingency and should only be used as directed.

Basis of Payment

The unit price shall be irrespective of the depth of pipe, size of existing lateral or main and whether one or both of the connections are on the long side or short side of the main to R/W and shall include horizontal and vertical surveying and layout; locating the existing service connection alignment, main connection location and test tee location; field location, exploratory excavation, and verification of existing utilities prior to excavation; clearing and/or protection of existing trees or vegetation to be saved; protection and/or replacement of all existing utilities; 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; bedding; the furnishing and laying of pipe; specials; bends; tees; fittings; tri-band couplings (w/center shear band); adapters; o-rings; plugs; stoppers; sanitary and storm test tee/clean out assemblies and trap (most storm sewer laterals); bulkheads; jointing material; compaction of backfill material; replacement of poles, posts, signs, mailboxes, paper boxes, fences, landscape timbers, guardrail, sign wiring, fixtures, or other appurtenances; site cleanup; and the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown.

2.16 (611) STORM OR SANITARY SEWERS, STORM MANHOLES, AS PER PLAN

The work, method of construction and materials for sewer construction shall be in accordance with ODOT Item 611 with the modifications shown on the improvement plans and detailed in the specifications.

Method of Measurement

The quantity of sewer to be paid for shall be determined for gravity sewers by the linear feet difference in horizontal stationing between centerlines of as-built manholes and/or inlets, the existing sewer main or the end of pipe for stub connections.

Basis of Payment

The unit price stipulated per lineal foot for sewer pipe of the various sizes and types specified shall be irrespective of class of pipe and depth and if not called out as a separate pay item, shall be full compensation for maintenance of traffic for the duration of the project; earth and/or rock excavation for the pipe and foundation for same, including clearing and grubbing; removal of all materials necessary for placing the pipe, the complete removal of the existing sanitary and storm sewers,

manholes and catch basins except materials listed separately; furnishing and placing granular or concrete bedding and special backfill as required, testing of compaction, constructing and subsequently removing all necessary boring and receiving pits, cofferdams, cribs, sheeting and shoring; furnishing, installing and operating necessary pumps, pipes and appurtenances necessary for flow bypassing and/or trench dewatering; sealing or banding all pipe joints where required; furnishing and installing of the pipe jointing materials and all necessary plugs, bulkheads, bends, fittings, specials and branches of a type at least equal to the conduit of which it becomes part; furnishing and installing concrete encasements, boring and steel casing pipe where required; protection, verification and/or replacement of all existing utilities, i.e., gas mains gas connections water mains (including hydrants and their connections to the main), water connections, sanitary sewers, sanitary connections, storm sewers, storm connections, curb drains, catch basins, culverts, electric or telephone underground cables and/or underground connections if damaged by the Contractor; protection of existing trees or vegetation; joining of the pipe to existing and proposed manholes, catch basins, structures, and other appurtenances as required whether temporary or permanent; leakage testing or internal videotaping; disposal of all surplus and unsuitable materials; furnishing and installing temporary stone trench topping of pavement and driveways; removal and replacement of poles, posts, signs, mailboxes, paper boxes, fences, landscape timbers, guardrails, sign wiring, fixtures and other appurtenances; removal and replacement of any damaged curbing, sidewalk, driveways, parking lots and roadways as directed by the Engineer; and the furnishing of all labor, tools, materials and equipment necessary to complete the work as specified or as shown.

2.17 (611) CONDUIT INTERNAL TELEVISION INSPECTION, INCLUDING LIGHT CLEANING, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the number of linear feet televised as measured centerline to centerline of structures (i.e., manholes, inlet or catch basins, lamp holes, headwalls, outlets, cisterns, etc.)

Basis of Payment

The unit price for the various sizes of pipe shall include mobilization, setup, light cleaning of the sewer using sewer jet, hydraulically powered equipment, or mechanically powered equipment, hauling water for cleaning, seer flow control, and the furnishing of all labor, material, tools and appurtenances necessary to complete the work as specified or as shown.

2.18 (611) 18-INCH AND 24-INCH DRAIN BASIN, PRE-FABRICATED, ENGINEERED PVC DRAINAGE STRUCTURE, AS PER PLAN

Method of Measurement

The method of measurement shall be the number of each inline drain installed and connected to new and existing sewers or as otherwise shown.

The unit price shall be irrespective of the depth of inline drain and if not called out as a separate pay item shall include the furnishing and of setting inline drains and castings; field location; exploratory excavation, and verification of existing utilities prior to installing inline drains; 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; bedding; compacted granular backfill; compacted backfill material; specials; seals, bends; tees; fittings; riser pipe; jointing material; coring of sewers; protection of existing trees or vegetation to be saved; protection and/or replacement of all existing utilities; removal and replacement of poles, posts, signs, mailboxes, paper boxes, fences, landscape timbers, guardrails, sign wiring, fixtures, or other appurtenances; temporary pavement; and the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown.

2.19 (611) CASTINGS ADJUSTED TO GRADE, AS PER PLAN

The work, method of construction and materials for various street castings adjusted to grade shall be in accordance with ODOT Item 611 with the following modifications:

- A. Metal adjusting rings or castings shall not be used. Existing risers shall be removed during the casting adjustment.
- B. Brick used shall be clay or shale brick meeting the requirements of ASTM C32 sewer brick, Grade SM.
- C. Concrete brick or masonry block shall not be used.
- D. The height limitation for additional compensation shall be considered two (2) vertical feet from the bottom of the casting.
- E. Type QC MS concrete shall be used for fill around all castings.
- F. All costs for work and material associated with incorporating a new style casting designated by the City which may include steel plates, corbelling, and/or shifting the casting to its proper location shall be included in this Item.

Method of Measurement

The quantity to be paid for of each, manholes, catch basins, water meter castings, monument boxes, gas valve boxes, water valve boxes, or service line valve boxes, adjusted to grade to be paid for shall be the actual number adjusted to grade in accordance with the contract, contract drawings and these specifications. Adjusting to grade of items proposed for new or replaced construction as part of the project will not be measured and shall be paid for in the cost of installation of that item.

The unit price stipulated, each, for manholes, catch basins, water meter castings, monument boxes, gas valve boxes, water valve boxes or service line valve boxes, adjusted to grade to be paid for under this Item shall be full compensation for furnishing and placing all material including removal, cleaning, storage and resetting of salvaged casting or new casting; pavement saw cutting and excavation, (irrespective of depth), resetting of loose brick work if needed, 3/4-inch steel plates, and furnishing of all labor, tools, and necessary appurtenances to complete the work as specified or as shown on the contract drawings.

2.20 STRUCTURES RECONSTRUCTED TO GRADE, AS PER PLAN

The work, method of construction and materials for catch basins or manholes reconstructed to grade shall be in accordance with ODOT Item 611 with the following modifications:

- A. The Contractor and the representative of the Engineer shall field check all manholes and catch basins within the project which are to remain. Any manhole or catch basin found to exhibit substantial deterioration and requires more work than specified under adjusted to grade, shall be reconstructed to grade to a depth as directed by the Engineer.
- B. Metal adjusting rings or castings shall not be used.
- C. Brick used shall be clay or shale brick meeting the requirements of ASTM C32 sewer brick, Grade SM.
- D. Concrete brick or masonry block shall not be used.
- E. This Item shall be paid only for the vertical footage beyond the 2-foot maximum of the adjust to grade item.
- F. Type QC MS concrete shall be used for fill around all castings.
- G. All costs for work and material associated with incorporating a new style casting designated by the City which may include steel plates, corbelling, and/or shifting the casting to its proper location shall be included in this Item.

Method of Measurement

The vertical feet of manholes or catch basins reconstructed to grade to be paid for shall be the actual vertical feet reconstructed to grade measured vertically from the bottom of the casting to bottom of wall reconstructed in accordance with the contract, contract drawings and these specifications. Adjusting to grade of items proposed for new or replaced construction as part of the project will not be measured and shall be paid for in the cost of installation of that item. This item is included as a contingency and should only be used as directed.

The unit price stipulated, per vertical feet for catch basins, or manholes reconstructed to grade to be paid for under this Item shall be full compensation for furnishing and placing all materials including removal, cleaning, storage and resetting salvaged or new casting and furnishing of all labor, tools, and necessary appurtenances to complete the work as specified or as shown on the contract drawings.

2.21 (611) MISCELLANEOUS METALS

The work, method of construction and materials for miscellaneous metals shall be in accordance to pertinent sections of ODOT 611 with the following modifications:

- 1. Existing castings may prove to be unsuitable, as determined by the Engineer, during construction of the project. It shall be the Contractor's responsibility to provide the casting of the required type, size and strength for the particular structure in question, as directed by the Engineer. All grated castings shall be bicycle safe.
- 2. All castings shall conform to the requirements of ODOT Item 611.
- 3. All castings removed shall remain the property of the Owner and shall be delivered to a location within the City as directed by the Owner.
- 4. The Contractor is cautioned to use extreme care in the removal, storage and replacement of all castings. Any casting damaged by the negligence of the Contractor shall be replaced with the proper casting by the Contractor at no expense to the Owner.
- 5. The Contractor shall not order materials until authorized by the Engineer.
- 6. Castings installed for new structures (manhole/catch basins) or reconstructed to grade shall not be paid for under this item.

Method of Measurement

The quantity of miscellaneous metal to be paid for shall be actual pounds of metal supplied, supported by invoice, and accepted.

Basis of Payment

The unit price stipulated per pounds of miscellaneous metal shall be compensation for furnishing all materials, including delivery of old castings to a location within the City designated by the Owner. Placing of the various castings shall be paid for under adjusted to grade bid items.

2.22 (614) MAINTAINING TRAFFIC, AS PER PLAN

The work, method of construction and materials for maintaining traffic shall be in accordance with ODOT Item 614 and the Ohio Manual of Uniform Traffic Control Devices (OMUTCD)

The lump sum price shall include all costs for labor, materials, tools and appurtenances necessary to complete the work as specified. Payment shall be made progressively throughout the contract period in proportion to the percentage of work complete or as otherwise approved by the Engineer.

2.23 (623) CONSTRUCTION LAYOUT STAKES AND SURVEYING

Basis of Payment

The lump sum (LS) price shall include all labor to provide construction layout staking, property pins monument documentation, as-built information and resetting disturbed property pins.

2.24 (624) MOBILIZATION

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.

2.25 (638) WATER SERVICE REPLACEMENT, AS DIRECTED

Method of Measurement

The method of measurement shall be as per ODOT 638 except that the water service connections shall be paid per each as short service connections or long service connections for the diameter designated on the plans or directed by the Engineer regardless of length of the connection. Short service connections shall be those which the water main is on the same side of centerline of the pavement as the lot serviced. Long service connections shall be those which the water main is on the opposite side of centerline of the pavement as the lot serviced. This item is included as a contingency and should only be used as directed.

Basis of Payment

The basis of payment shall be as per ODOT 638 with the following exceptions: the unit price shall also include locating and connecting to all existing services; exploratory excavation and field location of existing service connections, new curb stops and boxes, corporation stops, copper services, blocking, and the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown.

Note: The Contractor shall open cut service connections across the roadway. Drive aprons and sidewalks shall be protected and avoided during connection work unless the shut-off is located in the apron or sidewalk. If shut-off is located in the apron or sidewalk, the contractor will be paid under the contract unit price bid for the various apron and sidewalk line items.

2.26 (638) 8-INCH WATER MAIN LOWERING, AS PER PLAN

Method of Measurement

The method of measurement shall be for each lowering of the existing water main done in place to provide proper installation of sewer based on the plans and specifications. This item is included as a contingency and should only be used as directed.

Basis of Payment

The basis of payment shall be as per ODOT 638 with the following additions: The unit price shall be irrespective of the depth of pipe and shall include excavation, bedding, backfill, compaction, all waterline and soils testing, supports, thrust blocking, megalug joint restraint, polyethylene encasement, tees, bends, protection and/or replacement of all existing utilities (conduit, wires, cables, poles, signs, etc.); maintenance, removal and replacement of all signs, mailboxes, paper boxes, fences, guardrails, or other structures; regrading of ditches and/or swales; and the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown.

2.27 (SPEC) LAWN RESTORATION INCLUDING GRADING AND TOPSOIL

The work, method of construction and materials for lawn restoration shall be in accordance with Section 329219 with the following modifications:

- 1. There will be no separated measurement or payment for furnishing and placing the required 4-inch topsoil bed.
- 2. Cost to prepare the subgrade to receive the 4-inch topsoil bed including any necessary excavation or embankment to bring the subgrade to the lines indicated on the plans and parallel to the proposed finished grade shall be included in this bid item.
- 3. The cost to furnish and place sphagnum peat moss at the rate specified and mix into the topsoil shall be included in this bid item.
- 4. Restoration within the contract pay limits will be paid as directed by the Engineer on a one-time basis. Subsequent repairs of previously repaired seeded areas, repair of areas outside the contract pay limits and repairs to areas not planted within the designated spring or fall sowing season shall be at the Contractor's expense.
- 5. Cost to inventory and restore existing tree lawn landscape i.e., decorative stone, mulch, trees, brick pavers or any other special features damaged by the Contractor shall be included in this bid item.
- 6. Intent is to provide restoration of disturbed areas that will match the existing lawns beyond the right of way. Contractor shall inventory project limits prior to bidding & construction.
- 7. Cost to excavate and regrade existing tree lawns for positive drainage to new catch basins.

The square yard price stipulated for lawn restoration of all disturbed and damaged lawn areas shall be full compensation for excavation and/or embankment of all areas to be restored to a depth necessary for placing topsoil to the grades shown or directed by the Engineer; removal and disposal of excess and unsuitable materials; preparation of the subgrade for topsoil; furnishing, placing, spreading and rolling topsoil; preparing the topsoil bed for sowing of seed; furnishing and placing soil amendments, fertilizer, peat moss and seed; maintaining lawn by watering, fertilizing, weeding, mowing, trimming and other operations as rolling, regrading and replanting as required to establish an acceptable standard of growth; inventory and restore damaged tree lawn landscape features; and the furnishing of all labor, material, tools, materials and appliances necessary to complete the work as specified or as shown.

2.28 (680) SPECIAL – DEWATERING

The lump sum price shall include furnishing, installation, testing, operating, monitoring and maintaining a dewatering system deemed acceptable by the Engineer. It shall be of sufficient scope, size, and capacity to control groundwater flow into excavations and permit construction to proceed on dry, stable subgrades. The Contractor shall employ the services of a firm that specializes in groundwater dewatering who shall design a project specified dewatering plan. The plan shall be signed by a Registered Professional Engineer in the State of Ohio. The Contractor shall perform additional investigative work as necessary to complete the design of the dewatering plan. The lump sum price shall also include the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown.

2.29 (690) GEOTEXTILE FABRIC, TYPE 2, AS PER PLAN (GEOSYNTHETIC FABRIC, MIRAFI RS380i)

Method of Measurement

The quantity to be paid of geosynthetic fabric (MIRAFI RS380i or approved equal) shall be the actual square yard area of covered subgrade using woven geotextile fabric completed and accepted in place excluding all overlaps.

Basis of Payment

The unit price stipulated per square yard of geosynthetic fabric complete shall be full compensation for furnishing and properly installing the geosynthetic fabric in accordance with manufacturer's recommendation to the pavement subgrade unless directed otherwise by the Engineer; and furnishing all labor, tools, materials and equipment necessary to complete the work as specified or as shown.

2.30 (SPC) UTILITY COMPANY CHARGES ALLOWANCE

This Allowance has been included in the Bid Proposal in each contract to be utilized as directed by the utility company requirements to hold poles during the storm sewer installation in accordance with the general note in the plan set. Any portion of the allowance not utilized shall be credited to the Owner.

2.31 (SPC) CONTINGENCY / DISCRETIONARY ALLOWANCE

A Contingency / Discretionary Allowance has been included in the Bid Proposal in each contract to be utilized as directed by the Engineer for unscheduled work items not included on the proposal forms or other changes in the work. The contingency allowance or portions thereof shall only be released upon execution of approved Change Orders or as approved by the Engineer. Any portion of the allowance not utilized shall be credited to the Owner.