

**CONTRACT DOCUMENTS
FOR
2022 AUGUSTA ROADWAY RECONSTRUCTION:
CUSHNOC DRIVE, ABENAKI ROAD, AND CUSHNOC CIRCLE**

BID # 221098

Pre-Bid Meeting: June 15, 2022 at 10:00 AM

Bid Opening: June 29, 2022 at 11:00 AM

**Tyler Pease, PE
June 3, 2022**

**City of Augusta
City Center Plaza
16 Cony Street
Augusta, Maine 04330**



**CITY OF AUGUSTA, MAINE
NOTICE TO CONTRACTORS
2022 Augusta Roadway Reconstruction**

The City of Augusta will receive sealed proposals for 2022 Augusta Roadway Reconstruction as described in the Contract documents. Proposals shall be publicly opened and read aloud at City Center Plaza, 16 Cony Street, Augusta, Maine 04330 at **11:00 AM** prevailing local time on **June 29, 2022**. Bids will be accepted from all qualified bidders. The lowest responsive bidder must have successfully completed a similar project matching this project scope in order to be considered for the award of the bid.

The work to be done under this contract consists of the following:

- Reconstruction of Cushnoc Drive, Abenaki Road, and Cushnoc Circle in accordance with the Contract Plans and these Specifications.
- Utility Work on Cushnoc Drive, Abenaki Road, and Cushnoc Circle in accordance with the Contract Plans and these Specifications.
- Any other work described in the Contract documents.

Bid documents may be viewed and downloaded from the City of Augusta website at the following link: http://www.augustamaine.gov/businesses/city_government/. To request paper copies of plans and/or the bid book, contact Tyler Pease (tyler.pease@augustamaine.gov) to make arrangements to obtain the documents.

Each proposal must be provided on the blank forms provided. The Bidder shall include a project schedule and narrative of how they plan to complete the project with an assumed award date of July 8, 2022. The completion date on the Bidder's schedule will become the project completion date, adjusted for when the Contract is signed. Bid bonds and performance bonds will be required on all bids in excess of \$50,000.

This Contract is subject to all applicable Federal Laws.

No proposal may be withdrawn within sixty (60) days after date of opening thereof. The right is reserved to waive any informality in proposal received. Award of the contract will be based on an evaluation of the total unit price base bid, construction narrative, and proposed schedule. The right is hereby reserved by the Owner to reject any or all bids, and to accept any bid that it may deem to be in the best interest of the City.

BIDDER INFORMATION

1. This project is administered by the City of Augusta. The City shall have the right and authority to determine the acceptability of work and materials in progress or completed. The City shall have the right to reject any work or materials which do not conform, in its sole opinion, to the plans and specifications or for this project.
2. The Contractor shall abide by the State of Maine Department of Transportation's Standard Specifications and Standard Details, dated March 2020. They shall also abide by any published modifications by the State of Maine. Standard Specifications referenced in the following supplemental specifications and special provisions refer to these documents. Any reference to older versions shall be understood to mean this version.
3. The City of Augusta's Technical Standards shall apply to this contract, as applicable.
4. In the case of any conflicts between the contract documents, the following shall be considered the order of prevalence, with each item superseding the item listed before, as applicable:
 - a. MaineDOT Standard Specifications and Standard Details
 - b. City of Augusta's Technical Standards
 - c. General Notes
 - d. Construction Notes
 - e. Contract Plans
 - f. Contract Specifications
5. All references in the Standard Specifications to the Commissioner, Department, Engineer, Inspector, Resident Engineers, Construction Manager, the State, or similar terms indicating authority over the project shall be interpreted for purposes of this contract to include the City of Augusta and its authorized agents and employees.
6. Indemnifications of the Maine Department of Transportation in the Standard Specifications shall be expressly interpreted for purposes of this contract to include the City of Augusta and their authorized agents and employees.
7. It is the responsibility of the Contractor to obtain the "State of Maine Department of Transportation, Standard Specifications, Revision of March 2020" with updates and the "State of Maine Department of Transportation, Standard Details for Highways and Bridges, March 2020" with updates at the expense of the Contractor, and to be fully knowledgeable of the requirements of these publications before submitting a bid for the proposed work. These publications are available for purchase from the Maine Department of Transportation, 16 State House Station, Augusta, Maine, 04333-0016, price \$10 [\$15 by mail], and Standard Details, March 2020 Edition, price \$10 [\$15 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 AM to 4:30 PM. Standard Detail updates can be found at <http://www.maine.gov/mdot/contractors/publications>.

8. This is to notify the bidder that, if the bid price submitted with this proposal appears to be extremely low or high compared to the estimated cost of performing the work, the bidder will be asked to explain in writing how the work in question is to be performed at price or prices bid before a decision is made by the City of Augusta to award a contract or reject the bid.
9. The City of Augusta reserves the right to reject any bids for reasons including, but not limited to, incomplete submissions, errors or omissions in submissions, nonconformance to bonding requirements, or cost. The City may accept any bid that it may deem to be in the best interest of the City.
10. Availability of Documents: Bid Documents are available to view and download from the City of Augusta website at http://www.augustamaine.gov/businesses/city_government/. Bid documents are made available only for the purpose of obtaining offers for this Project. Their use does not grant a license for other purposes.
11. Examination of Documents: Upon receipt of Bid Documents please verify that the documents are complete and immediately notify the Engineer upon finding discrepancies or omissions in Bid Documents.
12. Inquiries and Addenda: Direct questions by email to Tyler Pease, PE, City Engineer, City of Augusta Email: tyler.pease@augustamaine.gov
13. Verbal answers are not binding on any party. All questions must be received by 4:00 PM on June 22, 2022. Replies will be made by Addenda. Addenda will be issued to known Bidders and posted on the website. Addenda become part of the Bid Documents. No addenda will be issued after close of business on June 24, 2022. Bidders shall acknowledge the addenda on the Bid Proposal.
14. Dates:
Pre-Bid Meeting Date: **June 15, 2022**
Bid Opening Date: **June 29, 2022**
Completion Date: **September 30, 2023, or as specified in Bidder's schedule.**
15. Bonding:
Liquidated Damages: Per MaineDOT Standard Specifications Bonds Required:
-Bid Bonds: 5% of bid price for all bids in excess of \$50,000
-Performance and Surety Bonds: 100% of bid price for all bids in excess of \$50,000
16. Pre-Bid Meeting: A mandatory pre-bid meeting will be held at Augusta City Center on June 15, 2022 at 10:00 AM in Conference Room A. Bids will be accepted only from those present at the pre-bid meeting.
17. Acceptance of Offer: The Contract will be awarded based on an evaluation of the total unit price base bid, construction narrative, and schedule from a responsible and qualified bidder.

CONSTRUCTION NOTES:

1. Items 615-619 shall be used to repair all slopes impacted by the work, as shown on the Contract Plans. Any material required to repair areas damaged by the Contractor's equipment, operation, or personnel will not be measured for payment.
2. Items 629-631 shall be used only as directed by the City of Augusta.
3. The City is not specifying what, if any, work is required in 2022. All work in 2022 shall be completed by November 5, 2022, with any preceding applicable pavement deadlines remaining in effect. Utility trenches shall be stabilized and paved in accordance with the Contract Documents. Any roadwork shall be completed to include base paving and curbing in rebuilt sections of road and shall include both sides of the road. Driveway transitions may be temporary. All temporary pavement and incomplete work shall be maintained by the contractor throughout winter suspension. No separate payment will be made for winter stabilization or maintenance unless otherwise specified in the Contract Documents. Surface pavement shall be placed in a manner that there will be no transverse joints in the pavement.

BIDDING INSTRUCTIONS

FOR ALL PROJECTS:

1. Use pen and ink to complete all paper Bids.
2. As a minimum, the following must be received prior to the time of Bid opening: a copy of the Notice to Contractors, b) the completed Acknowledgement of Bid Amendments form, c) the completed Schedule of Items, d) any other certifications or Bid requirements listed in the Bid documents as due by Bid opening, e) proposed project schedule.
3. Include prices for all items in the Schedule of Items
4. Bid Guaranty acceptable forms are:
 - a) A properly completed and signed bid bond for 5% of the bid amount
 - b) An official bank check, cashier's check, certified check, US postal money order, or negotiable certificate of deposit for 5% of the bid amount

NOTICE

Interested parties will be responsible for reviewing the Bid Amendments and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment form.

For security and other reasons, all Bid Packages which are mailed shall be provided in double envelopes. The inner envelope shall have the following information provided on it:

- BID ENCLOSED – DO NOT OPEN
- RFSB Number
- Date of Bid Opening
- Name of Contractor with mailing address and telephone number

Hand-carried bids may be sealed in a single envelope with the above information written on it.

NOTICE

Bidders:

Please use the attached "Request for Information" form when submitting questions concerning specific Contracts that have been advertised for Bid, include additional numbered pages as required. RFI's may emailed to tyler.pease@augustamaine.gov.

This is the only allowable mechanism for answering Project specific questions. The City of Augusta will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

When submitting RFIs by Email, please follow the same guidelines as stated on the "request for Information" form and include the word "RFI" along with the Project name and Identification number in the subject line.

City of Augusta
Bureau of Engineering

RFI No: _____

REQUEST FOR INFORMATION

Date _____ Time _____

Information Requested for: Bid No.: _____ Bid Date: _____

Question(s): _____

Request by: Company Name: _____
Phone: (_____) _____
Email: _____

Complete the form and email to tyler.pease@augustamaine.gov. Please include the word "RFI" along with the Project Name and Bid Number in the Subject line.

**CONTRACTOR BID PROPOSAL
FOR
2022 Roadway Reconstruction**

- 1. The undersigned BIDDER proposes and agrees that if this Bid is accepted, to enter into an Agreement in the form included in the Contract Documents to complete all Work as specified or indicated in the Contract Documents (including the plans and specifications) for the Contract Price and within the Contract time indicated in this Bid and in accordance with the Contract Documents.

- 2. BIDDER accepts all of the terms and conditions of the Instructions to Bidders. This Bid will remain open for sixty days after the day of Bid opening. BIDDER will sign the agreement and submit the Contract Security, and other documents required by the Contract documents within fifteen days after the date of OWNER'S Notice of Award.

- 3. In submitting this Bid, BIDDER represents, as more fully set forth in the agreement, that:
 - a. BIDDER has examined copies of all the Contract Documents and all of the Following Addenda:

Addendum # _____	Date _____
Addendum # _____	Date _____
Addendum # _____	Date _____
Addendum # _____	Date _____

(receipt of all of which is hereby acknowledged) and also copies of the Notice to Contractors and the Instructions to Bidders;

- b. BIDDER has examined the site and locality where the Work is to be performed, the legal requirements (federal, state, and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as BIDDER deems necessary;

- c. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or a corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for himself any advantage over any other BIDDER or over OWNER. Bidder has provided a balanced bid between items and funding source groups of items.

BID PROPOSAL

Proposal of _____
Name

Tel.No.: _____ Address: _____

Email Address _____

(PLEASE WRITE OR PRINT LEGIBLY)

The name and address shown on the above lines shall be the official name and address of the person, partnership or corporation submitting this bid and must agree with the "Signature of Bidder" in the case of an individual; the "Name of Firm or Partnership" in the case of a firm or partnership; the "Name of Corporation" in the case of a corporation.

SUMMARY OF SECTIONS:

Section	Description	Schedule Attached? (Y/N)	Total
1	Cushnoc Dr, Abenaki Rd, and Cushnoc Cir. Reconstruction		
2	Cushnoc Dr, Abenaki Rd, and Cushnoc Cir. Utility Work		
		PROJECT TOTAL:	

Note: Items with quantities in parentheses will be paid as a lump sum. Quantities shown are intended only to assist in the estimation of the Work.

SCHEDULE OF ITEMS:
Section 1: Cushnoc Dr., Abenaki Rd., and Cushnoc Cir.
Reconstruction

Item #	Description	Estimated Qty	Unit	Unit Price	Total
203.2	COMMON EXCAVATION	6,300	CY	\$	\$
304.1	AGGREGATE SUBBASE COURSE – GRAVEL	5,600	CY	\$	\$
304.101	AGGREGATE SUBBASE COURSE – MAINT. OF TRAFFIC GRAVEL	200	CY	\$	\$
403.207	HOT MIX ASPHALT – 19 MM	1,200	T	\$	\$
403.208	HOT MIX ASPHALT – 12.5 MM	390	T	\$	\$
403.209	HOT MIX ASPHALT 9.5 MM (INCIDENTALS)	230	T	\$	\$
409.15	BITUMINOUS TACK COAT - APPLIED	650	G	\$	\$
603.15	12 INCH CULVERT PIPE OPTION I	31	LF	\$	\$
605.09	6 INCH UNDERDRAIN TYPE B	2,300	LF	\$	\$
608.26	CURB RAMP DETECTABLE WARNING FIELD	140	SF	\$	\$
609.31	CURB TYPE 3	3,100	LF	\$	\$
613.319	EROSION CONTROL BLANKET	14	SY	\$	\$
615.07	LOAM	390	CY	\$	\$

618.13	SEEDING METHOD NUMBER 1	31	UN	\$	\$
619.12	MULCH	31	UN	\$	\$
629.05	HAND LABOR, STRAIGHT TIME	10	HR	\$	\$
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR	\$	\$
631.172	TRUCK-LARGE (INCLUDING OPERATOR)	20	HR	\$	\$
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS	\$	\$
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS	\$	\$
659.1	MOBILIZATION	1	LS	\$	\$
703.19	GRANULAR BORROW	1,200	LF	\$	\$
SECTION TOTAL:					\$

Tyler Pease, PE
City of Augusta
16 Cony Street
Augusta, Maine 04330

The undersigned having carefully examined the site of the work, the Plans, the Maine Department of Transportation Standard Specifications, March 2020, Supplemental Specifications, Special Provisions, appended provisions, Contract Agreement and Contract Bonds for the 2022 AUGUSTA ROADWAY RECONSTRUCTION on which proposals will be received until the time specified in the "Notice to Contractors" do(es) hereby propose and offer to enter into a contract to supply all the materials, tools, labor and equipment to construct the whole of the work in strict accordance with the terms and conditions of this contract.

SUPPLEMENTAL ADDITIONS: In conformance with requirements of Section 109 Measurement and Payment, the undersigned agrees to provide additional work as ordered, at unit prices listed above in the "Schedule of Items". It is further understood that the unit prices are for work items in place, and include all labor, materials, delivery, de-watering, shoring, removal, temporary construction, overhead, profit, insurance, incidentals or any other cost items to cover the finished work of the several kinds called for. Changes shall be processed as called for in the General and Supplementary Conditions.

PROPOSED SUBSTITUTIONS: After the award of the contract, the Contractor may introduce any material or materials or Installation Methods, not specified in the Bidding Documents but deemed worthy of consideration. A cost comparison must be included giving the comparison with Material or Installation Method specified and the reason for suggested substitution. Basic bid shall be specified.

Submitted on _____, 2022

By _____
(Firm or Corporation) (Business Address)

Telephone _____ State of Incorporation _____

By _____
(Print Name, Title, authorized to sign)

Signature of Bidder: _____

Email address _____

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the City of Augusta (Owner), and _____, a corporation or other legal entity organized under the laws of the State of _____, with its principal place of business located at _____

The Owner and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, for the **RFSB No. 221098- 2022 Augusta Roadway Reconstruction in the City of Augusta, County of Kennebec, Maine.** The Work includes the construction, maintenance during construction and warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Owner shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work on or before **September 30, 2023, or as specified by the schedule submitted with the Bid, as adjusted based on Contract signing date.** Further, the Owner may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, March 2020 Edition and related Special Provisions.

C. Price.

The quantities and bid prices as listed in the Schedule of Items included in these documents will be used as the basis for determining the Contract amount which is \$_____.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, March 2020 Edition, Standard Details March 2020 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, appended provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications March 2020 Edition, Standard Details March 2020 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: **2022 AUGUSTA ROADWAY RECONSTRUCTION in the City of Augusta, County of Kennebec, State of Maine** do(es) hereby offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work in strict accordance with the terms of this solicitation, and to provide the appropriate insurance if this offer is accepted by the City in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached bid sheet which may be ordered by the Owner, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, March 2020 Edition, and as addressed in the contract documents.

Second: To begin the Work as stated in Section 107.2 of the Standard Specifications March 2020 Edition and complete the Work within the time limits given in the Special Provisions of this Contract.

Third: That this offer shall remain open for sixty (60) calendar days after the date of opening of bids.

Fourth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the City.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

Date

(Signature of Legally Authorized Representative
of the Contractor)

Witness

(Name and Title Printed)

G. Award.

Your offer is hereby accepted. This award consummates the Contract, and the documents referenced herein.

CITY OF AUGUSTA, MAINE

Date

By: Susan E. Robertson, City Manager

Witness

SECTION 101
CONTRACT INTERPRETATION

The provisions of Section 101 shall apply with the following revisions:

Commissioner

REPLACE:

“The Commissioner of Transportation established by 23 MRSA §4205.”

With:

“The City of Augusta, Maine”

Department.

REPLACE:

“The Department of Transportation of the State of Maine, as established by 23 MRSA ' 4202 et. Seq.”

With:

“The City of Augusta, Maine”

Project Manager.

REPLACE:

“The Department’s duly authorized representative for overall coordination of the Project.”

With:

“The City of Augusta, Maine”

Resident:

REPLACE:

“The Department’s on-site representative.”

With:

“The City of Augusta, Maine.”

ADD:

“Engineer: Shall mean the City Engineer or the City of Augusta’s duly authorized representative.”

102.4.1 Estimated Quantities: A schedule of Quantities has been prepared by the Engineer for bidding purposes. The Schedule of Quantities is informational only, and is not necessarily inclusive of all elements required to complete this project. Therefore, the actual quantities needed to complete this project may differ from those contained in the Schedule. It is the Bidder’s sole responsibility to estimate sufficient quantities to complete the job as designed.

SECTION 104
UTILITES

UTILITY COORDINATION

The Contractor has primary responsibility for coordinating their work with Utilities after contract award. The Contractor shall communicate directly with the utilities regarding any utility work necessary to maintain the Contractor's schedule and prevent project construction delays. The Contractor shall notify the Resident of any issues.

THE CONTRACTOR SHALL PLAN AND CONDUCT WORK ACCORDINGLY.

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications, **IS NOT REQUIRED**.

GENERAL INFORMATION

Temporary utility adjustments **ARE NOT** anticipated as part of this project. If any unexpected utility relocations become necessary, they shall be scheduled in compliance with Section 104 of the Standard Specifications and shall be performed by the appropriate utility company in conjunction with the work by the Contractor. All work shall be done at the Contractor's request and expense with no additional cost or schedule impacts to the City of Augusta.

All adjustments shall be made by the respective utility unless otherwise specified herein.

AERIAL

Aerial utility adjustments **ARE NOT** anticipated as part of this project. If any unexpected utility relocations become necessary, they shall be scheduled in compliance with Section 104 of the Standard Specifications and shall be performed by the appropriate utility company in conjunction with the work by the Contractor.

SUBSURFACE

Subsurface utility adjustments **ARE** anticipated as part of this project. If any unexpected utility relocations become necessary, they shall be scheduled in compliance with Section 104 of the Standard Specifications and shall be performed by the appropriate utility company in conjunction with the work by the Contractor.

Greater Augusta Utility District

Greater Augusta Utility District (GAUD) has drainage lines, sewer mains, and water mains within the limits of the project. GAUD intends to replace, relocate, and adjust sections of their facilities. GAUD has entered into an agreement with the City of Augusta to include this work in the schedule for construction. This work shall be completed in accordance with the plans and special provisions for the work included in the contract documents and shall be completed in a manner that these systems always remain fully functional unless otherwise approved by GAUD. GAUD requires 2 weeks notification prior to work taking place to schedule their on-site representative for inspection purposes. If a suspension of work occurs, GAUD requires 2 weeks notification prior to the work starting back up to schedule inspection.

SECTION 105
GENERAL SCOPE OF WORK

Delete the entire Section 105.6 and replace with the following:

105.6.4 Boundary Markers: The Contractor shall preserve and protect from damage all monuments or other points that mark the boundaries of the Right-of-Way or abutting parcels that are outside the area that must be disturbed to perform the Work. The Contractor indemnifies and holds harmless the Owner from all claims to reestablish the former location of all such monuments or points including claims arising from 14 MRSA § 7554-A. For a related provision, see Section 104.3.11 - Responsibility for Property of Others.

LIMITATIONS OF OPERATIONS

1. Permitted workdays are Monday through Saturday. The Contractor shall not work on Sundays and Holidays without prior approval by the City of Augusta. Saturday work is not required.
2. Work hours shall comply with the City's Noise Ordinance, 7:00 AM – 10:00 PM, unless otherwise approved.
3. The contractor shall maintain, at a minimum, one 11-foot lane at all times.
4. Absences must be requested at least 72 hours in advanced and are subject to approval by the City of Augusta based on existing roadway condition, project deadlines, adherence to schedule, traffic restricts, detours, etc. The Contract must ensure that the roadway surface and signage are maintained for safe passage of the travelling public during any approved absences. The Contract Completion Date will not be modified due to approved absences.
5. Once operations commence, for every weekday not worked, the Contractor will be charged liquidated damages per Section 107.7.2 of the Standard Specifications, excluding days lost to weather, holidays, or approved absences.

SPECIAL PROVISION
SECTION 106
QUALITY

106.3.2 Quality Requirements: The existing provisions of this section are amended with the following:

Add (at the end of the Section):

“All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents;”

106.3.7 Sampling and Testing. The existing provisions of this section are amended with the following additions:

All tests, analysis or other evaluation of material samples to be used on the project for assurance of compliance with specifications will be made at the expense of the Owner.

After checking and verifying all field measurements and after complying with applicable procedures specified in the Specifications, Special Provisions, Contractor shall submit to Engineer five copies of Shop Drawings for review, approval, or other appropriate action. These Shop Drawings shall be submitted in accordance with the accepted schedule of progress for review by the Engineer in a timely manner as to cause no delay in work. These submittals will bear a stamp or specific written indication that Contractor has satisfied Contractor’s responsibilities under the Contract Documents with respect to the review of submission. All submissions will be identified as Engineer may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable Engineer to review the information as required.

Contractor shall also submit to Engineer for review and approval with such promptness as to cause no delay in work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that Contractor has satisfied Contractor’s responsibilities under the Contract Documents with respect to the review of the submission. Each sample shall also identify clearly as to material, supplier, pertinent data such as Specification Subsection reference, catalog numbers and the use for which intended.

Before submission of each Shop Drawing or sample, Contractor shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed. Contractor shall insure that each submittal is coordinated with other Shop Drawings and samples and with the

requirements of the work and the Contract Documents such that complete information is available for adequate review by the Engineer.

At the time of each submission, Contractor shall give Engineer specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents. In addition, each submittal shall have a specific notation made indicating the deviation for Engineer's review.

Engineer will review and take appropriate action on submittals with reasonable promptness. If approved, the Engineer's review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. Engineer's approval shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such does not indicate approval of the assembly in which the item functions. Contractor shall make corrections required by Engineer, and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

Engineer's approval of submittals shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents. This may be excepted if the Contractor has called Engineer's attention to each such variation in writing on each submission and the Engineer has given written approval of each such variation by a specific written notice thereof incorporated in or accompanying the submittal.

Where a Shop Drawing or sample is required by the Specifications, any related work performed prior to Engineer's review and approval of the pertinent submission will be the sole expense and responsibility of Contractor.

The City will not perform degradation testing on this project. Material qualities that may be tested include, but are not limited to, the following:

- Aggregate Gradation
- Soil Compaction
- Asphalt Compaction
- Asphalt Content
- Concrete Compressive Strength

SPECIAL PROVISION
SECTION 107
PROSECUTION AND PROGRESS
(Contract Time)

1. The Contractor may begin work anytime in accordance with Standard Specification 104.4.2 and upon approval of all required submittals and receipt of a Notice to Proceed. The Contract Completion Date will be no later than **September 30, 2023, or as specified by the Contractors schedule submitted with the bid and adjusted for the Contract signing date.**
2. At least 15 days prior to the desired Begin Construction Date the Contractor will submit an updated Schedule of Work in accordance with Standard Specification 107.4.2 to the Resident. Upon receipt of the schedule, a pre-construction meeting will be scheduled.
3. A 48-hour notice will be required for any changes in the work schedule.

SPECIAL PROVISION
SECTION 110
INDEMNIFICATION, BONDING AND INSURANCE

110.21 Bonds.

REPLACE:

“The bonds shall each be in the full Contract amount, payable to the Treasurer of the State of Maine and on the Department form....”

With:

“The bonds shall each be in the full Contract amount, payable to the City of Augusta, Maine.”

SPECIAL PROVISION
SECTION 304
AGGREGATE SUBBASE COURSE
MAINTENANCE OF TRAFFIC GRAVEL

304.01 Description: This work shall consist of placing gravel used to maintain a suitable road surface for the traveling public during construction.

304.02 Construction Requirements: The work shall consist of all necessary equipment, materials, and labor to provide, install, maintain and remove the gravel. The gravel used for this maintenance of traffic item shall not be used for Item 304.10 Aggregate Subbase Course – Gravel.

- Once a section of maintenance of traffic gravel has been placed, it shall be the Contractor's responsibility to maintain that section of gravel throughout the project and shall only be paid for once.
- Any placement of maintenance of traffic gravel prior to authorization from GAUD or the Engineer shall be at the Contractor's expense.
- Any placement of maintenance of traffic gravel outside of the limits established by GAUD or the Engineer shall be at the Contractor's expense.

304.03 Materials: Materials shall meet the requirements specified in Division 700 – Materials:

- Aggregate for Base and Subbase – Type D – 703.06c

Other suitable materials may be used if approved by the Engineer.

304.04 Method of Measurement: Maintenance of Traffic Gravel will be measured by the area and depth in place to the extents directed by GAUD or the Engineer.

304.05 Basis of Payment: The accepted quantity of Maintenance of Traffic Gravel will be paid at the contract price per cubic yard. This payment will be considered full compensation for all labor, equipment, and materials necessary to complete the work, including, but not limited to the following:

- Furnishing, placing, compacting, and removal of aggregate for subbase material as directed by GAUD or the Engineer.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
304.101 Aggregate Subbase Course – Maintenance of Traffic Gravel	Cubic Yard

SPECIAL PROVISION
SECTION 609
CURB
SLIPFORM CONCRETE CURB

609.01 Description: This work shall consist of furnishing and placing Slipform Concrete Curb in close conformity with the plans or as authorized by the Resident

609.02 Materials: Except as provided below, the materials used shall meet the requirements in Section 700 – Materials:

Portland Cement and Portland Pozzolan Cement	701.01
Water	701.02
Air-Entraining Chemical Admixtures	701.03
Fine Aggregate for Concrete	703.01
Coarse Aggregate for Concrete	703.02

Mix design for the Portland Cement Concrete shall meet the requirements of Class A or Class LP with the exception that permeability requirements will be waived.

609.03 Construction: Construction of Slipform Concrete Curb shall comply with the requirements of this section.

609.031 Preparation of Base: Slipform Concrete Curb shall be placed on a base of either Portland Cement Concrete or Hot Mix Asphalt. Before placing the curb, the foundation course shall be thoroughly cleaned of all foreign and objectionable material. The Contractor shall not place Slipform Concrete Curb on wet or frozen base. The Contractor shall apply an epoxy resin adhesive meeting the requirements of AASHTO 235, Type II.

609.032 Placement: Concrete shall be placed with an approved slipform machine that will produce a finished product complying with the design shown on the Plans and Contract documents. Minimum temperature for application will be 36°F and rising. The curb shall be placed on a firm, uniform base of either Portland Cement Concrete or Hot Mix Asphalt, shall conform to the section shown in the Contract documents, and shall match the appropriate grade. Expansion joints will be required wherever the curb meets rigid structures, such as buildings. Contraction joints shall be placed at 10' intervals (maximum) using saw-cut methods. Joints shall be cut into the concrete between 1 and 3 inches and shall be constructed perpendicular to the face of the curb. Wherever possible, the joints shall be aligned with other adjacent joints, such as sidewalk joints.

609.033 Curing and Sealing: Proper curing shall be insured through the use of a curing/sealing compound spray that meets ASTM 1315 Type 1-D – Class A, a curing compound that meets ASTM 309 Type 1-D, or by methods described in Section 502.12 of the Standard Specifications. If a combination curing/sealing compound is not used, a separate sealing compound shall be applied after the concrete has cured.

609.034 Protection: Slipform Concrete Curb shall be adequately protected from impact damage for a minimum of 72 hours after placement. If the air temperature drops below 36°F during this time, the Contractor shall protect the curb with plastic sheeting, straw, or other approved method to retain heat.

609.035 Acceptance: Curb may be rejected for inconsistencies in finish and alignment or deficiencies in entrained air content or compressive strength. All damaged or rejected curb shall be removed and replaced at the Contractor's expense.

609.04 Method of Measurement: Concrete Slipform Curb will be measured for payment by the linear foot along the face of curb at the elevation of finished grade, completed in-place and accepted by the Resident.

609.05 Basis of Payment: The accepted quantities of curb will be paid for at the contract unit price per linear foot. Such payment will be considered full compensation for all materials, labor, and incidentals necessary to complete the installation of Concrete Slipform Curb.

Removal of existing curb and backing up of curb, as necessary, will not be paid directly, but will be considered incidental to the Concrete Slipform Curb Item.

Terminal Ends for Concrete Slipform Curb will not be measured separately for payment, but will be measured and included for payment in the total quantity of Concrete Slipform Curb, as described in Section 609.04.

Payment will be made under:

<u>Pay Item:</u>	<u>Pay Unit:</u>
609.21 Concrete Slipform Curb	LF

SPECIAL PROVISION
SECTION 652
MAINTENANCE OF TRAFFIC

652.8.1.2 Payment by Lump Sum: Amend this section with the addition of the following:

“The contract lump sum price for Maintenance of Traffic Control Devices shall be full compensation for all equipment, labor, and materials necessary to comply with the Contractor’s Traffic Control Plan. This includes, but is not limited to, construction signs, drums, cones, barricades, and flaggers.”

The Contractor shall submit a traffic control plan for the overall project for approval by the City. The traffic control items in this pay item shall be considered for the road reconstruction and paving items; the traffic control for the utility work shall be in accordance with the Measurement and Payment section of GAUD’s bid documents.

SPECIAL PROVISION
SECTION 703
AGGREGATES

703.01 Description: This work shall consist of placing Type B Underdrain Sand or ¾" stone above the storm drain trench as shown on the Drawings. This item covers the fill material from the top of the stone of the storm drain (six (6) inches above the top of the pipe) to subgrade elevation.

703.02 Construction Requirements: The work shall consist of all necessary equipment, materials, and labor to provide and install, granular material above the storm drain trenches that are oriented parallel to the road, exclusive of underdrain trenches. Either sand or stone may be used, if sand is used, non-woven geotextile shall be placed in between the sand and the stone of the storm drain trench.

703.03 Materials: Materials shall meet the requirements specified in Division 700 – Materials:

- Crushed Stone ¾-Inch – 703.13
- Granular Borrow – 703.19
- Underdrain Backfill Material – 703.22
- Separation Geotextile – 722.04

703.04 Method of Measurement: Measurement will be per linear foot of trench filled with material above the storm drain.

703.05 Basis of Payment: The accepted quantity of Granular Borrow will be paid at the contract price per linear foot of trench. This payment will be considered full compensation for all labor, equipment, and materials necessary to complete the work, including, but not limited to the following:

- Furnishing, placing, and compacting granular fill.
- Furnishing and placing separation geotextile if sand is used above the stone.

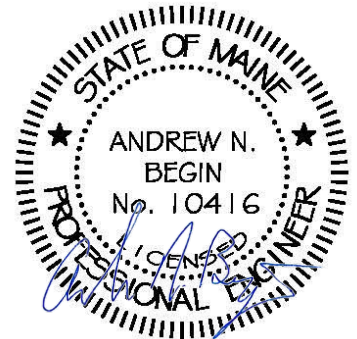
Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
703.19 Granular Borrow	Linear Foot

DOCUMENTS AND SPECIFICATIONS

FOR

CUSHNOC DRIVE STORM DRAIN REPLACEMENT WATER AND SEWER STRUCTURE ADJUSTMENTS



5-26-22

AUGUSTA, MAINE

MAY 2022

Summary of Utility Work
Greater Augusta Utility District

Cushnoc Drive Storm Drain Replacements Water and Sewer Structure Adjustments

The Greater Augusta Utility District (GAUD) is responsible for the Water, Sewer and Storm Utilities on this project. The following outlines the scope of work for GAUD staff, and the scope of work for the hired contractor as it relates to our utilities. The District will be responsible for providing the necessary castings that are not being reused, or that are new. Specifications for precast structures, mortar, grade rings, brick, etc. can be found online at:

http://www.greteraugustautilitydistrict.org/docs/GAUD_Specifications_April_2017-2.pdf

Water System Infrastructure

- The Contractor is responsible for all water service shut offs and valves boxes in the construction area.
- The Contractor will raise all water service shut offs and valves boxes in the pavement prior to final paving. Contractor to provide a 1 week notice.
- The Contractor will adjust all water service shut offs prior to final grading.
- GAUD will provide service boxes, gate box tops and gate box covers if existing castings cannot be reused.
- GAUD will inspect work done by others.
- The Contractor shall replace damaged infrastructure caused by the work.

Sanitary Infrastructure

- The Contractor shall rebuild all sanitary structures identified in the work scope, for the proper pavement grade.
- GAUD will provide frame and cover inventory, if existing castings cannot be reused.
- The Contractor is responsible for structure adjustments.
- GAUD will inspect work done by others.
- The Contractor shall replace damaged infrastructure caused by the work.

Storm Drain Infrastructure

- The Contractor shall upgrade the storm drain system as shown on the plans and described in the contract documents.
- The Contractor shall rebuild all storm structures identified in the work scope, for the proper pavement grade.
- GAUD will provide frames and covers (or grates) for newly installed infrastructure.
- GAUD will provide frame and grates for existing storm structures if existing castings cannot be reused.
- The Contractor is responsible for structure adjustments on existing and newly installed infrastructure.
- GAUD will inspect work done by others.

Storm Drain Replacement and Water, Sewer, Storm Structure Adjustments

1. DESCRIPTION:

The Contractor shall provide all goods and services necessary to complete the construction described in the Contract Documents for the Project (the "Work"). The Work consists of Storm Drain Replacement, Adjusting Gate Box Tops, Sanitary and Storm frames and covers (or grates). All work associated with the Storm Drain replacement must be accomplished in strict compliance with GAUD Specifications. Adjusting Gate Box Tops, Frames and Covers (hereinafter referred to F & C) associated with sanitary sewer manhole structures, newly installed storm drain manhole structure and catch basin structures to accommodate the City of Augusta's Street work on Cushnoc Drive. All Gate box tops and structures F & C must be rebuilt prior to final paving by the City of Augusta's contractor. This work will generally include the cutting and removal of pavement; excavation around existing gate boxes to a minimum of 12" below the top section; removal of existing frame and cover and all brick or supporting structure down to the top section; removal of all mortar on the top section to create a clean flat surface; removal of any debris that happens to fall into gate boxes and the bottom of the manhole structure, installation of precast concrete grade ring of appropriate thickness under frame and cover; application of mortar to set grade ring on top of structure and frame on top of grade ring; installation of new gate box tops and F & C's set to grade; GAUD will provide new F & C's to replace worn F & C's deemed not suitable for use; cutting of any frame corners overhanging structure; parge coating of frame and grade rings to top of manhole structure; backfill and compaction of gravel in the excavation to within 6" of the existing shim course pavement grade. Installation and compaction of HMA pavement within excavated area.

2. MATERIALS:

Temporary Steel Plates - Steel plates shall be a minimum of 5/8" thick x 36" wide and 36" long and be rated to support an H-20 loading. Plates shall be flat as to create a tight bond with the surface of the manhole structure to prevent any soils from entering structure.

Precast Concrete Grade Rings – Grade Rings shall be precast reinforced concrete with a minimum 4,000 psi after 28 days.

Brick – shall be Grade H (hard) brick conforming to the Federal Specifications for Building Brick (common) Designations SS-B-656 and amendments thereto, new and of first quality, solid, sound, hard burned through out of uniform color, and equal in quality to samples which shall have been approved by the District.

Mortar – Mortar, except as otherwise specified, shall consist of one part Portland Cement Type II, and one part Mortar Cement, and four parts Mortar Sand. Sand shall be approved by the District. A quick-set mortar may be acceptable upon review of submission.

Frame and Cover (provided by GAUD) - Manhole frames and covers shall be East Jordan or approved equal. Covers shall be solid and clearly marked as "Sewer".

Frames shall be provided to accept a 24" diameter cover and shall be a height of 5".

Frame and cover shall be rated for an H-20 loading.

Pavement Replacement – Pavement replacement shall meet the MEDOT specifications for Hot Mix Asphalt 12.5 mm Base and shall be placed in lifts of a compacted thickness of no greater than 2". All butt joints shall be swept clean and tack-coated prior to installation of hot mix asphalt. Tack

coat only needs to be applied when installing hot mix asphalt after raising F & C prior to final surface paving by the City's contractor.

3. CONSTRUCTION:

The Contractor shall coordinate all of its Work with the paving operations. Gate Box and F & C adjustments may be required to be performed at night, if requested by the contractor.

Contractor is responsible for all traffic control associated with the adjustment Gate Boxes and F & Cs, including but not limited to, signage; flagging, if necessary; cones; barricades; special reflective equipment for nighttime work; traffic officers, if necessary; and any other traffic control devices required per the MUTCD and/or the authority having jurisdiction.

Contractor shall cut existing pavement around each Gate Box and manhole F & C to be adjusted by a means that will create a smooth, flat vertical surface. Pavement openings per each manhole F&C adjustment shall be no greater than 6 feet wide by 6 feet long. All pavement cutting by mechanical means shall be accomplished using water to eliminate dust.

Contractor shall remove all existing pavement around each structure adjustment down to the existing gravel surface. Pavement shall be disposed of properly.

Contractor to excavate around structure to an adequate width and depth to facilitate the removal of the existing F & C down to the top of the manhole structure and place a steel plate over the manhole opening so that the opening is completely covered and the plate is lying flat on the surface.

Contractor to remove all debris that may fall into manhole structure during the removal of the existing F & C. Debris must be removed prior to installing steel plate and backfilling.

Contractor shall backfill the entire opening with the gravel that was removed to a depth of 4" below the existing roadway surface. Gravel shall be smooth and thoroughly compacted as to not settle with traffic loading. Additional gravel may be required to fill the space where the existing F & C and existing pavement were removed. This gravel is incidental to the adjustment.

The Contractor shall replace each F & C that has been deemed unfit for re-installation with a new F & Cs provided by the District. The District's field inspector will make the final determination as to each F & C reuse.

Contractor shall use Precast Concrete Grade Rings for all F & C adjustments. Grade rings shall be sized per structure adjustment so that one grade ring is used per adjustment to limit the number of joints. Lifting ears of grade rings shall be set smooth with the surface of the ring and not left to protrude. Grade ring shall be set concentric with the manhole opening. Provide adequate temporary covers to prevent accidental entry until final placement of F & C is made.

Bricks meeting the enclosed specification may be used in no more than one layer thick under the F & C or as shims to set the proper slope for the F & C. Wood shims will not be allowed.

The Contractor shall set each F & C to match the slope of the roadway in all directions and shall set the top of the frame rim at a grade that is ¼" below the final pavement grade as established by the City of Augusta. F & C shall be set concentric to the manhole opening. Used F & C shall be free of all old mortar, debris and scale prior to re-installation.

Contractor shall mortar all joints between the top of the manhole structure and the grade ring and between the grade ring and the new or existing F & C. All mortar joints shall be a minimum of 3/8" thick and a maximum of ½" thick and shall be continuous throughout the surface area of the joint.

Contractor shall trim the bottom flange of any F & C that would overhang beyond the outside vertical plane of the manhole structure. Trimming shall be accomplished by mechanical means and not by breaking bottom flange by striking with any object.

Contractor shall parge over the entire outside surface area of the components used in the adjustment of the F & C from 2" above the bottom flange of the F & C to the top of the manhole structure. The parge shall be a minimum of 3/8" thick and shall create a smooth surface along the entire outside of the adjustment components to prevent infiltration and the possibility of frost grabbing hold of the structure.

Contractor shall parge the grade ring or brick surface area inside the manhole opening to create a smooth surface with no protrusions into the opening.

All masonry work shall be protected from drying too rapidly by using burlaps which are kept moist, or by other approved means.

Contractor to remove all debris that may fall into manhole structure during the adjustment of the F & C. Debris shall be removed prior to installing pavement replacement.

Contractor shall backfill excavation as soon as all mortar has cured properly. Existing gravel may be used up to 9" below existing pavement grade then 3" of Type A gravel shall be placed as a base for the hot mix asphalt. Type A gravel shall be graded smooth matching the slope of the roadway surface in all directions and graded to allow for pavement thicknesses as outlined in Item 1 above. All gravel and backfill material shall be thoroughly compacted so no settlement occurs.

Contractor shall install 12.5mm base hot mix asphalt in each structure adjustment opening, to the pavement thicknesses as outlined in Item 1 above, prior to the surface paving taking place by the City's contractor. Pavement replacement must occur immediately following the structure adjustment to accommodate traffic. Pavement shall be installed to match existing roadway surfaces in all directions and shall be thoroughly compacted so no settlement occurs. Pavement shall be placed in maximum 2" lifts to the required thickness.

The exterior of the rim of the F & C left exposed prior to the City's contractor installing the final surface pavement shall be spray painted white to make it visible to the traveling public.

4. USE OF TEMPORARY PAVEMENT:

The utility work is meant to be installed just before the road reconstruction efforts, thus not requiring the use of temporary pavement. However, the City of Augusta was considering phasing the road work. If the Contractor chooses to complete a portion of the road work in 2022 and another portion in 2023, we understand the storm drain needs to be installed first. We do not mind the Storm infrastructure being completed in one season, if the road work is phased over two seasons. The District will entertain payment of temporary pavement for up to 650 feet of trench, 6' wide and a pavement thickness of 2-inches. Anything beyond that length will be at the contractor's expense. The use of temporary pavement will not be allowed if the Contractor chooses not to complete any roadwork within the 2022 construction season, this is meant only for phasing road reconstruction work.

Schedule of Prices
Cushnoc Drive Storm Drain Replacement, Water & Sewer Structure Adjustments
Greater Augusta Utility District

ITEM NUMBER	APPROX. QUANTITY	ITEM NAME	UNIT MEASUREMENT	UNIT PRICE	AMOUNT
1A	10'	6" PVC Pipe	L.F.	\$_____.	\$_____.
1B	160'	8" PVC Pipe	L.F.	\$_____.	\$_____.
1C	360'	12" PE Storm Pipe	L.F.	\$_____.	\$_____.
1D	520'	15" PE Storm Pipe	L.F.	\$_____.	\$_____.
1E	471'	18" PE Storm Pipe	L.F.	\$_____.	\$_____.
2A	17'	4' Dia. Manhole	V.L.F.	\$_____.	\$_____.
2B	74'	4' Dia. Catch Basin	V.L.F.	\$_____.	\$_____.
2C	4	2' DIA CB (Type "F")	Each	\$_____.	\$_____.
3	400'	Trench Insulation	L.F.	\$_____.	\$_____.
4A	9	SMH F&C Adjustment	Each	\$_____.	\$_____.
4B	3	CB F&C Adjustment	Each	\$_____.	\$_____.
4C	7	Gate Box Top Replacement	Each	\$_____.	\$_____.
5	60	Temp Pavement HMA 12.5 mm	Ton	\$_____.	\$_____.

Total Bid Price \$_____.

TOTAL, BID PRICE _____
 (Words)

MEASUREMENT AND PAYMENT

ITEM	DESCRIPTION
1	Gravity Storm Drain Pipe
2	Manholes & Catch Basins
3	Trench Insulation
4	Existing Storm Drain, Sewer Structure Adjustments and Gate Box Top Replacement
5	Temporary Pavement, HMA

ITEM NO. 1: INSTALLING PIPE – GRAVITY STORM DRAIN

This item includes all labor, materials and equipment required to furnish and install the gravity sanitary and storm drain piping as shown on the plans and described in the contract documents. The length of gravity pipe to be paid for under this item shall be the length measured in linear feet, to the nearest whole foot, along the slope of pipe for each applicable section of gravity sewer, storm drain between manhole and catch basin center lines with no deduction for manholes, wyes, tees, chimneys, catch basins or drain manholes.

The unit price per linear foot of pipe bid for respective item shall include pavement cutting, removal and disposal of pavement, trench excavation, trench shoring, dewatering, the handling and installing of the pipe, pipe bedding, non-woven geotextile fabric, cover material, including special cover materials for storm drain, replacement of temporary road base, maintenance of trench surface, removal and abandonment of existing catch basins and storm piping, capping new and abandoned mains, and all other accessories together with backfilling and compacting the trench, testing for leakage, together with all materials, labor, tools, equipment, and incidentals necessary to complete the work under each item.

Payment shall be at the unit price in the bid schedule. Partial payment shall be according to the following schedule:

Installation, Backfill & Surface Restoration	90% Bid Price
Testing and/or CCTV Inspection	10%

ITEM NO. 2: MANHOLES & CATCH BASINS

This item includes all labor, materials and equipment required to furnish and install manhole and catch basin structures as shown on the plans and described in the contract documents. Payment for manholes and catch basins shall include all excavation and backfill, pavement cutting, bedding, non-woven geotextile fabric, polyethylene wrap, boots, stainless steel clamps, manhole rungs, mortar, placement or finishing of inverts, trench shoring, trench maintenance, erosion control, restoration, insulation, all necessary drainage or dewatering, traffic control, installation of frames, grates and covers, and other equipment necessary for a complete unit shall be made at the applicable contract unit price bid for the structure listed in the Proposal. Depth will be measured from the top of the frame to the lowest invert for manholes, from top of the frame to the inside bottom of the sump for 4' dia. catch basins. F-basin's measurement will be each. This item also includes all work necessary for the removal and disposal of all old manholes and catch basins. The District reserves the right to retain old frames/covers/grates.

Catch basins and drain manholes shall be left below grade with a steel plate over the opening at the top of the structure to completely cover opening. The Contractor will bring the manhole or catch basin to finish grade as required following completion of the city road work, GAUD to provide Frame and Cover.

The applicable unit price for catch basins shall also be full compensation necessary for setting the frame and grate to match curb alignment and the top of the base pavement.

ITEM NO. 3: TRENCH INSULATION

This item includes all labor, materials and equipment required to furnish and install trench insulation as required in the contract documents or as directed by the Engineer or District Inspector.

Measurement shall be per linear foot of insulation installed (based on 4 foot width and 2 inch thickness).

Payment shall be at the unit price in the bid schedule.

ITEM NO. 4 EXISTING STORM DRAIN, SEWER STRUCTURE ADJUSTMENTS AND GATE BOX TOP REPLACEMENT

This item includes all labor, materials and equipment required to rebuild risers, reset frames and covers, replace gate box tops as described in the contract documents and as shown on the plans. This includes: site preparation, pavement cutting, excavation, permanent pavement replacement, brick, mortar, grade rings, backfilling, compaction, trench gravel, cleaning debris out of structures and gate boxes, erosion control and traffic control.

Measurement shall be per structure adjusted (rebuild & raise) and gate box top replacement following base paving.

Payment shall be at the unit price in the bid schedule.

ITEM NO. 5: TEMPORARY HOT MIX ASPHALT – 9.5 mm

These items shall meet all the requirements and specifications of the MDOT's Hot Bituminous Asphalt specification for the individual mixes and shall include all labor, materials and equipment required to furnish and install permanent hot mix asphalt pavement as described in the contract documents and as shown on the plans. This includes: road base material, grading the gravel surface, compaction of gravel surface, cutting pavement as required, milling pavement as required, furnishing and installing hot mix asphalt pavement in layers specified, tacking edges and surfaces, compaction and traffic control. Repair, replacement and shimming of pavement due to settlement within trenches, within the one year guarantee period, shall be incidental to this item. No additional payment will be made for necessary repairs, replacement or shimming.

Measurement shall be per ton of pavement actually installed within the maximum pay limit as indicated on the Aggregate Base & Paving Detail on the plans. Pavement disturbed beyond these limits or installed to a greater thickness than specified and without the direct written authorization of the District's Engineer or Inspector will not be considered for compensation.

Paving tonnage slips shall accompany each requisition containing this pay item.

Payment shall be at the unit price in the bid schedule. Partial payment shall be according to the following schedule.

Pavement installation completed:	90% of Bid Price
Retainage held for guarantee period:	10% of Bid Price