NEW CASTLE FY2025 CITYWIDE PAVING CONTRACT 2025-001 BID COMPARISON

| Item No. | Description | Quantity | Unit | Cirillo | | Greggo & Ferrara | |
|-----------|--|----------|-------|-------------|--------------|------------------|--------------|
| | | | | Unit | Total | Unit | Total |
| | | | | | | | |
| 1 | Mobilization / demobilization | | LS | \$28,400.00 | \$28,400.00 | \$23,630.00 | \$23,630.00 |
| 2 | Field Engineering and Surveying | 1 | LS | \$15,400.00 | \$15,400.00 | \$9,730.00 | \$9,730.00 |
| 3 | Maintenance of traffic | 1 | LS | \$44,400.00 | \$44,400.00 | \$15,290.00 | \$15,290.00 |
| 4 | Excavation and removal | 710 | | \$27.50 | \$19,525.00 | \$67.00 | \$47,570.00 |
| 5 | Undercutting | 160 | CY | \$78.00 | \$12,480.00 | \$100.00 | \$16,000.00 |
| 6A | Roadway Milling - 2.75 inch depth | | sy-in | \$2.25 | \$53,302.50 | \$2.50 | \$59,225.00 |
| 6B | Roadway Milling – 3.25 inch depth | 8,700 | sy-in | \$2.85 | \$24,795.00 | \$3.20 | \$27,840.00 |
| | Superpave type C surface course - 2.75 | | | | | | |
| 7A | inch depth | 1300 | tons | \$121.50 | \$157,950.00 | \$153.00 | \$198,900.00 |
| | Superpave type C surface course - 3.25 | | | | | | |
| 7B | inch depth | 470 | tons | \$124.00 | \$58,280.00 | \$139.00 | \$65,330.00 |
| | Superpave type B base course - 2.25 | | | | | | |
| 8A | inch depth | 210 | tons | \$128.00 | \$26,880.00 | \$146.00 | \$30,660.00 |
| | Superpave type B base course - 4 inch | | | | | | |
| 8B | depth | 120 | tons | \$166.00 | \$19,920.00 | \$139.00 | \$16,680.00 |
| | Type B graded aggregate base course - | | | | | | |
| 9A | 7 inch depth | 520 | tons | \$38.00 | \$19,760.00 | \$81.00 | \$42,120.00 |
| | Type B graded aggregate base course - | | | | | | |
| 9B | 8 inch depth | | tons | \$40.00 | \$8,800.00 | \$79.00 | |
| 10 | Remove and reset granite curb | 200 | | \$333.00 | \$66,600.00 | \$86.00 | \$17,200.00 |
| 11 | Remove and reset brick sidewalk | | SF | \$119.00 | \$7,140.00 | \$78.00 | \$4,680.00 |
| 12 | Detectable warning surfaces | | SF | \$162.00 | \$4,860.00 | \$78.00 | \$2,340.00 |
| 13 | Painting and stripping | 1 | LS | \$5,000.00 | \$5,000.00 | \$10,200.00 | \$10,200.00 |
| | Concrete Sidewalk - remove and | | | | | | |
| 14 | replace | 150 | | \$285.00 | \$42,750.00 | \$278.00 | |
| 15 | Concrete Curb - remove and replace | 440 | | \$127.00 | \$55,880.00 | \$86.00 | \$37,840.00 |
| 16 | Blacktop Curb - remove and replace | 100 | | \$76.50 | \$7,650.00 | \$167.00 | \$16,700.00 |
| 17 | Speed hump - remove and replace | | LF | \$200.00 | \$4,800.00 | \$236.00 | \$5,664.00 |
| 18 | Restorations | 1 | LS | \$7,500.00 | \$7,500.00 | \$19,500.00 | \$19,500.00 |
| Total Bid | | | | | \$692,072.50 | | \$726,179.00 |



CITY OF NEW CASTLE DELAWARE CONTRACT NO. 2025-001 FY2025 CITYWIDE PAVING CONTRACT

September 2024

ADDENDUM #1

City of New Castle, Delaware Contract No. 2025-001 FY25 Citywide Paving Contract September 20, 2024

This addendum is hereby made part of the Contract Documents for the referenced project. Please note the following additions, changes, corrections, and/or information and include the requirements stated herein in connection with this Contract. Work or materials not specifically mentioned herein are to be as described in the original Contract Documents. This addendum #1 contains a total of six (6) pages including this page.

- 1. The meeting minutes, and sign in sheet from the pre-bid meeting held on September 20, 2024, are attached.
- 2. Section TS-9, Paving, Part 3, Execution, Section 3.6, Speed Humps has been updated to note that Figure III-2 can be found in the DelDOT Traffic Calming Manual. An updated Page TS-35 is attached.

If you have any questions, please e-mail Brian N. Bolender, P.E. at brian.bolender@aecom.com or call 302.781.5900

END OF ADDENDUM #1

MEETING MINUTES

Date: September 20, 2024

To: All Plan Holders

From: Brian N. Bolender, PE

Subject: City of New Castle FY25 Citywide Paving Contract

Meeting Date: September 20, 2024

Contract No. Contract 2025-001

PRE-BID MEETING:

ATTENDEES: Per Sign In Sheet Attached

LOCATION: Teams Virtual Meeting

Sealed bid proposals for "Contract 2025-001 City of New Castle FY25 Citywide Paving Contract" as described in the proposal package, for the City of New Castle, Delaware, will be received from qualified bidders until 1:30 PM on October 3, 2024, at the City Administration Building, 220 Delaware Street, New Castle, Delaware, 19720.

On September 20, 2024, an optional pre-bid meeting for the **New Castle FY25 Citywide Paving Contract** project was held at 1:30 PM via a virtual Teams meeting.

The following topics were discussed:

- 1. Attendance at the pre-bid meeting is <u>not mandatory</u>. The City of New Castle may accept bids from bidders not attending the meeting.
- 2. All questions related to the bid shall be submitted in writing to either the City of New Castle or the engineer, AECOM. Contact information will be provided with these minutes.
- 3. All questions related to the bid must be submitted at least seven calendar days prior to the bid date. Responses to the questions will be provided via addendum if the City or Engineer feels it is necessary. The last day for questions is September 26, 2024.

- 4. Bids are scheduled to be open at 1:30 PM on October 3, 2024. No bids will be accepted after 1:30 PM. Bids are not to be submitted by email any bids submitted by email will be discarded. Bids are to be delivered to the City Administrator at the City Administration Building, 220 Delaware Street, New Castle, 19720
- 5. Payment of prevailing wages is required on the Project. The wage rate schedule is Highway Construction and is dated March 15, 2024 (a certified copy is included with the bid documents). The general contractor and all subcontractors will be required to report wages as stipulated in the Bid Documents.
- 6. Minority Business Enterprises (MBE), Disadvantaged Business Enterprises (DBE) and Women Business Enterprises (WBE) will be afforded full opportunity to submit bids on this contract and will not be subject to discrimination on the basis of race, color, national origin, sex, religion, age, disability or sexual orientation in the consideration of this award. MBE, DBE and /or WBE participation is not required on this project.
- 7. Contractors must complete and submit Pages BF-1 to BF-4, and BP-1 with their bid, along with a 10% bid bond which is on sheet BB-1.
- 8. Contractors must indicate acceptance of all Addenda on the Bid Forms.
- 9. Addenda will be issued to those entities known by the City or AECOM to have received a complete set of Bidding Documents.
- 10. Addenda will not be issued later than four days prior to the date for receipt of Bids, unless the Request for Bids is being withdrawn or the Bid Opening Date is being extended.
- 11. The Contractor is required to submit one original copy of the bid in a clearly marked Sealed Envelope, as noted in the Invitation to Bid and the Bid Documents.
- 12. The Contractor will be required to provide a Performance and Payment Bond. The Bonds shall be issued for 100% of the value of the Total Bid.
- 13. The Contractor will be required to possess a State of Delaware business license.
- 14. The Bid will be awarded based on the Total Bid.
- 15. The completion date for this project shall be a maximum of 120 calendar days beginning on the actual start date of the project as established in the Notice to Proceed, expected to be on or around November 15, 2024.

- 16. The requirements for Insurance are included in the Contract Documents.

 Workmans Compensation and Liability Insurance are required. The City of New Castle shall be named as an additional insured.
- 17. Working hours are from 7 to 7 Monday through Friday, and 9 to 7 on Saturday. The City can grant special permission to work outside these hours if requested and the City agrees with the request.
- 18. Description of Work was provided by Brian Bolender, AECOM. Maps showing the five locations of proposed work, and a detailed description for each location is included in the Contract documents.
- 19. Quantities and measurements shown on the Bid Tab, Page BP-1, are for bidding and contract purposes only. Quantities and measurements supplied or placed and verified by the Owner or Engineer shall determine payment.
- 20. Various submittals are required as specified in the technical specifications.
- 21. A 72 hour advance notice for all properties being impacted is required.
- 22. Submittals required to be signed by a Delaware PLS can also be signed by a Delaware PE.
- 23. Traffic control is a lump sum bid item (called Maintenance for Traffic in specifications).
- 24. There are no plans, only the bid specifications which includes maps depicting the locations covered under the specifications.
- 25. There was a question concerning the installation of ADA ramps. The ramps will be installed in locations noted in the field and will consist of detectable warning surfaces as well as the underlying concrete or brick.
- 26. There was also a question concerning the replacement of a speed hump on Buttonwood Avenue. As noted in the specifications, the speed hump will be installed in accordance with DelDOT details, including the installation of the required stripping.

The minutes of the meeting have been prepared by AECOM. We feel they accurately reflect the discussions of the meeting. Any additions, deletions or corrections to these minutes should be forwarded to the Engineer, in writing within 10 days. If no comments are received, the minutes presented above shall be considered acceptable to all parties

Sign In Sheet

Project: City of New Castle FY25 Citywide Paving Contract Contract 2025-001

September 20, 2024 Date:

Meeting: Pre-Bid Meeting

| Name | Representing | Phone No. | Email Address |
|-------------------|--------------------|--------------|--------------------------------------|
| Brian Bolender | AECOM | 302.781.5900 | brian.bolender@aecom.com |
| Antonina Tantillo | City of New Castle | 302.322.9812 | atantillo@newcastlecity.delaware.gov |
| Courtaney Taylor | City of New Castle | 302.221.4532 | ctaylor@newcastlecity.delaware.gov |
| Pete Boyer | Greggo and Ferrari | 302.841.1974 | gnfpboyer@gmail.com |
| | | | |
| | | | |
| | | | |
| | | | |

3.5 PLACING WMA SUPERPAVE

A. Machine on prepared surface, spread uniformly, and strike off. Place by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted per DelDOT standards.

B. Base Course:

1. Base course placed for road patches and pipe trench repair shall be 4 inches along Buttonwood Road, and minimum of 2.25 inches at along all other roadways. Base course will be placed in equal lifts with a maximum lift thickness of 2 inches.

C. Surface Course:

1. Surface course placed following milling operations, road patches and pipe trench repair shall be a minimum of 3.25 inches along the Buttonwood Road. Along all other roadways, the surface course shall be a minimum of 2.75 inches. Surface course will be placed in equal lifts with a maximum lift thickness of 2 inches.

3.6 SPEED HUMPS

A. Construct speed humps as specified in the DelDOT Traffic Calming Manual, Figure III-2.

3.7 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of asphalt course.
 - 1. Clean contact surfaces and apply tack coat to joints.
 - 2. Offset patch joints, in successive courses, a minimum of 3 inches.
 - 3. Provide single longitudinal joint at roadway centerline. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
 - 4. Offset transverse joints, in successive courses, a minimum of 24 inches.

TABLE OF CONTENTS

- A. Specifications for this project are arranged in general accordance with the Construction Specifications Institute numbering system and format. Section numbering is discontinuous and all numbers not appearing in the Table of Contents are not used for this Project.
- B. DOCUMENTS BOUND HEREWITH

DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS

INVITATION TO BID
INSTRUCTIONS TO BIDDERS
PROJECT DESCRIPTIONS AND LOCATIONS
BID FORM
BID BOND
PERFORMANCE BOND
PAYMENT BOND
GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION
(AIA A201-2007)
SUPPLEMENTARY GENERAL CONDITIONS
(AIA A201-2007)
GENERAL REQUIREMENTS
DELAWARE PREVAILING WAGE RATES

DIVISION 1 - TECHNICAL SPECIFICATIONS

| TS-1 | MEASUREMENT | AND PAYMENT |
|------|-------------|-------------|

- TS-2 SUBMITTALS
- TS-3 FIELD ENGINEERING AND SURVEYING
- TS-4 MAINTENANCE OF TRAFFIC
- TS-5 EXCAVATION AND REMOVAL OF EXISTING MATERIALS
- TS-6 EARTHWORK
- TS-7 UNDERCUTTING
- TS-8 ROADWAY MILLING
- TS-9 PAVING
- TS-10 CAST-IN-PLACE CONCRETE
- TS-11 INSTALL DETECTABLE WARNING SURFACES (TRUNCATED DOME BLOCKS)
- TS-12 PAINTING AND STRIPING
- TS-13 SEEDING AND RESTORATION
- TS-14 CRACK AND JOINT SEALING
- TS-15 REMOVE AND RESET GRANITE CURB
- TS-16 REMOVE AND RESET BRICK SIDEWALK

END OF TABLE OF CONTENTS

INVITATION TO BID INV-1

INVITATION TO BID

Sealed bids for **the City of New Castle FY2025 Citywide Paving Contract** will be received by the City Administrator until 1:30 p.m. on Thursday, October 3, 2024, at the City Administration Building, 220 Delaware Street, New Castle, at which time they will be publicly opened and read. Bids received after the stated time will be returned unopened. The Contractor shall begin work on or about November 15, 2024.

Project involves roadway resurfacing portions of Buttonwood Avenue, West 10th Street, Kings Way, School Street, Foundry Street and Cherry Street. Work includes mobilization / demobilization, field engineering and surveying, maintenance of traffic, excavation and removal of existing materials, undercutting, roadway milling, type B and type C asphalt, graded aggregate base course, granite curb, concrete sidewalk and curb, blacktop curbing, speed humps, pavement markings, detectable warning surfaces, erosion and sediment control, and restorations. The Contractor shall complete all work within 120 calendar days of the Notice to Proceed.

Bidding documents may be obtained by contacting the City at: info@newcastlecity.delaware.gov or during normal business hours at the City Administration Building, 220 Delaware Street, New Castle, beginning Friday, September 13, 2024. A Pre-Bid Meeting will be held virtually on Friday, September 20, 2024, at 1:30 p.m. Attendance at this meeting is optional. Prospective bidders will need to register in advance when they obtain the bidding documents. A Teams meeting link will be provided prior to the meeting.

Bids shall be submitted in a sealed envelope and shall be marked clearly as follows: **Sealed Bid – Proposal for FY2025 Citywide Paving Contract** Requirements for a 10% Bid Bond, 100% Performance Bond, 100% Payment Bond and Maintenance Bond, and Contractor's Insurance are included in the Contract Documents.

Minority Business Enterprises (MBE), Disadvantaged Business Enterprises (DBE) and Women-Owned Business Enterprises (WBE) will be afforded full opportunity to submit bids on this contract and are encouraged to do so.

Each Bidder must deposit with their bid a security equivalent to 10% of the bid amount, form and subject to the conditions provided in the instructions for bidders.

The City of New Castle reserves the right to reject any or all bids and makes such award as appears most advantageous to the City.

The City may extend the time and place for the opening of the bids from that described in the advertisement, with not less than two calendar days-notice by certified delivery, facsimile machine, e-mail, or other electronic means to those bidders who have obtained bid packets.

END OF ADVERTISEMENT FOR BIDS

INVITATION TO BID INV-1

INSTRUCTIONS TO BIDDERS

TABLE OF ARTICLES

| 1. | DEFINITIONS |
|----|--|
| 2. | BIDDER'S REPRESENTATION |
| 3. | BIDDING DOCUMENTS |
| 4. | BIDDING PROCEDURES |
| 5. | CONSIDERATION OF BIDS |
| 6. | POST-BID INFORMATION |
| 7. | PERFORMANCE BOND AND PAYMENT BOND |
| 8. | AGREEMENT BETWEEN OWNER AND CONTRACTOR |

ARTICLE 1: GENERAL

| 1. | 1 | DEFINITIONS | 9 |
|----|---|--------------------|---|
| | | | |

- 1.1.1 Whenever the following terms are used, their intent and meaning shall be interpreted as follows:
- 1.2 DELETED
- 1.3 AGENCY or OWNER: The City of New Castle, Delaware (CITY).
- 1.4 DESIGNATED OFFICIAL: The City of New Castle and their designee.
- 1.5 ENGINEER: AECOM.
- BIDDING DOCUMENTS: Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement for Bid, Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders (if any), General Conditions, Supplementary General Conditions, General Requirements, Special Provisions (if any), the Bid Form (including the Non-collusion Statement), and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, as well as the Drawings, Specifications (Project Manual) and all Addenda issued prior to execution of the Contract.
- 1.7 CONTRACT DOCUMENTS: The Contract Documents consist of the Instructions to Bidders, Supplementary Instructions to Bidders (if any), General Conditions, Supplementary General Conditions, General Requirements, Special Provisions (if any), the form of agreement between the Owner and the Contractor, Drawings (if any), Specifications (Project Manual), and all addenda.
- 1.8 AGREEMENT: See Section 8 of these Instructions to Bidders.
- 1.9 GENERAL REQUIREMENTS (or CONDITIONS): General Requirements (or conditions) are instructions pertaining to the Bidding Documents and to contracts in general. They contain, in summary, requirements of laws of the State of Delaware; policies of the City of New Castle and instructions to bidders.
- 1.10 SPECIAL PROVISIONS: Special Provisions are specific conditions or requirements peculiar to the bidding documents and to the contract under consideration and are supplemental to the General Requirements. Should the Special Provisions conflict with the General Requirements, the Special Provisions shall prevail.
- 1.11 ADDENDA: Written or graphic instruments issued by the Owner / Engineer prior to the execution of the contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
- 1.12 BIDDER OR VENDOR: A person or entity who formally submits a Bid for the Materials or Work contemplated, and acting directly or through a duly authorized representative who meets the requirements set forth in the Bidding Documents.
- 1.13 SUB-BIDDER: A person or entity who submits a Bid to a Bidder for materials, labor, or both for a portion of the Work.

- BID: A complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
 BASE BID: The sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids (if any are required to be stated in the bid).
- 1.16 ALTERNATE BID (or ALTERNATE): An amount stated in the Bid, where applicable, to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- 1.17 UNIT PRICE: An amount stated in the Bid, where applicable, as a price per unit of measurement for materials, equipment, services, or a portion of the Work as described in the Bidding Documents.
- 1.18 SURETY: The corporate body which is bound with and for the Contract, or which is liable and engages to be responsible for the Contractor's payments of all debts pertaining to and for his or her acceptable performance of the Work for which he or she has contracted.
- 1.19 BIDDER'S DEPOSIT: The security designated in the Bid to be furnished by the Bidder as a guarantee of good faith to enter into a contract with the City of New Castle if the Work to be performed or the material or equipment to be furnished is awarded to him or her.
- 1.20 CONTRACT: The written agreement covering the furnishing and delivery of material or work to be performed.
- 1.21 CONTRACTOR: Any individual, firm or corporation with whom a contract is made by the Agency.
- 1.22 SUBCONTRACTOR: An individual, partnership or corporation which has a direct contract with a contractor to furnish labor and materials at the job site, or to perform construction labor and furnish material in connection with such labor at the job site.
- 1.23 CONTRACT BOND: The approved form of security furnished by the contractor and his or her surety as a guarantee of good faith on the part of the contractor to execute the work in accordance with the terms of the contract.

ARTICLE 2: BIDDER'S REPRESENTATIONS

- 2.1 PRE-BID MEETING
- 2.1.1 A pre-bid meeting for this project will be held at the time and place designated. Attendance at this meeting is optional and attendance is not a pre-requisite for submitting a Bid.
- 2.2 By submitting a Bid, the Bidder represents that:
- 2.2.1 The Bidder has read and understands the Bidding Documents, and the Bid is made in accordance therewith.
- 2.2.2 The Bidder has visited each of the sites, become familiar with existing conditions under which the Work is to be performed, and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.

| 2.2.3 | The Bid is based upon the materials, equipment, and systems required by the Bidding Documents, without exception. |
|------------|---|
| 2.2.4 | The Bidder understands and accepts that the work associated with curb ramp installation or renovation must be completed in compliance with the Americans with Disabilities Act guidelines established by the U.S. Access Board. |
| 2.3 | JOINT VENTURE REQUIREMENTS |
| 2.3.1 | For Public Works Contracts, each Joint Venturer shall be qualified and capable to complete the Work with their own forces. |
| 2.3.2 | Included with the Bid submission, and as a requirement to bid, a copy of the executed Joint Venture Agreement shall be submitted and signed by all Joint Venturers involved. |
| 2.3.3 | All required Bid Bonds, Performance Bonds, Maintenance Bonds, Material and Labor Payment Bonds must be executed by both Joint Venturers and be placed in both of their names. |
| 2.3.4 | All required insurance certificates shall name both Joint Venturers. |
| 2.3.5 | Both Joint Venturers shall sign the Bid Form and shall submit a valid Delaware Business License Number with their Bid or shall state that the process of application for a Delaware Business License has been initiated. |
| 2.3.6 | Both Joint Venturers shall include their Federal E.I. Number with the Bid. |
| 2.3.7 | In the event of a mandatory Pre-bid Meeting, each Joint Venturer shall have a representative in attendance. |
| 2.3.8 | Due to exceptional circumstances and for good cause shown, one or more of these provisions may be waived at the discretion of the City of New Castle. |
| ARTICLE 3: | BIDDING DOCUMENTS |
| 3.1 | COPIES OF BID DOCUMENTS |
| 3.1.1 | Bidders may obtain complete sets of the Bidding Documents from the City of New Castle. |
| 3.1.2 | Bidders shall use complete sets of Bidding Documents for preparation of Bids. Neither the City nor the Engineer assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. |
| 3.1.3 | Any errors, inconsistencies, or omissions discovered shall be reported to the City or Engineer immediately. |
| 3.1.4 | The City may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents. |
| 3.2 | INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS |

- 3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall report any errors, inconsistencies, or ambiguities discovered to the City or Engineer.
- 3.2.2 Bidders or Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request to the City or Engineer at least seven calendar days prior to the date for receipt of Bids. Interpretations, corrections, and changes to the Bidding Documents will be made by written Addendum. Interpretations, corrections, or changes to the Bidding Documents made in any other manner shall not be binding.
- 3.2.3 The apparent silence of the specifications as to any detail, or the apparent omission in the specifications of detailed descriptions concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and only material and workmanship of the first quality are to be used. Proof of specification compliance will be the responsibility of the Bidder.
- 3.2.4 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all permits, labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work.

3.3 SUBSTITUTIONS

- 3.3.1 The materials, products and equipment described in the Bidding Documents establish a standard of quality, required function, dimension, and appearance to be met by any proposed substitution. The specification of a particular manufacturer or model number is not intended to be proprietary in any way. Substitutions of products for those named will be considered, providing that the Vendor certifies that the function, quality, and performance characteristics of the material offered is equal or superior to that specified. It shall be the Bidder's responsibility to assure that the proposed substitution will not affect the intent of the design and to make any installation modifications required to accommodate the substitution.
- 3.3.2 Requests for substitutions shall be made in writing to the City or Engineer at least ten calendar days prior to the date of the Bid Opening. Such requests shall include a complete description of the proposed substitution, drawings, performance and test data, explanation of required installation modifications due the substitution, and any other information necessary for an evaluation. The burden of proof of the merit of the proposed substitution is upon the proposer. The City's or Engineer's decision of approval or disapproval shall be final.
- 3.3.3 If the City or Engineer approves a substitution prior to the receipt of Bids, such approval shall be set forth in an Addendum. Approvals made in any other manner shall not be binding.
- 3.3.4 The City or Engineer shall have no obligation to consider any substitutions after the Contract award.

3.4 ADDENDA

- 3.4.1 Addenda will be mailed or delivered to all who are known by the City or Engineer to have received a complete set of the Bidding Documents.
- 3.4.2 Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.

- 3.4.3 No Addenda will be issued later than four calendar days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which extends the time or changes the location for the opening of bids.
- 3.4.4 Each bidder shall ascertain prior to submitting the Bid that he or she has received all Addenda issued and shall acknowledge their receipt in their Bid in the appropriate space. Not acknowledging issued Addenda could be grounds for determining a bid to be non-responsive.

ARTICLE 4: BIDDING PROCEDURES

4.1 PREPARATION OF BIDS

- 4.1.1 A Pre-bid meeting will be held virtually on Friday, September 20, 2024 at 1:30 p.m. Attendance at the Pre-bid meeting is optional. Prospective bidders will need to register in advance when they obtain the bidding documents. A Teams meeting link will be provided prior to the meeting.
- 4.1.2 Bids will be received by the City Administrator until 1:30 p.m. on Thursday, October 3, 2024, at the City Administration Building, 220 Delaware Street, New Castle, at which time they will be publicly opened and read. Bids received after the stated time will be returned unopened.
- 4.1.3 Submit the bids on the Bid Forms included with the Bidding Documents.
- 4.1.4 Submit the original Bid Form for each bid. Bid Forms may be removed from the project manual for this purpose.
- 4.1.5 Execute all blanks on the Bid Form in a non-erasable medium (typewriter, computer printer, or manually in ink).
- 4.1.6 Interlineations, alterations or erasures must be initialed by the signer of the Bid.
- 4.1.7 BID ALL REQUESTED ALTERNATES AND UNIT PRICES, IF ANY. If there is no change in the Base Bid for an Alternate, enter "No Change". The Contractor is responsible for verifying that they have received all addenda issued during the bidding period. Work required by Addenda shall automatically become part of the Contract.
- 4.1.8 Make no additional stipulations on the Bid Form and do not qualify the Bid in any other manner.
- 4.1.9 Each copy of the Bid shall include the legal name of the Bidder and a statement whether the Bidder is a sole proprietor, a partnership, a corporation, or any legal entity, and each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current Power of Attorney attached, certifying agent's authority to bind the Bidder.
- 4.1.10 Bidder shall complete the Non-Collusion Statement form included with the Bid Forms and include it with their Bid.

4.2 BID SECURITY

4.2.1 All bids shall be accompanied by a deposit of either a good and sufficient bond to the Agency for the benefit of the Agency with corporate surety authorized to do business in this State, the form of the bond and the surety to be approved by the Agency, a security of the bidder

assigned to the Agency, for a sum equal to at least 10% of the bid plus all add alternates, or, in lieu of the bid bond, a security deposit in the form of a certified check, bank treasurer's check, cashier's check, money order, or other prior approved secured deposit assigned to the State. The bid bond need not be for a specific sum, but may be stated to be for a sum equal to 10% of the bid plus all add alternates to which it relates and not to exceed a certain stated sum, if said sum is equal to at least 10% of the bid. The Bid Bond form is attached.

- 4.2.2 The Agency has the right to retain the bid security of Bidders to whom an award is being considered until either a formal contract has been executed and bonds have been furnished or the specified time has elapsed so the Bids may be withdrawn or all Bids have been rejected.
- 4.2.3 In the event of any successful Bidder refusing or neglecting to execute a formal contract and bond within 20 calendar days of the awarding of the contract, the bid bond or security deposited by the successful bidder shall be forfeited.
- 4.3 SUBCONTRACTOR LIST
- 4.3.1 Each Bidder shall submit with their Bid a completed List of Sub-Contractors included with the Bid Form. NAME ONLY ONE SUBCONTRACTOR FOR EACH TRADE. A Bid will be considered non-responsive unless the completed list is included.
- 4.3.2 Provide the Name and Address for each listed subcontractor. Addresses by City, Town or Locality, plus State, will be acceptable.
- 4.3.3 It is the responsibility of the Contractor to ensure that their Subcontractors are in compliance with the provisions of this law. Also, if a Contractor elects to list themselves as a Subcontractor for any category, they must specifically name themselves on the Bid Form and be able to document their capability to act as Subcontractor in that category in accordance with this law.
- 4.4 EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS
- 4.4.1 During the performance of this contract, the contractor agrees as follows:
 - A. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex or national origin. The Contractor will take affirmative action to ensure the applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex, religion, disability, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post the nondiscrimination clause in conspicuous places available to employees and applicants for employment notices.
 - B. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex or national origin."
- 4.5 PREVAILING WAGE REQUIREMENT
- 4.5.1 The minimum wage rates for various classes of laborers and mechanics shall be as determined by the Department of Labor, Division of Industrial Affairs of the State of Delaware.

- 4.5.2 The prevailing wage shall be the wage paid to a majority of employees performing similar work as reported in the Department's annual prevailing wage survey or, in the absence of a majority, the average paid to all employees reported.
- 4.5.3 The employer shall pay all mechanics and laborers employed directly at the site of work unconditionally, not less often than once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the specifications, regardless of any contractual relationship which may be alleged to exist between the employer and such laborers and mechanics.
- 4.5.4 The scale of the wages to be paid shall be posted by the employer in a prominent and easily accessible place at the site of the work.
- 4.5.5 Every contract based upon these specifications shall contain a stipulation that sworn payroll information, as required by the Department of Labor, be furnished weekly. The Department of Labor shall keep and maintain the sworn payroll information for a period of 6 months from the last day of the work week covered by the payroll.

4.6 SUBMISSION OF BIDS

- 4.6.1 Enclose the Bid, the Bid Security, and any other documents required to be submitted with the Bid in a sealed opaque envelope. Address the envelope to the party receiving the Bids. Identify with the project name, project number, and the Bidder's name and address. If the Bid is sent by mail, enclose the sealed envelope in a separate mailing envelope with the notation "BID ENCLOSED" on the face thereof. The City of New Castle is not responsible for the opening of bids prior to bid opening date and time that are not properly marked.
- 4.6.2 Deposit Bids at the designated location prior to the time and date for receipt of bids indicated in the Advertisement for Bids. Bids received after the time and date for receipt of bids will be marked "LATE BID" and returned.
- 4.6.3 Bidder assumes full responsibility for timely delivery at the location designated for bid receipt.
- 4.6.4 Oral, telephonic, emailed, or telegraphic bids are invalid and will not receive consideration.
- 4.6.5 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids, provided that they are then fully in compliance with these Instructions to Bidders.

4.7 MODIFICATION OR WITHDRAW OF BIDS

- 4.7.1 Prior to the closing date for receipt of Bids, a Bidder may withdraw a Bid by personal request and by showing proper identification to the City or Engineer. A request for withdraw by letter or email, if the City or Engineer is notified in writing prior to receipt of email, is acceptable. An email directing a modification in the bid price will render the Bid informal, causing it to be ineligible for consideration of award. Telephone directives for modification of the bid price shall not be permitted and will have no bearing on the submitted proposal in any manner.
- 4.7.2 Bidders submitting Bids that are late shall be notified as soon as practicable and the bid shall be returned.
- 4.7.3 A Bid may not be modified, withdrawn or canceled by the Bidder during a forty-five (45) calendar day period following the time and date designated for the receipt and opening of Bids, and the Bidder so agrees in submitting their Bid. Bids shall be binding for 45 calendar days after the date of the Bid opening.

| ARTICLE 5: | CONSIDERATION OF BIDS | | |
|------------|--|--|--|
| 5.1 | OPENING / REJECTION OF BIDS | | |
| 5.1.1 | Unless otherwise stated, Bids received on time will be publicly opened and read aloud. | | |
| 5.1.2 | The Agency shall have the right to reject any or all Bids. A Bid not accompanied by a required Bid Security or by other data required by the Bidding Documents or a Bid which is in any way incomplete or irregular is subject to rejection. | | |
| 5.1.3 | If the Bids are rejected, it will be done within forty-five (45) calendar day of the Bid opening. | | |
| 5.2 | COMPARISON OF BIDS | | |
| 5.2.1 | After the Bids have been opened and read, the bid prices will be compared and the result of such comparisons will be made available to the public. Comparisons of the Bids will be based on the Unit Prices as provided in the Base Bid. | | |
| 5.2.2 | The Agency reserves the right to waive technicalities, to reject any or all Bids or any portion thereof, to advertise for new Bids, to proceed to do the Work otherwise, or to abandon the Work, if in the judgment of the Agency or its agent(s), it is in the best interest of the City of New Castle. | | |
| 5.2.3 | An increase or decrease in the quantity for any item is not sufficient grounds for an increase or decrease in the Unit Price. | | |
| 5.2.4 | The prices quoted are to be those for which the material will be furnished F.O.B. Job Site and includes all charges that may be imposed during the period of the Contract. | | |
| 5.2.5 | No qualifying letter or statements in or attached to the Bid, or separate discounts will be considered in determining the low Bid except as may be otherwise herein noted. Cash or separate discounts should be computed and incorporated into Unit Bid Price(s). | | |
| 5.3 | DISQUALIFICATION OF BIDDERS | | |
| 5.3.1 | The Agency may determine that each Bidder is responsible before awarding the Contract. Factors to be considered in determining the responsibility of a Bidder include: | | |
| | A. The Bidder's financial, physical, personnel or other resources including Subcontracts; | | |
| | B. The Bidder's record of performance on past public or private construction projects, including, but not limited to, defaults and/or final adjudication or admission of violations of the Prevailing Wage Laws in Delaware or any other state;. | | |
| | C. The Bidder's written safety plan; | | |
| | D. Whether the Bidder is qualified legally to contract with the State; | | |
| | E. Whether the Bidder supplied all necessary information concerning its responsibility; and, | | |
| 5.3.2 | If the Agency determines that a Bidder is nonresponsive and/or non-responsible, the determination shall be in writing and set forth the basis for the determination. A copy of | | |

| | the determination shall be sent to the affected Bidder within five (5) working days of said determination. |
|---------|--|
| 5.3.3 | In addition, any one or more of the following causes may be considered as sufficient for the disqualification of a Bidder and the rejection of their Bid or Bids. |
| 5.3.3.1 | More than one Bid for the same Contract from an individual, firm, or corporation under the same or different names. |
| 5.3.3.2 | Evidence of collusion among Bidders. |
| 5.3.3.3 | Unsatisfactory performance record as evidenced by past experience. |
| 5.3.3.4 | If the Unit Prices are obviously unbalanced either in excess or below reasonable cost analysis values. |
| 5.3.3.5 | If there are any unauthorized additions, interlineation, conditional or alternate bids or irregularities of any kind which may tend to make the Bid incomplete, indefinite or ambiguous as to its meaning. |
| 5.3.3.6 | If the Bid is not accompanied by the required Bid Security and other data required by the Bidding Documents. |
| 5.3.3.7 | If any exceptions or qualifications of the Bid are noted on the Bid Form. |
| 5.4 | ACCEPTANCE OF BID AND AWARD OF CONTRACT |
| 5.4.1 | The contracting Agency shall award any public works contract within forty five (45) calendar days of the bid opening to the lowest responsive and responsible Bidder, unless the Agency elects to award on the basis of best value, in which case the election to award on the basis of best value shall be stated in the Invitation to Bid. |
| 5.4.2 | Each Bid on any Public Works Contract must be deemed responsive by the Agency to be considered for award. A responsive Bid shall conform in all material respects to the requirements and criteria set forth in the Contract Documents and specifications. |
| 5.4.3 | The Agency shall have the right to accept Alternates in any order or combination, and to determine the low Bidder on the basis of the sum of the Base Bid items. |
| 5.4.4 | The successful Bidder shall execute a formal contract, submit the required Insurance Certificate, and furnish good and sufficient bonds, unless specifically waived in the General Requirements, in accordance with the General Requirement, within twenty (20) calendar days of official notice of contract award. |
| 5.4.5 | If the successful Bidder fails to execute the required Contract and Bond, as aforesaid, within twenty (20) calendar days after the date of official Notice of the Award of the Contract, their Bid guarantee shall immediately be taken and become the property of the City for the benefit of the Agency as liquidated damages, and not as a forfeiture or as a penalty. Award will then be made to the next lowest qualified Bidder of the Work or readvertised, as the Agency may decide. |
| 5.4.6 | Prior to receiving an award, the successful Bidder shall furnish to the Agency proof of State of Delaware Business Licensure. If the Bidder does not currently have a Business License, they may obtain an application by writing to: Division of Revenue, Carvel State Office Building, 820 French Street, Wilmington, DE 19899. A copy of the letter written to the Division of Revenue, |

sent with your Bid will be adequate proof for your firm to be considered for award until such time as you receive your license.

- 5.4.7 The Bid Security shall be returned to the successful Bidder upon the execution of the formal contract. The Bid Securities of unsuccessful bidders shall be returned within forty-five (45) calendar days after the opening of the Bids.
- 5.4.8 The Contractor shall begin work on or about November 15, 2024. The Contractor shall complete all work specified within 120 calendar days of the Notice to Proceed.

ARTICLE 6: POST-BID INFORMATION

- 6.1 CONTRACTOR'S QUALIFICATION STATEMENT
- 6.1.1 Bidders to whom award of a Contract is under consideration shall, if requested by the Agency, submit a properly executed AIA Document A305, Contractor's Qualification Statement, unless such a statement has been previously required and submitted.
- 6.2 BUSINESS DESIGNATION FORM
- 6.2.1 Successful bidder may be required to accurately complete an Office of Management and Budget Business Designation Form for Subcontractors.

ARTICLE 7: PERFORMANCE BOND AND PAYMENT BOND

- 7.1 BOND REQUIREMENTS
- 7.1.1 A performance and payment bond will be required for this project.
- 7.2 TIME OF DELIVERY AND FORM OF BONDS
- 7.2.1 The bonds shall be dated on or after the date of the Contract.
- 7.2.2 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix a certified and current copy of the power of attorney.

ARTICLE 8: AGREEMENT BETWEEN OWNER AND CONTRACTOR

8.1 The party to whom the contract is awarded will be required to execute the Agreement and obtain the Performance BOND and Payment BOND within twenty (20) calendar days from the date when NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and BOND forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may at his or her option consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

END OF INSTRUCTIONS TO BIDDERS

PROJECT DESCRIPTIONS AND LOCATIONS

#1 - CHERRY STREET

Mill and overlay entire length and width from existing seam along the northern edge of 5th Street to the existing seam along the southern edge of DE 273, Frenchtown Road. Provide full depth paving at locations found to have inadequate base or subbase. Undercut as needed. Remove paving and other materials. Remove and replace granite curbing as needed. Other items include mobilization / demobilization, roadway closure, sidewalk repairs, saw cut, joint and crack sealing, and restorations. See Asphalt and Base Course Depth Table.

#2 - FOUNDRY STREET

Mill and overlay entire length and width from existing seam along the northern edge of 3rd Street to the existing seam along the southern edge of 4th Street. Provide full depth paving at locations found to have inadequate base or subbase. Undercut as needed. Remove paving and other materials. Remove and replace granite curbing as needed. Install four ADA ramps along with detectable warning surfaces. Remove and replace existing blacktop curb. Other items include mobilization / demobilization, roadway closure, saw cut, joint and crack sealing, and restorations. See Asphalt and Base Course Depth Table.

#3 - WEST 10TH STREET

Mill and overlay entire length and width from existing seam along the western edge of DE 9, Washington Street, to Kings Way. Provide full depth paving at locations found to have inadequate base or subbase. Undercut as needed. Remove paving and other materials. Other items include mobilization / demobilization, roadway closure, sidewalk repairs, rolled curb repairs, saw cut, joint and crack sealing, and restorations. See Asphalt and Base Course Depth Table.

#4 - KINGS WAY

Mill and overlay entire length and width from the end of West 10th Street through the cul-de-sac at the end of Kings Way. Provide full depth paving at locations found to have inadequate base or subbase. Undercut as needed. Remove paving and other materials. Install four ADA ramps along with detectable warning surfaces. Other items include mobilization / demobilization, roadway closure, sidewalk repairs, rolled curb repairs, saw cut, joint and crack sealing, and restorations. See Asphalt and Base Course Depth Table.

#5 - SCHOOL STREET

Mill and overlay entire length and width from existing seam along the northern edge of West 9th Street to the southern edge of West 10th Street. Provide full depth paving at locations found to have inadequate base or subbase. Undercut as needed. Remove paving and other materials. Remove and replace granite curbing as needed. Replace striping and pavement markings for two existing handicapped parking spaces. Other items include mobilization / demobilization, roadway closure, sidewalk repairs, rolled curb repairs, saw cut, joint and crack sealing, and restorations. See Asphalt and Base Course Depth Table.

#6 - BUTTONWOOD AVENUE

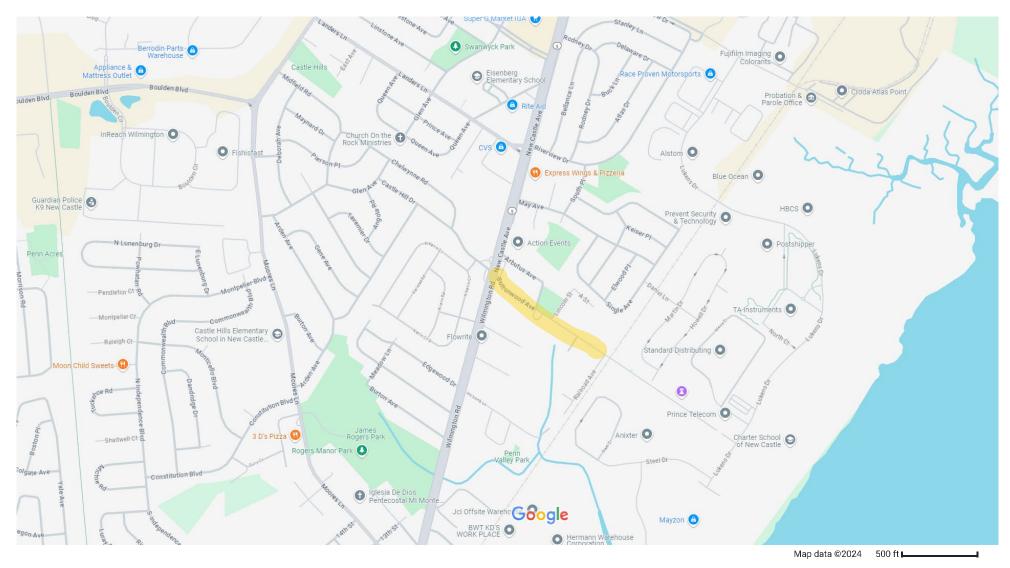
Mill and overlay entire length and width from existing seam along the eastern edge of DE 9, Wilmington Road, to the stop sign at the intersection of Buttonwood Avenue and Railroad Avenue. Provide full depth paving at locations found to have inadequate base or subbase. Undercut as needed. Remove paving and other materials. Replace existing speed hump. Other items include mobilization / demobilization, roadway closure, sidewalk repairs, curb repairs, saw cut, joint and crack sealing, and restorations. See Asphalt and Base Course Depth Table.

CITY OF NEW CASTLE FY2025 CITYWIDE PAVING CONTRACT

| ASPHALT AND BASE COURSE DEPTH TABLE | | | | |
|-------------------------------------|--------|--------|-------------|--|
| LOCATION | TYPE C | TYPE B | TYPE B GABC | |
| Buttonwood Avenue | 3.25" | 4" | 8" | |
| Cherry Street | 2.75" | 2.25" | 7" | |
| Foundry Street | 2.75" | 2.25" | 7" | |
| West 10th Street | 2.75" | 2.25" | 7" | |
| Kings Way | 2.75" | 2.25" | 7" | |
| School Street | 2.75" | 2.25" | 7" | |

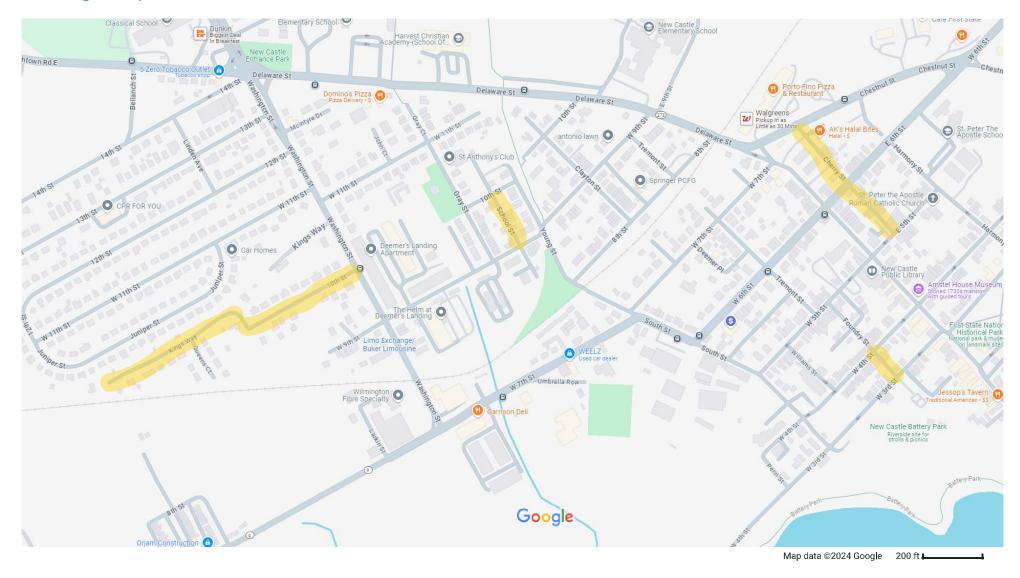
9/11/24, 1:53 PM Google Maps





9/11/24, 1:55 PM Google Maps





NEW CASTLE, DELAWARE

CONTRACT NO. 2025-001

BID FORM

| For Bids Due: | | | | 220 Delaware S | ration Building Street elaware 19720 | <u> </u> |
|---------------------------------------|-------------------------|----------------------|---|------------------------------------|--------------------------------------|---------------------------|
| Name of Bidder: | | | | New Castle, Do | elawaie 19720 | |
| Delaware Busines | ss License No | o.: | Taxpay | er ID No.: | | |
| (Other License N | os.): | | | | | |
| Phone No.: (|) | | Fax No.: | () | | |
| made in accordance conditions under w | therewith, which the Wo | that he or she has v | ead and understands visited the site and h d, and that his or her thout exception, here | as familiarized bid is based up | him or herself wi | ith the local systems and |

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the Unit Prices. Complete Bid Form on Page BP-1.

materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the

aforesaid documents for the Unit Prices itemized on Page BP-1.

BID FORM BF-1/4

PROJECT SPECIFICATIONS

FY2025 Citywide Paving Contract

NEW CASTLE, DELAWARE

CONTRACT NO. 2025-001

BID FORM

| I/We acknowledge Addendums numbered and the they may have. | e price(s) submitted include any cost/schedule impact |
|--|---|
| This bid shall remain valid and cannot be withdrawn for forty and the undersigned shall abide by the Bid Security forfeiture | |
| The Owner shall have the right to reject any or all bids, and to | waive any informality or irregularity in any bid received. |
| This bid is based upon work being accomplished by the Sub-C | Contractors named on the list attached to this bid. |
| Should I/We be awarded this contract, I / We pledge to achieve calendar days of the Notice to Proceed. | e substantial completion of all work specified within 120 |
| and national laws; that no legal requirement has been or shal contract to him or her or in the prosecution of the work require | omplied and shall comply with all requirements of local, state, I be violated in making or accepting this bid, in awarding the ed; that the bid is legal and firm; that he or she has not, directly any collusion, or otherwise taken action in restraint of free |
| Upon receipt of written notice of the acceptance of this Bid, the agreement in the required form and deliver the Contract B Documents. | |
| I am / We are an Individual / a Partnership / a Corporation | |
| By(Individual's / General Partner's / Corporate Name) | Trading as |
| (State of Corporation) | _ |
| Business Address: | |
| Witness: | |
| (SEAL) | (Authorized Signature) |
| , | (Title) |
| ATTACHMENTS Sub-Contractor List | Date: |
| Non-Collusion Statement Bid Bond | |

BID FORM BF-2/4

(Others as Required by Project Manuals)

NEW CASTLE, DELAWARE

CONTRACT NO. 2025-001

BID FORM

SUBCONTRACTOR LIST

The following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor **must be listed for each category** where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the *Owner*, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

| Category | Subcontractor | Address (City and State) |
|----------|---------------|--------------------------|
| 1 | | |
| | | |
| 2 | | |
| | | |
| 5 | | |
| 6 | | |
| _ | | |
| 8 | | |

BID FORM BF-3/4

NEW CASTLE, DELAWARE

CONTRACT NO. 2025-001

BID FORM

NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date to the City of New Castle, Delaware.

All the terms and conditions have been thoroughly examined and are understood.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

BID FORM BF-4/4

NEW CASTLE, DELAWARE

CONTRACT NO. 2025-001

| Item No. | Description | Quantity | Unit | Bid Unit Price | Bid Price |
|-------------|--|----------|---------|----------------|-----------|
| 1 | Mobilization / demobilization | 1 | LS | | |
| 2 | Field Engineering and Surveying | 1 | LS | | |
| 3 | Maintenance of traffic | 1 | LS | | |
| 4 | Excavation and removal | 710 | CY | | |
| 5 | Undercutting | 160 | CY | | |
| 6A | Roadway Milling - 2.75 inch depth | 23,690 | sy - in | | |
| 6B | Roadway Milling – 3.25 inch depth | 8,700 | sy - in | | |
| 7A | Superpave type C surface course – 2.75 inch depth | 1,300 | tons | | |
| 7B | Superpave type C surface course – 3.25 inch depth | 470 | tons | | |
| 8A | Superpave type B base course – 2.25 inch depth | 210 | tons | | |
| 8B | Superpave type B base course – 4 inch depth | 120 | tons | | |
| 9A | Type B graded aggregate base course – 7 inch depth | 520 | tons | | |
| 9B | Type B graded aggregate base course – 8 inch depth | 220 | tons | | |
| 10 | Remove and Reset Granite Curb | 200 | LF | | |
| 11 | Remove and Reset Brick Sidewalk | 60 | SF | | |
| 12 | Detectable Warning Surfaces | 30 | SF | | |
| 13 | Painting and Stripping | 1 | LS | | |
| 14 | Concrete sidewalk – remove and replace | 150 | SY | | |
| 15 | Concrete curb – remove and replace | 440 | LF | | |
| 16 | Blacktop curb – remove and replace | 100 | LF | | |
| 17 | Speed hump – remove and replace | 24 | LF | | |
| 18 | Restorations | 1 | LS | | |
| | Total Bid | | | | |

BID PAGE BP-1

NEW CASTLE, DELAWARE

BID BOND

TO ACCOMPANY PROPOSAL (Not necessary if security is used)

| KNOW ALL MEN | BY THESE PRESE | NTS That: |
|--|--|---|
| | of | in the County ofas Principal , andin the County ofally authorized to do business in the State of Delaware |
| and State of | of | as Principal , and |
| | of | in the County of |
| and State of | as Surety , leg | ally authorized to do business in the State of Delaware |
| ("State"), are held and firm | ly unto the City of N | New Castle in the sum of |
| | Dollars (\$ |), or 10 percent not to exceed |
| | | Dollars (\$ |
|) of amount of bid o | on Contract No | , to be paid to the City of New |
| Castle, Delaware for which | n payment well and to | ruly to be made, we do bind ourselves, our and each of our jointly and severally for and in the whole firmly by these |
| enter into and execute this entered into within twenty accordance with the terms of full force and virtue. | Contract as may be received (20) calendar days of said proposal, then all and dated this | led this Contract, and, if said Principal shall well and truly required by the terms of this Contract, this Contract to be after the date of official notice of the award thereof in this obligation shall be void or else to be and remain inday of |
| two mousand and | | _ (20). |
| SEALED, AND DELIVERE | D IN THE | |
| Pre | sence of | |
| | | W CBill (O i i i) |
| Cornorata | D | Name of Bidder (Organization) |
| Corporate Seal | By: | Authorized Signature |
| Seul | | Tautotizea digitature |
| Attest | | |
| | | Title |
| | | Nome of Country |
| Witness: | By: | Name of Surety |
| 11111000 | Dy. | |
| | | |
| | | Title |

BID BOND BB-1

NEW CASTLE, DELAWARE

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS: that

| (Name of Contractor) | |
|--|--|
| (Address of Contractor) | |
| a(Corporation, Partnership, or Individual) | , hereinafter called Principal, and |
| (Name of Surety) | |
| (Address of Surety) | |
| hereinafter called Surety, are held firmly bound unto | |
| (Name of Owner) | |
| (Address of Owner) | |
| hereinafter called OWNER, in the total aggregate panel sun | n of |
| dollars (\$). | |
| in lawful money of the United States, for payment of which su our heirs, executors, administrators, successors, and as presents. | |
| THE CONDITION OF THIS OBLIGATION is such that where with the OWNER, dated theday of and made a part hereof for the construction of: | eas, the Principal entered into a certain contract 20, a copy of which is hereto attached |
| | |

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any

PERFORMANCE BOND PER-1

extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the two year guarantee period and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages from which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said security, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to work to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the Contract price more than 20 percent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term Amendment, wherever used in this BOND, and whether referring to this BOND, the Contract or the Loan Documents shall include any alteration, addition, extension, or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of the other beneficiary hereunder, who claim may be unsatisfied. The OWNER is the only beneficiary hereunder.

| | this instrument is executed in a | nich shall be deemed |
|------------------------|----------------------------------|----------------------|
| ATTEST: | | SEAL |
| (Principal) Secretary | | |
| (Witness to Principal) | | |
| ATTEST: | | |
| (Witness to Surety) | | |
| (Address) | | |

If CONTRACTOR is partnership, all partners should execute BOND.

Date of BOND must not be prior to date of Contract

NOTE:

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located.

PERFORMANCE BOND PER-2

NEW CASTLE, DELAWARE

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: that

| (Name of Contractor) |
|---|
| |
| (Address of Contractor) |
| a, hereinafter called Principal, and (Corporation, Partnership, or Individual) |
| (corporation, restauration) |
| (Name of Surety) |
| (Address of Surety) |
| hereinafter called Surety, are held firmly bound unto |
| (Name of Owner) |
| (Address of Owner) |
| hereinafter called OWNER, and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the contract and to their successors and assigns in the total aggregate penal sum of |
| THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain contract with the OWNER, dated theday of 20, a copy of which is hereto attached and made part hereof for the construction of: |
| NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extensions or modifications thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or unused in connection with the construction of such WORK, and for all labor cost incurred in such work including that by a SUBCONTRACTOR, and to any mechanic or material-person lienholder whether it acquires its lien by operation of State or Federal law; than this obligation shall be void, otherwise to remain in full force and effect. |
| PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and |

PAYMENT BOND PAY-1

persons, firms, and corporations having a direct contact with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of this contract or to the work to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any affect its obligation on this BOND, and it does hereby waive notice of any such charge, extension of time, alteration of addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) Unless claimant, other than one having a direct contract with the PRINCIPAL shall have given written notice to any of the following: the PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer. (b) After the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND if prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER that is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the PRINCIPAL and the SURETY to the full and faith Contract as so amended. The term Amendment, wherever used in this BOND and whether referring to this BOND, the Contract or the loan documents shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

PAYMENT BOND PAY-2

| | S WHEREOF, this instrument is executed in this theday of | counterparts, each one of which shall be deer, 20 | ned |
|---------------|--|---|-----|
| ATTEST: | | SEAL | |
| (Principal) S | Secretary | OL/IL | |
| (Witness to | Principal) | | |
| ATTEST: | | | |
| (Witness to | Surety) | | |
| (Address) | | | |
| NOTE: | Date of BOND must not be prior to date | of Contract | |

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located.

If CONTRACTOR is partnership, all partners should execute BOND.

PAYMENT BOND PAY-3

STANDARD

GENERAL CONDITIONS

OF THE

CONTRACT FOR CONSTRUCTION

The General Conditions of this Contract are as stated in the American Institute of Architects Document AIA A201 (2007 Edition) entitled <u>General Conditions of the Contract for Construction</u> and is part of this project manual as if herein written in full.

Copies of the Document are available through the Owner.

SUPPLEMENTARY GENERAL CONDITIONS A201-2007

The following supplements modify the "General Conditions of the Contract for Construction," AIA Document A201-2007. Where a portion of the General Conditions is modified or deleted by the Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

TABLE OF ARTICLES

- GENERAL PROVISIONS
- 2. OWNER
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- 4. ADMINISTRATION OF THE CONTRACT
- 5. SUBCONTRACTORS
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- 14. TERMINATION OR SUSPENSION OF THE CONTRACT
- 15. CLAIMS AND DISPUTES

ARTICLE 1: GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

1.1.1 THE CONTRACT DOCUMENTS

Delete the last sentence in its entirety and replace with the following:

"The Contract Documents also include Advertisement for Bid, Instructions to Bidder, sample forms, the Bid Form, the Contractor's completed Bid and the Award Letter."

Add the following Paragraph:

1.1.2 In the event of conflict or discrepancies among the Contract Documents, the Documents prepared by the City of New Castle, Delaware shall take precedence over all other documents.

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

Add the following Paragraphs:

- 1.2.4 In the case of an inconsistency between the Drawings and the Specifications, or within either document not clarified by addendum, the better quality or greater quantity of work shall be provided in accordance with the Engineer's interpretation.
- 1.2.5 The word "PROVIDE" as used in the Contract Documents shall mean "FURNISH AND INSTALL" and shall include, without limitation, all labor, materials, equipment, transportation, services and other items required to complete the Work.
- 1.2.6 The word "PRODUCT" as used in the Contract Documents means all materials, systems and equipment.

1.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

Delete Paragraph 1.5.1 in its entirety and replace with the following:

"All pre-design studies, drawings, specifications and other documents, including those in electronic form, prepared by the Engineer under this Agreement are, and shall remain, the property of the Owner whether the Project for which they are made is executed or not. Such documents may be used by the Owner to construct one or more like Projects without the approval of, or additional compensation to, the Engineer. The Contractor, Subcontractors, Sub-subcontractors and Material or Equipment Suppliers are authorized to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the Engineer and the Engineer's consultants appropriate to and for use in the execution of their Work under the Contract Documents. They are not to be used by the Contractor or any Subcontractor, Sub-subcontractor or Material and Equipment Supplier on other Projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Engineer and Engineer's consultants.

The Engineer shall not be liable for injury or damage resulting from the re-use of drawings and specifications if the Engineer is not involved in the re-use Project. Prior to re-use of

construction documents for a Project in which the Engineer is not also involved, the Owner will remove from such documents all identification of the original Engineer, including name, address and professional seal or stamp."

Delete Paragraph 1.5.2 in its entirety.

ARTICLE 2: OWNER

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

To Subparagraph 2.2.3 – Add the following sentence:

"The Contractor, at their expense, shall bear the costs to accurately identify the location of all underground utilities in the area of their excavation and shall bear all cost for any repairs required, out of failure to accurately identify said utilities."

Delete Subparagraph 2.2.5 in its entirety and substitute the following:

2.2.5 The Contractor shall be furnished free of charge one (1) set of the Drawings and Project Manuals. Additional sets can be furnished from the Engineer (at the cost of twenty dollars (\$20) per set, paid to the Engineer).

ARTICLE 3: CONTRACTOR

3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

Amend Paragraph 3.2.2 to state that any errors, inconsistencies or omissions discovered shall be reported to the Engineer and Owner immediately.

Delete the third sentence in Paragraph 3.2.3.

3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

Add the following Paragraphs:

- 3.3.2.1 The Contractor shall immediately remove from the Work, whenever requested to do so by the Owner, any person who is considered by the Owner or Engineer to be incompetent or disposed to be disorderly, or who, for any reason, is not satisfactory to the Owner, and that person shall not again be employed on the Work without the consent of the Owner or the Engineer.
- 3.3.4 The Contractor must provide suitable storage facilities at the Site for the proper protection and safe storage of their materials. Consult the Owner and the Engineer before storing any materials.
- 3.3.5 When any room is used as a shop, storeroom, office, etc., by the Contractor or Subcontractor(s) during the construction of the Work, the Contractor making use of these areas will be held responsible for any repairs, patching or cleaning arising from such use. The Owner and Engineer will not be held responsible for any lost, damaged, or stolen materials or supplies from the storage space.

3.4 LABOR AND MATERIALS

Add the Following Paragraphs:

- 3.4.4 Before starting the Work, each Contractor shall carefully examine all preparatory Work that has been executed to receive their Work. Check carefully, by whatever means are required, to insure that its Work and adjacent, related Work will finish to proper contours, planes and levels. Promptly notify the General Contractor/Construction Manager of any defects or imperfections in preparatory Work which will in any way affect satisfactory completion of its Work. Absence of such notification will be construed as an acceptance of preparatory Work and later claims of defects will not be recognized.
- 3.4.5 Under no circumstances shall the Contractor's Work proceed prior to preparatory Work having been completely cured, dried and/or otherwise made satisfactory to receive this Work. Responsibility for timely installation of all materials rests solely with the Contractor responsible for that Work, who shall maintain coordination at all times.

3.5 WARRANTY

Add the following Paragraphs:

- 3.5.1 The Contractor will guarantee all materials and workmanship against original defects, except injury from proper and usual wear when used for the purpose intended, for two (2) years after Acceptance by the Owner, and will maintain all items during the period of guarantee.
- 3.5.2 Defects appearing during the period of guarantee will be made good by the Contractor at the contractor's expense upon demand of the Owner, it being required that all work will be in perfect condition when the period of guarantee will have elapsed.
- 3.5.3 In addition to the General Guarantee there are other guarantees required for certain items for different periods of time than the two (2) years as above, and are particularly so stated in that part of the specifications referring to same. The said guarantees will commence at the same time as the General Guarantee.
- 3.5.4 If the Contractor fails to remedy any failure, defect or damage within a reasonable time after receipt of notice, the Owner will have the right to replace, repair, or otherwise remedy the failure, defect or damage at the Contractor's expense.

3.11 DOCUMENTS AND SAMPLES AT THE SITE

Add the following Paragraphs:

- 3.11.1 During the course of the Work, the Contractor shall maintain a record set of drawings on which the Contractor shall mark the actual physical location of all piping, valves, equipment, conduits, outlets, access panels, controls, actuators, including all appurtenances that will be concealed once construction is complete, etc., including all invert elevations.
- 3.11.2 At the completion of the project, the Contractor shall obtain a set of reproducible drawings from the Engineer, and neatly transfer all information outlined in 3.11.1 to provide a complete record of the as-built conditions.

- 3.11.3 The Contractor shall provide one (1) print of the as-built conditions in "hard copy" format and one electronic (i.e. .pdf) for to the Owner.
- 3.17 In the first sentence of the paragraph, insert "indemnify and" between "shall" and "hold".

ARTICLE 4: ADMINISTRATION OF THE CONTRACT

4.2 ADMINISTRATION OF THE CONTRACT

Delete the first sentence of Paragraph 4.2.7 and replace with the following:

The Engineer will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples for the purpose of checking for conformance with the Contract Documents.

Delete the second sentence of Paragraph 4.2.7 and replace with the following:

The Engineer's action will be taken with such reasonable promptness as to cause no delay in the Work or in the activities of the Owner, Contractor or separate Contractors, while allowing sufficient time in the Owner's professional judgment to permit adequate review.

Add to Paragraph 4.2.13 "and in compliance with all local requirements." to the end of the sentence

ARTICLE 5: SUBCONTRACTORS

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

Delete Paragraph 5.2.3 in its entirety and replace with the following:

5.2.3 If the Owner or Engineer has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Engineer has no reasonable objection, subject to the statutory requirements of 29 Delaware Code § 6962(d)(10)b.3 and 4.

ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

Delete Paragraph 6.1.4 in its entirety.

6.2 MUTUAL RESPONSIBILITY

6.2.3 In the second sentence, strike the word "shall" and insert the word "may".

ARTICLE 7: CHANGES IN THE WORK

(SEE ARTICLE 7: CHANGES IN WORK IN THE GENERAL REQUIREMENTS)

ARTICLE 8: TIME

8.2 PROGRESS AND COMPLETION

Add the following Paragraphs:

- 8.2.1.1 Refer to Specification Section SUMMARY OF WORK for Contract time requirements.
- 8.2.4 If the Work falls behind the Progress Schedule as submitted by the Contractor, the Contractor shall employ additional labor and/or equipment necessary to bring the Work into compliance with the Progress Schedule at no additional cost to the Owner.

8.3 DELAYS AND EXTENSION OF TIME

8.3.1 Strike "arbitration" and insert "remedies at law or in equity".

Add the following Paragraph:

8.3.2.1 The Contractor shall update the status of the suspension, delay, or interruption of the Work with each Application for Payment. (The Contractor shall report the termination of such cause immediately upon the termination thereof.) Failure to comply with this procedure shall constitute a waiver for any claim for adjustment of time or price based upon said cause.

Delete Paragraph 8.3.3 in its entirety and replace with the following:

8.3.3 Except in the case of a suspension of the Work directed by the Owner, an extension of time under the provisions of Paragraph 8.3.1 shall be the Contractor's sole remedy in the progress of the Work and there shall be no payment or compensation to the Contractor for any expense or damage resulting from the delay.

Add the following Paragraph:

8.3.4 By permitting the Contractor to work after the expired time for completion of the project, the Owner does not waive their rights under the Contract.

ARTICLE 9: PAYMENTS AND COMPLETION

9.3 APPLICATIONS FOR PAYMENT

Add the following Paragraph:

9.3.1.3 Application for Payment shall be submitted either on AIA Document G702 "Application and Certificate for Payment", supported by AIA Document G703 "Continuation Sheet", or in a similar format. Said Applications shall be fully executed and notarized.

Add the following Paragraphs:

- 9.3.4 Until Closeout Documents have been received and outstanding items completed, the Owner will pay 95% (ninety-five percent) of the amount due the Contractor on account of progress payments.
- 9.3.5 The Contractor shall provide a current and updated Progress Schedule to the Engineer with each Application for Payment. Failure to provide Schedule will be just cause for rejection of Application for Payment.

9.5 DECISIONS TO WITHHOLD CERTIFICATION

Add the following to 9.5.1:

- 9.5.1 Failure to provide a current Progress Schedule;
- 9.5.2 A lien or attachment is filed;
- 9.5.3 Failure to comply with mandatory requirements for maintaining Record Documents.

9.6 PROGRESS PAYMENTS

Delete Paragraph 9.6.1 in its entirety and replace with the following:

9.6.1 After the Engineer has approved and issued a Certificate for Payment, payment shall be made by the Owner within 30 days after the Owner's receipt of the Certificate for Payment.

9.7 FAILURE OF PAYMENT

In first sentence, strike "seven" and insert "thirty (30)". Also strike "binding dispute resolution" and insert "remedies at law or in equity".

9.8 SUBSTANTIAL COMPLETION

To Subparagraph 9.8.3- Add the following sentence:

"If the Engineer is required to make more than 2 inspections of the same portion of work, the Contractor shall responsible for all costs associated with subsequent inspections including but not limited to any Engineer's fees."

9.8.5 In the second sentence, strike "shall" and insert "may".

ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

Add the following Paragraphs:

- 10.1.2.1.1 Each Contractor shall develop a safety program in accordance with the Occupational Safety and Health Act of 1970. A copy of said plan shall be furnished to the Owner and Engineer prior to the commencement of that Contractor's Work.
- 10.1.3 Each Contractor shall appoint a Safety Representative. A Safety Representative shall be someone who is on site on a full time basis. If deemed necessary by the Owner or Engineer, Contractor Safety meetings will be scheduled. The attendance of all Safety Representatives will be required. Minutes will be recorded of said meetings by the Contractor and will be distributed to all parties as well as posted in all job offices/trailers etc.

10.2 SAFETY OF PERSONS AND PROPERTY

Add the following Paragraph:

10.2.4.1 As required in the Hazardous Chemical Act of June 1984, all vendors supplying any material that may be defined as hazardous must provide Material Safety Data Sheets for those products. Any chemical product should be considered hazardous if it has a caution warning on the label relating to a potential physical or health hazard, if it is known to be present in the work place, and if employees may be exposed under normal conditions or in foreseeable emergency situations. Material Safety Data Sheets shall be provided directly to the Owner, along with the shipping slips that include those products.

10.3 HAZARDOUS MATERIALS

Delete Paragraph 10.3.3 in its entirety.

Delete Paragraphs 10.3.6 in its entirety.

ARTICLE 11: INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.4 Strike "the Owner" immediately following "(1)" and strike "and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations."

11.2 OWNER'S LIABILITY INSURANCE

Delete Paragraph 11.2 in its entirety.

11.3 PROPERTY INSURANCE

Delete Paragraph 11.3 in its entirety and replace with the following:

The City will not provide Builder's All Risk Insurance for the Project. The Contractor and all Subcontractors shall provide property coverage for their tools and equipment, as necessary. Any mandatory deductibles required by the Contractor's Insurance shall be the responsibility of the Contractor.

11.4 PERFORMANCE BOND AND PAYMENT BOND

Add the following sentence: "The bonds will conform to those forms approved by the State of Delaware, Office of Management and Budget."

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

12.2.2 AFTER SUBSTANTIAL COMPLETION

Add the following Paragraph:

| 12.2.2.1 | At any time during the progress of the Work, or in any case where the nature |
|----------|---|
| | of the defects will be such that it is not expedient to have corrected, the |
| | Owner, at its option, will have the right to deduct such sum, or sums, of |
| | money from the amount of the Contract as it considers justified to adjust the |
| | difference in value between the defective work and that required under |
| | contract, including any damage to the structure. |

| 12.2.2.2 | Strike | "one" | and | insert | "two" |
|----------|--------|-------|-----|--------|--------|
| 12.2.2.2 | CHILLE | OHE | anu | HISCIL | LVVU . |

12.2.2.3 Strike "one" and insert "two".

12.2.2.4 Strike "one" and insert "two".

12.2.2.5 In second sentence, strike "one" and insert "two".

ARTICLE 13: MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW

Strike "except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4."

13.6 INTEREST

Strike "the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located." Insert "30 days of presentment of the authorized Certificate of Payment at the annual rate of 12% or 1% per month.

13.7 TIME LIMITS ON CLAIMS

Strike the last sentence.

Add the following Paragraph:

CONFLICTS WITH FEDERAL STATUTES OR REGULATIONS

13.8.1 If any provision, specifications or requirement of the Contract Documents conflict or is inconsistent with any statute, law or regulation of the government of the United State of America, the Contractor shall notify the Engineer and Owner immediately upon discovery.

ARTICLE 14: TERMINATION OR SUSPENSION OF THE CONTRACT

14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

Delete Paragraph 14.4.3 in its entirety and replace with the following:

14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and cost incurred by reason of such termination along with reasonable overhead.

ARTICLE 15: CLAIMS AND DISPUTES

- 15.1.2 Throughout the Paragraph strike "21" and insert "45".
- 15.1.6 CLAIMS FOR CONSEQUENTIAL DAMAGES

Delete Paragraph 15.1.6 in its entirety.

15.2 INITIAL DECISION

Delete Paragraph 15.2.5 in its entirety and replace with the following:

15.2.5 The Engineer will approve or reject Claims by written decision, which shall state the reasons therefore and shall notify the parties of any change in the Contract Sum, Contract Time, or both. The approval or rejection of a Claim by the Engineer shall be subject to mediation and other remedies at law or in equity.

Delete Paragraph 15.2.6 and its subparagraphs in their entirety.

15.3 MEDIATION

- 15.3.1 Strike "binding dispute resolution" and insert "any or all remedies at law or in equity".
- 15.3.2 In the first sentence, delete "administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedure in effect on the date of the Agreement," Strike "binding dispute resolution" and insert "remedies at law and in equity".

15.4 ARBITRATION

Delete Paragraph 15.4 and its sub-sections in its entirety.

END OF SUPPLEMENTARY GENERAL CONDITIONS

GENERAL REQUIREMENTS

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ARTICLE 1: GENERAL PROVISIONS

1.1 CONTRACT DOCUMENTS

- 1.1.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary and, therefore, what is required by one shall be as binding as if required by all. Performance by the Contractor shall be required to an extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results.
- 1.1.2 Work, including material purchases, shall not begin until the Contractor is in receipt of a City of New Castle Notice to Proceed and signed contract. Any work performed or material purchased prior to the issuance of the Notice to Proceed and signed contract are done at the Contractor's own risk and cost.

1.2 EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS

- 1.2.1 For City of New Castle funded projects, the Contractor agrees that during the performance of this contract:
 - The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, religion, disability, or national origin. The Contractor will take positive steps to ensure that applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided by the contracting Agency setting forth this nondiscrimination clause.
 - The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, religion, disability, or national origin."

ARTICLE 2: OWNER

(NO ADDITIONAL GENERAL REQUIREMENTS – SEE SUPPLEMENTARY GENERAL CONDITIONS)

ARTICLE 3: CONTRACTOR

- 3.1 Schedule of Values: DELETED
- 3.2 Subcontracts: Upon approval of Subcontractors, the Contractor shall award their Subcontracts as soon as possible after the signing of their own contract and see that all material, their own and those of their Subcontractors, are promptly ordered so that the work will not be delayed by failure of materials to arrive on time.

- 3.3 Before commencing any work or construction, the General Contractor is to consult with the Owner as to matters in connection with access to the sites and the allocation of Ground Areas for the various features of hauling, storage, etc.
- 3.4 The Contractor shall supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over maintenance of traffic in accordance with Delaware Department of Transportation requirements, and construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions.
- 3.5 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.
- The Contractor warrants to the Owner that materials and equipment furnished will be new and of good quality, unless otherwise permitted, and that the work will be free from defects and in conformance with the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved, may be considered defective. If required by the Owner, the Contractor shall furnish evidence as to the kind and quality of materials and equipment provided.
- 3.7 Unless otherwise provided, the Contractor shall pay all sales, consumer, use and other similar taxes, and shall secure and pay for required permits, fees, licenses, and inspections necessary for proper execution of the Work.
- 3.8 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on performance of the Work. The Contractor shall promptly notify the Owner if the Drawings and Specifications are observed to be at variance therewith.
- 3.9 The Contractor shall be responsible to the Owner for the acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons performing portions of the Work under contract with the Contractor.
- 3.10 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove from and about the Project all waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials. The Contractor shall be responsible for returning all damaged areas to their original conditions.

The Contractor shall utilize extreme care to minimize disturbance of existing landscaping, walkways, pavements and curbing, except as required to complete the proposed work. This is to include limiting access to laborers and construction equipment which could damage the existing conditions. The Contractor shall be responsible for repair and/or restoration to its previous condition of any pavement, walkways, or landscapes that are damaged during construction at no addition expense to the Owner.

3.11 The Contractor shall provide residents with 72 hr. prior written notice for all phases of contract work. This notice shall be given to all residents whose property is adjacent to the street on which the work is to be performed. This will be accomplished by the contactor preparing and distributing a notice to be hung on front door knobs. This door hanger will be subject to approval by the City. Failure to give proper notice will result in a suspension of the work requiring notice until proper notice is provided. The Contractor shall provide a proposed activity schedule to the City for the following two-

week period. This activity schedule should reflect specific details related to actual construction activities the Contractor plans to have in progress during this period.

- 3.12 STATE LICENSE AND TAX REQUIREMENTS
- 3.12.1 Each Contractor and Subcontractor shall be licensed to do business in the State of Delaware and shall pay all fees and taxes due under State laws. In conformance with Section 2503, Chapter 25, Title 30, <u>Delaware Code</u>, "the Contractor shall furnish the Delaware Department of Finance within ten (10) days after entering into any contract with a contractor or subcontractor not a resident of this State, a statement of total value of such contract or contracts together with the names and addresses of the contracting parties."
- 3.12. The Contractor shall comply with all requirements set forth in Section 6962, Chapter 69, Title 29 of the Delaware Code.

ARTICLE 4: ADMINISTRATION OF THE CONTRACT

- 4.1 NOT USED
- 4.2 FAILURE TO COMPLY WITH CONTRACT
- 4.2.1 If any firm entering into a contract with the City of New Castle, or Agency, that neglects or refuses to perform or fails to comply with the terms thereof, the Agency which signed the Contract may terminate the Contract and proceed to award a new contract in accordance with this Chapter 69, Title 29 of the Delaware Code or may require the Surety on the Performance Bond to complete the Contract in accordance with the terms of the Performance Bond. Nothing herein shall preclude the Agency from pursuing additional remedies as otherwise provided by law.
- 4.3 CONTRACT INSURANCE AND CONTRACT LIABILITY
- 4.3.1 In addition to the bond requirements stated in the Bid Documents, each successful Bidder shall purchase adequate insurance for the performance of the Contract and, by submission of a Bid, agrees to indemnify and save harmless and to defend all legal or equitable actions brought against the City of New Castle, any Agency, officer and/or employee thereof, for and from all claims of liability which is or may be the result of the successful Bidder's actions during the performance of the Contract.
- 4.3.2 The purchase or nonpurchase of such insurance or the involvement of the successful Bidder in any legal or equitable defense of any action brought against the successful Bidder based upon work performed pursuant to the Contract will not waive any defense which the City of New Castle, its agencies and their respective officers, employees and agents might otherwise have against such claims, specifically including the defense of sovereign immunity, where applicable, and by the terms of this section, the City of New Castle and all agencies, officers and employees thereof shall not be financially responsible for the consequences of work performed, pursuant to said contract.
- 4.4 RIGHT TO AUDIT RECORDS
- 4.4.1 The Owner shall have the right to audit the books and records of a Contractor or any Subcontractor under any Contract or Subcontract to the extent that the books and records relate to the performance of the Contract or Subcontract.

4.4.2 Said books and records shall be maintained by the Contractor for a period of seven (7) years from the date of final payment under the Prime Contract and by the Subcontractor for a period of seven (7) years from the date of final payment under the Subcontract.

ARTICLE 5: SUBCONTRACTORS

5.1 SUBCONTRACTING REQUIREMENTS

- 5.1.1 All contracts for the construction, reconstruction, alteration or repair of any public building (not a road, street or highway) shall be subject to the following provisions:
 - A contract shall be awarded only to a Bidder whose Bid is accompanied by a statement containing, for each Subcontractor category, the name and address (city or town and State only – street number and P.O. Box addresses not required) of the subcontractor whose services the Bidder intends to use in performing the Work and providing the material for such Subcontractor category.
 - A Bid will not be accepted nor will an award of any Contract be made to any Bidder which, as the Prime Contractor, has listed itself as the Subcontractor for any Subcontractor unless:
 - A. It has been established to the satisfaction of the awarding Agency that the Bidder has customarily performed the specialty work of such Subcontractor category by artisans regularly employed by the Bidder's firm:
 - B. That the Bidder is duly licensed by the State to engage in such specialty work, if the State requires licenses; and
 - C. That the Bidder is recognized in the industry as a bona fide Subcontractor or Contractor in such specialty work and Subcontractor category.
- 5.1.2 The decision of the awarding Agency as to whether a Bidder who lists itself as the Subcontractor for a Subcontractor category shall be final and binding upon all Bidders, and no action of any nature shall lie against any awarding Agency or its employees or officers because of its decision in this regard.
- 5.1.3 After such a Contract has been awarded, the successful Bidder shall not substitute another Subcontractor for any Subcontractor whose name was set forth in the statement which accompanied the Bid without the written consent of the awarding Agency.
- 5.1.4 No Agency shall consent to any substitution of Subcontractors unless the Agency is satisfied that the Subcontractor whose name is on the Bidders accompanying statement:
 - A. Is unqualified to perform the work required;
 - B. Has failed to execute a timely reasonable Subcontract;
 - C. Has defaulted in the performance on the portion of the work covered by the Subcontract; or
 - D. Is no longer engaged in such business.
- 5.2 PENALTY FOR SUBSTITUTION OF SUBCONTRACTORS NOT USED

- 5.3 ASBESTOS ABATEMENT NOT USED
- 5.4 STANDARDS OF CONSTRUCTION FOR THE PROTECTION OF THE PHYSICALLY DISABLED
- 5.4.1 All Contracts shall conform with the standard established by the Delaware Architectural Accessibility Board unless otherwise exempted by the Board.
- 5.5 CONTRACT PERFORMANCE
- 5.5.1 If any firm entering into a Public Works Contract that neglects or refuses to perform or fails to comply with its terms, the Agency may terminate the Contract and proceed to award a new Contract or may require the Surety on the Performance Bond to complete the Contract in accordance with the terms of the Performance Bond.

ARTICLE 6: CONSTRUCTION BY OWNER OR SEPARATE CONTRACTORS

- The Owner reserves the right to simultaneously perform other construction or operations related to the Project with the Owner's own forces and to award separate contracts in connection with other portions of the Project or other Projects at the same site.
- The Contractor shall afford the Owner and other Contractors reasonable opportunity for access and storage of materials and equipment and for the performance of their activities, and shall connect and coordinate their activities with other forces as required by the Contract Documents.

ARTICLE 7: CHANGES IN THE WORK

- 7.1 The Owner, without invalidating the Contract, may order changes in the Work consisting of Additions, Deletions, Modifications or Substitutions, with the Contract Sum and Contract completion date being adjusted accordingly. Such changes in the Work shall be authorized by written Change Order signed by the Professional, as the duly authorized agent, the Contractor and the Owner.
- 7.2 The Contract Sum and Contract Completion Date shall be adjusted only by a fully executed Change Order.
- 7.3 The additional cost or credit to the Owner resulting from a change in the Work shall be by mutual agreement of the Owner, Contractor and Engineer. In all cases, this cost or credit shall be based on the 'DPE' wages required and the "invoice price" of the materials/equipment needed.
- 7.3.1 "DPE" shall be defined to mean "direct personnel expense". Direct payroll expense includes direct salary plus customary fringe benefits (prevailing wage rates) and documented statutory costs such as workman's compensation insurance, Social Security/Medicare, and unemployment insurance (a maximum multiplier of 1.35 times DPE).
- 7.3.2 "Invoice price" of materials/equipment shall be defined to mean the actual cost of materials and/or equipment that is paid by the Contractor, subcontractor, to a material distributor, direct factory vendor, store, material provider, or equipment leasing entity. Rates for equipment that is leased and/or owned by the Contractor or subcontractor(s) shall not exceed those listed in the latest version of the "Means Building Construction Cost Data" publication.

In addition to the above, the General Contractor is allowed a fifteen percent (15%) markup for overhead and profit for additional work performed by the General Contractor's own forces. For additional subcontractor work, the Subcontractor is allowed a fifteen (15) percent overhead and profit on change order work above and beyond the direct costs stated previously. To this amount, the General Contractor will be allowed a mark-up not exceeding seven and one half percent (7.5%) on the subcontractors work. These mark-ups shall include all costs including, but not limited to: overhead, profit, bonds, insurance, supervision, etc. No markup is permitted on the work of the subcontractors' subcontractor. No additional costs shall be allowed for changes related to the Contractor's onsite superintendent/staff, or project manager, unless a change in the work changes the project duration and is identified by the CPM schedule. There will be no other costs associated with the change order.

ARTICLE 8: TIME

- 8.1 Time limits, if any, are as stated in the Project Manual. By executing the Agreement, the Contractor confirms that the stipulated limits are reasonable and that the Work will be completed within the anticipated time frame.
- 8.2 If progress of the Work is delayed at any time by changes ordered by the Owner, unusual delay in deliveries, abnormal adverse weather conditions, fire, labor disputes, unavoidable casualties or other causes beyond the Contractor's control, the Contract Time shall be extended for such reasonable time as the Owner may determine.
- 8.3 Any extension of time beyond the date fixed for completion of the construction and acceptance of any part of the Work called for by the Contract, or the occupancy of the building by the Owner, in whole or in part, previous to the completion shall not be deemed a waiver by the Owner of his or her right to annul or terminate the Contract for abandonment or delay in the matter provided for, nor relieve the Contractor of full responsibility.

8.4 SUSPENSION AND DEBARMENT

- 8.4.1 Any Contractor who fails to perform a public works contract or complete a public works project within the time schedule established by the Agency in the Invitation To Bid, may be subject to Suspension or Debarment for one or more of the following reasons: a) failure to supply the adequate labor supply ratio for the project; b) inadequate financial resources; or, c) poor performance on the Project.
- 8.4.2 "Upon such failure for any of the above stated reasons, the Agency that contracted for the public works project may petition the Director of the Office of Management and Budget for Suspension or Debarment of the Contractor. The Agency shall send a copy of the petition to the Contractor within three (3) working days of filing with the Director. If the Director concludes that the petition has merit, the Director shall schedule and hold a hearing to determine whether to suspend the Contractor, debar the Contractor or deny the petition. The Agency shall have the burden of proving, by a preponderance of the evidence, that the Contractor failed to perform or complete the public works project within the time schedule established by the Agency and failed to do so for one or more of the following reasons: a) failure to supply the adequate labor supply ratio for the project; b) inadequate financial resources; or, c) poor performance on the project. Upon a finding in favor of the Agency, the Director may suspend a Contractor from Bidding on any project funded, in whole or in part, with public funds for up to 1 year for a first offense, up to 3 years for a second offense and permanently debar the Contractor for a third offense. The Director shall issue a written decision and shall send a copy to the Contractor and the Agency.

Such decision may be appealed to the Superior Court within thirty (30) days for a review on the record."

8.5 RETAINAGE

- 8.5.1 Per Section 6962(d)(5) a.3, Title 29, Delaware Code: The Agency may at the beginning of each public works project establish a time schedule for the completion of the project. If the project is delayed beyond the completion date due to the Contractor's failure to meet their responsibilities, the Agency may forfeit, at its discretion, all or part of the Contractor's retainage.
- 8.5.2 This forfeiture of retainage also applies to the timely completion of the punchlist. A punchlist will only be prepared upon the mutual agreement of the Owner, Engineer and Contractor. Once the punchlist is prepared, all three parties will by mutual agreement, establish a schedule for its completion. Should completion of the punchlist be delayed beyond the established date due to the Contractor's failure to meet their responsibilities, the Agency may hold permanently, at its discretion, all or part of the Contractor's retainage.
- 8.6 WORK HOURS
- 8.6.1 Unless the Owner grants special permission otherwise, work will be limited to between the hours of 7:00 a.m. to 5:00 p.m. Monday through Saturday.

ARTICLE 9: PAYMENTS AND COMPLETION

9.1 APPLICATION FOR PAYMENT

- 9.1.1 Applications for payment shall be made upon AIA Document G702 or on a document of similar format. There will be a five percent (5%) retainage on all Contractors' monthly invoices until completion of the project. This retainage may become payable upon receipt of all required closeout documentation, provided all other requirements of the Contract Documents have been met.
- 9.1.2 The monthly account of work completed will be required on a fixed date each month. Upon receipt of Contractor's itemized application for payment, such application will be audited, modified (if found necessary) and approved for the amount. Statement shall be submitted to the Owner.
- 9.1.3 Section 6516, Title 29 of the <u>Delaware Code</u> annualized interest is not to exceed 12% per annum beginning thirty (30) days after the "presentment" (as opposed to the date) of the invoice.

9.2 PARTIAL PAYMENTS

- 9.2.1 Any public works Contract executed by any Agency may provide for partial payments at the option of the Owner with respect to materials placed along or upon the sites or stored at secured locations which are suitable for use in the performance of the contract.
- 9.2.2 When approved by the Agency, partial payment may include the values of tested and acceptable materials of a nonperishable or noncontaminative nature which have been produced or furnished for incorporation as a permanent part of the work yet to be completed, provided acceptable provisions have been made for storage.

- 9.2.2.1 Any allowance made for materials on hand will not exceed the delivered cost of the materials as verified by invoices furnished by the Contractor, nor will it exceed the contract bid price for the material complete in place.
- 9.2.3 If requested by the Agency, receipted bills from all Contractors, Subcontractors, and material, men, etc., for the previous payment must accompany each application for payment. Following such a request, no payment will be made until these receipted bills have been received by the Owner.
- 9.3 SUBSTANTIAL COMPLETION
- 9.3.1 The Owner will determine the date when the project has been substantially completed.
- 9.3.2 If, after the Work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor and without terminating the Contract, the Owner may make payment of the balance due for the portion of the Work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment that it shall not constitute a waiver of claims.
- 9.3.3 On projects where commissioning is included, the commissioning work as defined in the specifications must be complete prior to the issuance of substantial completion.
- 9.4 FINAL PAYMENT
- 9.4.1 Final payment, including the five percent (5%) retainage if determined appropriate, shall be made within thirty (30) days after the Work is fully completed and the Contract fully performed and provided that the Contractor has submitted the following closeout documentation (in addition to any other documentation required elsewhere in the Contract Documents):
- 9.4.1.1 Evidence satisfactory to the Owner that all payrolls, material bills, and other indebtedness connected with the work have been paid,
- 9.4.1.2 An acceptable RELEASE OF LIENS,
- 9.4.1.3 As-built drawings Preparation of as-built drawings for Base Bid Location and Alternate #3 Location are incidental.
- 9.4.1.4 The Owner reserves the right to retain payments, or parts thereof, for its protection until the foregoing conditions have been complied with, defective work corrected and all unsatisfactory conditions remedied.

ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall take all reasonable precautions to prevent damage, injury or loss to: workers, persons nearby who may be affected, the Work, materials and equipment to be incorporated, and existing property at the site or adjacent thereto. The Contractor shall give notices and comply with applicable laws ordinances, rules regulations, and lawful orders of public authorities bearing on the safety of persons and property and their protection from injury, damage, or loss. The Contractor shall promptly remedy damage and loss to property at the site caused in whole or in part by the Contractor, a Subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose actions they may be liable.

- The Contractor shall notify the Owner in the event that any existing hazardous material such as lead, PCBs, asbestos, etc. is encountered on the project. The Owner will arrange with a qualified specialist for the identification, testing, removal, handling and protection against exposure or environmental pollution, to comply with applicable regulation laws and ordinances. The Contractor and Engineer will not be required to participate in or to perform this operation. Upon completion of this work, the Owner will notify the Contractor and Engineer in writing that the area has been cleared and approved by the authorities in order for the work to proceed. The Contractor shall attach documentation from the authorities of said approval.
- As required in the Hazardous Chemical Information Act of June 1984, all vendors supplying any materials that may be defined as hazardous must provide Material Safety Data Sheets for those products. Any chemical product should be considered hazardous if it has a warning caution on the label relating to a potential physical or health hazard, if it is known to be present in the work place, and if employees may be exposed under normal conditions or in any foreseeable emergency situation. Material Safety Data Sheets must be provided directly to the Owner along with the shipping slips that include those products.
- The Contractor shall certify to the Owner that materials incorporated into the Work are free of all asbestos. This certification may be in the form of Material Safety Data Sheet (MSDS) provided by the product manufacturer for the materials used in construction, as specified or as provided by the Contractor.

ARTICLE 11: INSURANCE AND BONDS

- The Contractor shall carry all insurance required by law, such as Unemployment Insurance, etc. The Contractor shall carry such insurance coverage as they desire on their own property such as a field office, storage sheds or other structures erected upon the project site that belong to them and for their own use. The Subcontractors involved with this project shall carry whatever insurance protection they consider necessary to cover the loss of any of their personal property, etc.
- Upon being awarded the Contract, the Contractor shall obtain a minimum of two (2) copies of all required insurance certificates called for herein and identifying the City as an Additional Insured, and submit one (1) copy of each certificate, to the Owner, within 20 calendar days of contract award.
- Bodily Injury Liability and Property Damage Liability Insurance shall, in addition to the coverage included herein, include coverage for injury to or destruction of any property arising out of the collapse of or structural injury to any building or structure due to demolition work and evidence of these coverages shall be filed with and approved by the Owner.
- The Contractor's Property Damage Liability Insurance shall, in addition to the coverage noted herein, include coverage on all real and personal property in their care, custody and control damaged in any way by the Contractor or their Subcontractors during the entire construction period on this project.
- Builders Risk (including Standard Extended Coverage Insurance) on the existing site during the entire construction period shall not be provided by the Contractor under this contract. The Owner shall insure the existing site and all of its contents and all this new alteration work under this contract during entire construction period for the full insurable value of the entire work at the site. Note, however, that the Contractor and their Subcontractors shall be responsible for insuring building materials (installed and stored) and their tools and equipment whenever in use on the project, against fire damage, theft, vandalism, etc.

11.6 Certificates of the insurance company or companies stating the amount and type of coverage, terms of policies, etc., shall be furnished to the Owner, within 20 calendar days of contract award.

11.7 The Contractor shall, at their own expense, (in addition to the above) carry the following forms of insurance:

11.7.1 Contractor's Contractual Liability Insurance

Minimum coverage to be:

Bodily Injury

\$ 500,000 for each person \$1,000,000 for each occurrence aggregate

\$2,000,000

Property Damage

\$ 500,000 for each occurrence

\$1,000,000 aggregate

11.7.2 Contractor's Protective Liability Insurance

Minimum coverage to be:

Bodily Injury

\$ 500,000 for each person \$1,000,000 for each occurrence

\$2,000,000 aggregate

Property Damage

\$ 500,000 for each occurrence

\$ 1.000.000 aggregate

11.7.3 Automobile Liability Insurance

Minimum coverage to be:

Bodily Injury

\$1,000,000 for each person \$1,000,000 for each occurrence

Property Damage

\$ 500,000 per accident

- Prime Contractor's and Subcontractors' policies shall include contingent and contractual 11.7.4 liability coverage in the same minimum amounts as 11.7.1 above.
- 11.7.5 Workmen's Compensation (including Employer's Liability):
- 11.7.5.1 Minimum Limit on employer's liability to be as required by law.

- 11.7.5.2 Minimum Limit for all employees working at one site.
- 11.7.6 Certificates of Insurance must be filed with the Owner <u>guaranteeing</u> fifteen (15) days prior notice of cancellation, non-renewal, or any change in coverages and limits of liability shown as included on certificates.

11.7.7 Social Security Liability

- 11.7.7.1 With respect to all persons at any time employed by or on the payroll of the Contractor or performing any work for or on their behalf or in connection with or arising out of the Contractor's business, the Contractor shall accept full and exclusive liability for the payment of any and all contributions for taxes, unemployment insurance, old age retirement benefits, pensions or annuities now or hereafter imposed by the Government of the United States and the State or political subdivision thereof, whether the same be measured by wages, salaries or other remuneration paid to such persons or otherwise.
- 11.7.7.2 Upon request, the Contractor shall furnish Owner such information on payrolls or employment records as may be necessary to enable it to fully comply with the law imposing the aforesaid contributions or taxes.
- 11.7.7.3 If the Owner is required by law to and does pay any and/or all of the aforesaid contributions or taxes, the Contractor shall forthwith reimburse the Owner for the entire amount so paid by the Owner.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

- The Contractor shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed, and shall correct any Work found to be not in accordance with the requirements of the Contract Documents within a period of two years from the date of Substantial Completion, or by terms of an applicable special warranty required by the Contract Documents. The provisions of this Article apply to work done by Subcontractors as well as to Work done by direct employees of the Contractor.
- At any time during the progress of the work, or in any case where the nature of the defects shall be such that it is not expedient to have them corrected, the Owner, at their option, shall have the right to deduct such sum, or sums, of money from the amount of the contract as they consider justified to adjust the difference in value between the defective work and that required under contract including any damage to the structure.

ARTICLE 13: MISCELLANEOUS PROVISIONS

- 13.1 PERFORMANCE
- 13.1.1 All construction and materials shall be in accordance with the Delaware Department of Transportation Standard Specifications for Road and Bridge Construction, August 2001, as modified by this Project Manual.
- 13.21 CUTTING AND PATCHING
- 13.2.1 The Contractor shall be responsible for all cutting and patching. The Contractor shall coordinate the work of the various trades involved.
- 13.3 DIMENSIONS

All dimensions shown shall be verified by the Contractor by actual measurements at the project site. Any discrepancies between the drawings and specifications and the existing conditions shall be referred to the Owner for adjustment before any work affected thereby has been performed.

13.4 LABORATORY TESTS

- Any specified laboratory tests of material and finished articles to be incorporated in the work shall be made by bureaus, laboratories or agencies approved by the Owner and reports of such tests shall be submitted to the Owner. The cost of the testing shall be paid for by the Contractor.
- 13.4.2 The Contractor shall furnish all sample materials required for these tests and shall deliver the same without charge to the testing laboratory or other designated agency when and where directed by the Owner.

13.5 ARCHAEOLOGICAL EVIDENCE

Whenever, in the course of construction, any archaeological evidence is encountered on the surface or below the surface of the ground, the Contractor shall notify the authorities of the Delaware Archaeological Board and suspend work in the immediate area for a reasonable time to permit those authorities, or persons designated by them, to examine the area and ensure the proper removal of the archaeological evidence for suitable preservation in the State Museum.

13.6 GLASS REPLACEMENT AND CLEANING – NOT USED

13.7 WARRANTY

13.7.1 For a period of two (2) years from the date of substantial completion, as evidenced by the date of final acceptance of the work, the contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect of equipment, material or workmanship performed by the contractor or any of the subcontractors or suppliers. However, manufacturer's warranties and guarantees, if for a period longer than two (2) years, shall take precedence over the above warranties. The contractor shall remedy, at the Contractor's own expense, any such failure to conform or any such defect. The protection of this warranty shall be included in the Contractor's Performance Bond.

ARTICLE 14: TERMINATION OR SUSPENSION OF CONTRACT

- If the Contractor defaults or persistently fails or neglects to carry out the Work in accordance with the Contract Documents or fails to perform a provision of the Contract, the Owner, after seven days written notice to the Contractor, may make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor. Alternatively, at the Owner's option, the Owner may terminate the Contract and take possession of the site and of all materials, equipment, tools, and machinery thereon owned by the Contractor and may finish the Work by whatever method the Owner may deem expedient. If the costs of finishing the Work exceed any unpaid compensation due the Contractor, the Contractor shall pay the difference to the Owner.
- 14.2 "If the continuation of this Agreement is contingent upon the appropriation of adequate state, or federal funds, this Agreement may be terminated on the date beginning on the first fiscal year for which funds are not appropriated or at the exhaustion of the

appropriation. The Owner may terminate this Agreement by providing written notice to the parties of such non-appropriation. All payment obligations of the Owner will cease upon the date of termination. Notwithstanding the foregoing, the Owner agrees that it will use its best efforts to obtain approval of necessary funds to continue the Agreement by taking appropriate action to request adequate funds to continue the Agreement."

END OF GENERAL REQUIREMENTS

STATE OF DELAWARE DEPARTMENT OF LABOR DIVISION OF INDUSTRIAL AFFAIRS OFFICE OF LABOR LAW ENFORCEMENT

PHONE: (302) 318-2769

Mailing Address: 252 Chapman Road Suite 210 Newark, DE 19702 Located at: 252 Chapman Road Suite 210 Newark, DE 19702

PREVAILING WAGES FOR HIGHWAY CONSTRUCTION EFFECTIVE MARCH 15, 2024

| CLASSIFICATION | NEW CASTLE | KENT | SUSSEX | |
|---------------------------|------------|-------|--------|--|
| BRICKLAYERS | 65.24 | 65.24 | 69.05 | |
| CARPENTERS | 65.85 | 61.06 | 49.30 | |
| CEMENT FINISHERS | 70.64 | 43.32 | 44.16 | |
| ELECTRICAL LINE WORKERS | 35.67 | 57.63 | 28.21 | |
| ELECTRICIANS | 81.62 | 81.62 | 81.62 | |
| IRON WORKERS | 86.81 | 31.66 | 33.63 | |
| LABORERS | 54.96 | 50.59 | 49.65 | |
| MILLWRIGHTS | 21.38 | 20.75 | 17.93 | |
| PAINTERS | 81.29 | 81.29 | 81.29 | |
| PILEDRIVERS | 95.51 | 31.53 | 88.62 | |
| POWER EQUIPMENT OPERATORS | 82.31 | 52.56 | 48.15 | |
| SHEET METAL WORKERS | 30.20 | 26.96 | 24.40 | |
| TRUCK DRIVERS | 51.73 | 37.48 | 45.64 | |

CERTIFIED: 9-13-24

BY: ADMINISTRATOR, OFFICE OF LABOR LAW ENFORCEMENT

NOTE: THESE RATES ARE PROMULGATED AND ENFORCED PURSUANT TO THE PREVAILING WAGE REGULATIONS ADOPTED BY THE DEPARTMENT OF LABOR ON APRIL 3, 1992.

CLASSIFICATIONS OF WORKERS ARE DETERMINED BY THE DEPARTMENT OF LABOR. FOR ASSISTANCE IN CLASSIFYING WORKERS, OR FOR A COPY OF THE REGULATIONS OR CLASSIFICATIONS, PHONE (302) 318-2769.

NON-REGISTERED APPRENTICES MUST BE PAID THE MECHANIC'S RATE.

PROJECT: 2025-001 FY2025 Citywide Paving Contract, New Castle County



TECHNICAL SPECIFICATIONS

TS-1 MEASUREMENT AND PAYMENT

PART 1: GENERAL

1.1 GENERAL

- A. Payment for the work completed under this Contract will be made at the lump sum and unit prices bid, which shall include the furnishing of all labor, tools, equipment and materials, and performance of all work required to complete the project as indicated and specified in accordance with all requirements of the Contract Documents and to the entire satisfaction of the Owner or Engineer.
- B. Work, incidental and miscellaneous items, and materials for which no specific bid item is shown, and which are necessary to complete the project in accordance with the contract documents and to maintain and repair the work within the Contract warranty period are incidental to the bid items listed below and shall be provided by the Contractor and included in the price for the associated bid item that most closely matches the work.

1.2 AUTHORITY

A. The Contractor shall provide the services of a surveyor professionally registered in the State of Delaware to take all measurements and compute quantities. The Owner or Engineer will verify measurements and quantities.

1.3 UNIT QUANTITIES SPECIFIED

- A. Quantities and measurements indicated in the Bid Tab are for bidding and contract purposes only. Quantities and measurements supplied or placed in the Work and verified by the Owner or Engineer shall determine payment. The City of New Castle is not liable to the Contractor for any additional compensation based on any variance between the estimated quantities and the actual quantities installed during the course of the Project. The Contractor shall be paid solely for the actual quantities of items installed at the bid price.
- B. If the actual Work requires more or fewer quantities than those quantities indicated, the Contractor shall provide the required quantities at the unit prices contracted.

PART 2: INCIDENTAL ITEMS

2.1 SEDIMENT AND EROSION CONTROL

- A. Measurement: No measurement will be made for Sediment and Erosion Control.
- B. Payment: No payment will be made for Sediment and Erosion Control.

 The Contractor is responsible for assuring that materials from all work areas are contained. Erosion and Sediment Control is incidental to other bid items.
- C. Description: Contractor shall prepare a Sediment and Erosion Control plan and will maintain temporary sediment and erosion control measures for the duration of each portion of the specified work. In case of repeated failures on the part of the Contractor to control erosion and sediment control, the City reserves the right to employ outside assistance or to use his own forces to provide the necessary corrective measures. Such incurred direct costs plus project engineering costs will be charged to the Contractor and appropriate deductions will be made from the Contractor's monthly progress estimate.

2.2 SITE CLEARING

- A. Measurement: No measurement will be made for Site Clearing.
- B. Payment: No payment will be made for Site Clearing. Site Clearing is incidental to other bid items.
- C. Description: Contractor shall provide for the demolition and removal of all surface items necessary to complete the work including the stripping and stockpiling of topsoil, demolition and removal of debris, trees, shrubs, grass, signs, etc. along with protection of items designated to remain. This item shall also include the proper and legal disposal of the materials removed to complete this work. Demolition and removal of existing asphalt, graded aggregates, sidewalks, curb and gutter, inlets, and pipes shall be paid for under bid items.

2.3 SAW CUT

- Measurement: No measurement will be made for Saw Cut.
- B. Payment: No payment will be made for Saw Cut. Saw Cut is incidental to other bid items.

C. Description: The equipment used shall be a saw cutting machine capable of cutting Portland Cement Concrete and hot-mix, hot-laid, bituminous concrete pavements. The machine shall consist of a suitable motor driven diamond blade circular cutter with control devices, mounted on a sturdy frame. The equipment shall be capable of cutting a groove in a straight line to a sufficient depth so that an even, neat joint will be cut to allow removal of material without damage to the adjacent pavement. A continuous water supply shall be supplied to the cutting element either by a water tank on the equipment or by other means. Equipment other than that specified for saw cutting may be used if the material to be cut is hot-mix, hot-laid bituminous concrete.

2.4 CRACK AND JOINT SEALING

- A. Measurement: No measurement will be made for Crack and Joint Sealing of asphalt and concrete surfaces.
- B. Payment: No payment will be made for Crack and Joint Sealing. Crack and Joint Sealing is incidental to other bid items.
- C. Description: See Section TS-14.

2.5 UTILITY COVER ADJUSTMENTS

- A. Measurement: No measurement will be made for Utility Cover Adjustments.
- B. Payment: No payment will be made for Utility Cover Adjustments. Utility Cover Adjustments is incidental to other bid items.
- C. Description: This item includes adjustments to manhole tops, water main valves, shut off valves, etc. as necessary for these appurtenances to be flush with the final surface after pavement operations are complete and the pavement surface is at final grade. Manhole tops will be adjusted in accordance with current New Castle County standards and details.

PART 3: BID ITEMS

3.1 MOBILIZATION / DEMOBILIZATION

- A. Measurement: No measurement will be made for Mobilization / Demobilization. It will be paid on a lump sum basis. The Lump Sum payment for this item will be full compensation for providing initial services and facilities required to mobilize for and commence the work of this project as shown, specified, and required to provide a complete project.
- B. Payment: The payment for mobilization will be made at 50 % on the first payment requested with the remainder paid in even monthly increments spread out over the Contract Time. Costs to be included under this item shall include such items as bonds, insurance, shop drawings, submittals, temporary facilities and controls, permits, notifications, coordination with Miss Utility or other underground utility-locating service along with other costs and incidentals associated with initiating the work. The maximum amount bid for this item shall not exceed 5% of the sum of all items.
- C. Description: Mobilization shall include all activities and associated costs for transportation of contractor's personnel, equipment, and operating supplies to the sites. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the sites. This includes disassembly, removal, and site cleanups.

3.2 FIELD ENGINEERING AND SURVEYING

- A. Measurement: No measurement will be made for Field Engineering and Surveying. The lump sum payment for this item will be full compensation for all work related to the construction survey and layout of the proposed work in accordance with the plans and specifications.
- B. Payment: The contract lump sum price will be paid under this item in proportion to the amount of work done as determined by the City or Engineer. The Contractor shall employ a surveyor or engineer professionally registered in the State of Delaware and acceptable to the City or Engineer. The price bid shall include, but not limited to field engineering and surveying services for stakeout of all project features and structures as indicated on the Drawings and specified herein, identify project benchmarks, establish all lines, elevations and reference marks needed by the Contractor or Engineer during the progress of the Work, and from time to time to verify such marks by instrument or other appropriate means. It also includes the preparation and certification of "As Built" Record Drawings.

3.3 MAINTENANCE OF TRAFFIC

- A. Measurement: No measurement will be made for Maintenance of Traffic.

 The Lump Sum payment for this item will be full compensation for all items related to the control of traffic throughout the course of the project in accordance with the specifications, DelDOT Standard Details and Manual on Uniform Traffic Control Devices (MUTCD).
- B. Payment: The contract lump sum price will be paid under this item in proportion to the amount of work completed as determined by the Owner or Engineer. The lump sum price bid shall include all of the Contractor's costs and shall include, but not limited to preparation of a Maintenance of Traffic Plan, proposed detour plans, notifications, coordination, furnishing, transporting, and set up of all traffic control equipment, materials, and labor to the various areas of construction as necessary to complete the work in accordance with the specifications, DelDOT Standard Details and Manual on Uniform Traffic Control Devices (MUTCD).

3.4 EXCAVATION AND REMOVAL OF EXISTING MATERIALS

- A. Measurement: Measurement of cubic yards to be paid under this section will be full compensation for all work related to the excavation required to achieve the subgrade elevations required to complete the work in accordance with the plans and specifications. This item includes excavation of soil and any other material including asphalt and concrete pipe and structures. This item does not include the removal of roadway millings (see Section TS-5).
- B. Payment: The quantity of excavation and removal of existing materials will be paid for at the contract unit price and shall include preparing, excavation, hauling, re use of material at the site and removal and legal disposal of materials off site if not appropriate for re use at the site.

3.5 UNDERCUTTING

A. Measurement: Measurement of the cubic yards of material to be paid under this section shall be the actual volume of cubic yards of unstable material excavated and replaced as directed and approved by the City or Engineer and in accordance with these specifications. The measurement for cubic yards shall be based upon the length, width and depth of the excavation completed to remove unstable subgrade material. Undercutting is a contingency item.

B. Payment: The cubic yards as measured above shall be paid at the Contract Unit Price Bid for Undercutting to excavate and replace unstable subgrade soils including excavation, removal of the excavated material from the site, dewatering, the installation of a geotextile stabilization fabric, refill with clean stone or GABC, compaction, testing and any other incidental items necessary to complete the work in accordance with the plans and specifications.

3.6 ROADWAY MILLING

- A. Measurement: Measurement of square yard-inches of milling to be paid under this section shall be the actual number of square yard-inches of pavement milling completed to the specified depth and removed in accordance with the plans and specifications, measured from end to end, complete, and accepted. This item does not include overlay following milling (see Section TS-8).
- B. Payment: The square yard-inches of material as measured above shall be paid at the contract unit price bid per square yard-inch of pavement milling at required depths and removal and shall be full compensation to complete the work including in accordance with the Contract Documents.

3.7 WMA SUPERPAVE TYPE C SURFACE COURSE

- A. Measurement: The quantity of WMA Superpave Type C will be measured as the actual number of tons placed and accepted. Legible weight tickets shall be submitted to the City or Engineer for all WMA Superpave Type C delivered to the site and placed.
- B. Payment: The quantity of WMA Superpave Type C will be paid for at the Contract unit price per ton. Payment will constitute full compensation for furnishing, preparing, hauling, and placing all materials, including adjusting utility boxes, tack coat, crack and joint sealing, and incidental excavation.

3.8 WMA SUPERPAVE TYPE B BASE COURSE

- A. Measurement: The quantity of WMA Superpave Type B will be measured as the actual number of tons placed and accepted. Legible weight tickets shall be submitted to the City or Engineer for all WMA Superpave Type B delivered to the site and placed.
- B. Payment: The quantity of WMA Superpave Type B will be paid for at the Contract unit price per ton. Payment will constitute full compensation for furnishing, preparing, hauling, and placing all materials, including tack coat and incidental excavation.

3.9 TYPE B GRADED AGGREGATE BASE COURSE

- A. Measurement: The quantity of graded aggregate base course (GABC) will be measured by the actual number of tons placed and accepted. All GABC used as a subbase for pavement or pavement patches will be paid for under this item. Legible weight tickets shall be submitted to the City or Engineer for all Type B Graded Aggregate Base Course delivered to the site and placed. GABC placed under sidewalk and curbing will be paid for under those items.
- B. Payment: Price and payment will constitute full compensation for preparing, furnishing, placing, and compacting the materials including incidentals required to complete the work.

3.10 REMOVE AND RESET GRANITE CURB

- A. Measurement: Measurement of lineal feet to be paid under this section shall be the actual number of lineal feet of old curb removed and reset plus the amount of new granite curb installed, measured along the centerline from end to end.
- B. Payment: The number of lineal feet as determined above shall be paid for at the contract unit price per lineal foot bid under this item. The unit price bid for this item will be full compensation necessary to construct the curb including removal of existing curb, excavation, placement of stone base beneath curb, resetting existing granite curb, acquiring and placing new granite curb, finishing, joint construction, backfill and all other incidental items necessary to complete the work.

3.11 REMOVE AND REPLACE BRICKWORK

- A. Measurement: Measurement of square feet to be paid under this section shall be the actual number of square feet of existing brick removed and new or reused bricks installed.
- B. Payment: The number of square feet as determined above shall be paid for at the contract unit price per square feet bid under this item, the unit price of which shall constitute full compensation necessary to complete the item, including incidental saw cut, removal of existing sidewalk, excavation, base, demolition, disposal, resetting of brick sidewalk, and compaction complete, in place and in accordance with the requirements of the contract documents.

3.12 DETECTABLE WARNING SURFACES (TRUNCATED DOME BLOCKS)

- A. Measurement: Measurement of square feet to be paid under this section shall be the actual number of square feet of installed blocks as measured on the surface.
- B. Payment: The number of square feet as determined above shall be paid for at the contract unit price per square foot bid under this item. The unit price bid for this item will be full compensation necessary to furnish and install truncated dome blocks flush with the ramp surface and include all incidentals including saw cutting, concrete removal, brick removal, excavation, disposal, and sealing the joint between the blocks and any voids along the edges of the blocks with an approved clear sealant.

3.13 PAINTING AND STRIPING

- A. Measurement: The lump sum payment for this item will be full compensation for all work related to the painting and striping of roadways and curbs such that post-construction conditions are similar and equivalent to pre-construction conditions.
- B. Payment: The lump sum price bid for this item will be full compensation necessary to complete the work in accordance with the plans and specifications, and as directed by the City or Engineer, and all other incidentals required to complete the work.

3.14 CONCRETE SIDEWALK – REMOVE AND REPLACE

- A. Measurement: Measurement of square yards to be paid under this section shall be the actual number of square yards of existing concrete sidewalk removed and replaced with new concrete installed.
- B. Payment: The number of square yards as determined above shall be paid for at the contract unit price per square yard bid under this item, the unit price of which shall constitute full compensation necessary to complete the item, including incidental saw cut, excavation, graded aggregate base, demolition, disposal, construction of new concrete sidewalk / ramp, and compaction complete, in place and in accordance with the requirements of the contract documents.

3.15 CONCRETE CURB – REMOVE AND REPLACE

- A. Measurement: Measurement of linear feet to be paid under this section shall be the actual number of linear feet of existing concrete curbing removed and replaced with new concrete installed.
- B. Payment: The number of linear feet as determined above shall be paid for at the contract unit price per linear foot bid under this item, the unit price of which shall constitute full compensation necessary to complete the item, including incidental saw cut, excavation, graded aggregate base, demolition, disposal, construction of new concrete curbing, and compaction complete, in place and in accordance with the requirements of the contract documents.

3.16 BLACKTOP CURB – REMOVE AND REPLACE

- A. Measurement: Measurement of linear feet to be paid under this section shall be the actual number of linear feet of existing blacktop curbing removed and replaced with new blacktop installed.
- B. Payment: The number of linear feet as determined above shall be paid for at the contract unit price per linear foot bid under this item, the unit price of which shall constitute full compensation necessary to complete the item, including incidental saw cut, excavation, graded aggregate base, demolition, disposal, construction of new blacktop curbing, and compaction complete, in place and in accordance with the requirements of the contract documents.

3.17 SPEED HUMP – REMOVE AND REPLACE

- A. Measurement: Measurement of linear feet to be paid under this section shall be the actual number of linear feet of existing blacktop speed hump removed and replaced with new blacktop speed hump installed.
- B. Payment: The number of linear feet as determined above shall be paid for at the contract unit price per linear foot bid under this item, the unit price of which shall constitute full compensation necessary to complete the item, including incidental saw cut, excavation, graded aggregate base, demolition, disposal, construction of new blacktop speed hump, and compaction complete, in place and in accordance with the requirements of the contract documents.

3.18 RESTORATIONS

- A. Measurement: The lump sum payment for this item will be full compensation for all work related to the complete and final restoration of incidental obstructions damaged during the work and the restoration of areas disturbed by construction including the Contractor's lay down and storage areas.
- B. Payment: The contract lump sum price will be paid under this item in proportion to the amount of work done as determined by the Owner or Engineer and shall include, but not be limited the restoration of all areas disturbed by construction including mail boxes, signs, property corners, incidental damage to items designated to remain, landscaping, gardens, the furnishing and placement of topsoil, fertilizing, seeding, mulching, etc. along with the protection and maintenance of restored areas.

TS-2 SUBMITTALS

PART 1: GENERAL

1.1 SUBMISSION DOCUMENTS

- A. All materials shall comply with DelDOT standard specifications for construction. Submit source of supply for all materials.
- B. Shop drawings & Product: Provide shop drawings and product data and any material not included in "A" above.
- C. Construction Schedule.
- D. Subcontractor List.
- E. Project Surveyor, QA/QC Testing Firm.
- F. Maintenance of Traffic Plan.
- G. Temporary Erosion and Sediment Control Plan.
- H. Safety Plan.
- I. Plan showing existing centerline and edge of pavement elevations and proposed milling depths such that requirements of Section TS-9 Paragraph 3.4.D. are met.

1.2 SUBMITTAL PROCEDURE

- A. Cover all submittals with transmittal forms. Sequentially number the transmittal forms. Resubmittals to have original number with an alphabetic suffix.
- B. Identify Project, Contractor, Subcontractor, or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate.
- C. Apply Contractor's "approved" stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information, are in accordance with the requirements of the Work and Contract Documents.
- D. Schedule submittals to expedite the Project and deliver to Engineer. Coordinate submission of related items.

- E. Identify variations from Contract Documents, Product or system limitations which may be detrimental to successful performance of the completed Work shall be identified also.
- F. Provide space for Contractor and Engineer review stamps.
- G. Revise and resubmit submittals as required, identify all changes made since previous submittal.
- H. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

1.3 SHOP DRAWINGS

- A. Submit the number of copies which the Contractor requires, plus three (3) copies which will be retained by the Engineer.
- B. Submit for approval completely dimensioned shop, layout or setting drawings and catalog cuts or other data as required to provide a complete description of system equipment.

TS-3 FIELD ENGINEERING AND SURVEYING

PART 1: GENERAL

1.1 WORK INCLUDED

- A. Provide field engineering and surveying services for stakeout of all project features and structures as indicated on the Drawings and specified herein.
- B. Identify project benchmarks.
- C. When the Contractor is able to complete the work under the Contract using GPS guided equipment, the City or Engineer will require that the Contractor provide sufficient construction "stake out" to allow the City or Engineer the opportunity to observe the proposed horizontal and vertical location of the proposed work.

1.2 QUALITY CONTROL

- A. The Contractor shall employ a qualified surveyor or engineer professionally registered in the State of Delaware and acceptable to City or Engineer. Surveyor shall establish all lines, elevations, reference marks, batterboards, etc., needed by the Contractor or City / Engineer during the progress of the Work, and from time to time to verify such marks by instrument or other appropriate means.
- B. The City or Engineer shall be permitted at all times to check the lines, elevations, reference marks, batterboards, etc., set by the Contractor, who will correct any errors in lines, elevations, reference marks, batterboards, etc., disclosed by such check. Such a check shall not be construed to be an approval of the Contractor's work and shall not relieve or diminish in any way the responsibility of the Contractor for the accurate and satisfactory construction and completion of the entire work of this Project.

1.3 FIELD CONDITIONS AND MEASUREMENTS

- A. The Contractor shall be responsible for field verification of all dimensions and conditions at the job site.
- B. Should the Contractor discover any discrepancy between actual conditions and those indicated on the Drawings which prevent the following of good practice or the intent of the Drawings and Specifications, he or she shall notify the Engineer, request clarification and instructions, and shall not proceed with his or her work until he or she has received instructions from the City or Engineer, provided that such wait does not unduly delay the progress of the work.
- C. No claims shall be made for extra payment or extensions of Contract completion time if the Contractor fails to notify the City or Engineer of any discrepancy before proceeding.

1.4 SUBMITTALS

- A. Submit name, address, and telephone number of surveyor or engineer to City or Engineer before starting Work.
- B. On request, submit documentation verifying accuracy of survey work.
- C. Plan showing existing centerline and edge of pavement elevations and proposed milling depths such that requirements of Section TS-10 are met.
- D. Submit as-built plan at completion of project. A digital (i.e. .pdf) file as well as "hard copy" plan marked in red of any changes to the project drawings will be delivered to the City. The Plan shall be signed and sealed by Surveyor, certifying that elevations and locations of improvements are in conformance, or non-conformance, with Contract Documents.

PART 2: MATERIALS (NOT USED)

PART 3: EXECUTION (NOT USED)

TS-4 MAINTENANCE OF TRAFFIC

PART 1: GENERAL

1.1 WORK INCLUDED

- A. The Contractor will provide and implement a Maintenance of Traffic Plan in accordance with the requirements of DelDOT and in accordance with the Contract Documents. Maintenance of Traffic will be limited to roadway closures.
- B. If any lane(s) to traffic must be closed, a written request must be submitted to the City of New Castle at least seven (7) days prior to the proposed closing of lane(s).
- C. It is the Contractor's responsibility to notify (in writing) local residents, school district and each and every emergency service, such as the state and local police, fire departments, rescue squads, ambulance services, hospitals, gas, electric, water, and sewer utilities, and all other emergency services that normally use the affected roadway or lane(s) or that are located within a radius of five miles of the proposed closing.
- D. The Contractor must apply for "temporary access permits" for any construction access he or she may need for construction access off of roads. A copy of the temporary access permit shall be submitted to the City of New Castle.
- E. In addition to maintenance of traffic for paved right-of-way construction work, the Contractor is responsible for maintenance of traffic for any work outside of the paved right-of-way that has any impact on roadway traffic.
- F. Provisions shall be made to maintain pedestrian traffic through the work zone. Pedestrians cannot be led into direct conflicts with either the Contractor and his or her work area or mainline traffic as it moves through or around the work zone.
- G. The Contractor shall submit to the Owner or Engineer for review and approval, plans showing details of any intended sheeting, shoring, bracing or support that is to be utilized within excavations to prevent trench failure, when the walls of the trench are near traffic.
- H. The Contractor must use flaggers that are Delaware-certified.

PART 2: MATERIALS (NOT USED)

PART 3: EXECUTION

3.1 EXECUTION

A. The type, frequency and location of all warning signs, barricades, lighting, flagging, etc. are to be in accordance with the latest DelDOT specifications governing traffic control.

TS-5 EXCAVATION AND REMOVAL OF EXISTING MATERIALS

PART 1: GENERAL

1.1 SCOPE OF WORK

- A. Contractor shall provide all labor, materials, equipment, and incidentals required for excavation and demolition work.
- B. Without intending to limit or restrict the extent of work required under contract, the work generally comprises the removal and legal disposal of earth, asphalt, concrete, and other incidental obstructions.

1.2 SUBMITTALS

- A. Permits and or notices required for demolition.
- B. Permits for transport and disposal of sewage and debris.

1.3 PROJECT RECORD DOCUMENTS

A. Accurately record actual locations of utilities, pipes subsurface foundations, and other obstructions that remain adjacent to demolition.

1.4 REGULATORY REQUIREMENTS

- A. Conform to applicable local, State and Federal codes and regulations for demolition work; safety of workers; dust and runoff control; and abandonment of sewer systems.
- B. Obtain all required permits and notices from authorities for all portions of the work.
- C. Use of explosives will not be permitted.
- D. Notify affected utility companies before starting work and comply with their requirements.

1.5 SCHEDULING

- A. Describe demolition removal sequence and schedule for review by City or Engineer.
- B. Notify City or Engineer in writing seven (7) days prior to commencement of demolition work.

PART 2: PRODUCTS (NOT USED)

PART 3: EXECUTION

3.1 PREPARATION AND PROTECTION

- A. Before beginning any cutting or demolition work, the Contractor shall carefully survey the existing work and examine the Drawings and Specifications to determine the extent of the work. The Contractor shall take all necessary precautions to ensure against damage to utilities to remain in place and any damage to such work shall be repaired or replaced at no additional cost to the Owner. The Contractor shall carefully coordinate the work of this section with all other work and construct and maintain shoring, bracing, and supports, as required. The Contractor shall ensure that structural elements are not overloaded and be responsible for increasing structural supports or adding new supports as may be required as a result of any cutting, removal, or demolition work performed under any part of this contract. Contractor shall protect all underground structures or existing utilities from damage by demolition work.
- B. Contractor shall provide "test pits" to locate utilities as needed to prevent damage.
- C. Contractor shall perform all demolition and removal work to prevent damage to adjacent properties and areas and features not designated to be demolished. Any damage caused by work shall be repaired at Contractor's expense.

3.2 GENERAL REQUIREMENTS

- A. Conduct operations with minimum interference to roadways and other accesses adjacent to the work. Maintain access and egress at all times during construction. Closing or obstruction of accesses and fire hydrants will not be permitted without proper authorization.
- B. Obtain written permission from adjacent property owners when demolition and removal equipment will traverse, infringe upon, or limit access to their property.
- C. When underground piping is to be altered or removed, the remaining piping shall be properly capped and plugged with flowable fill concrete.
- D. Arrange for and verify termination of utility services.

| E. | Equipment removed for upon removal. This drawings. | Owner shall equipment | be clea and/or | aned and st materials | tored are | for the listed | Ow | ner the |
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TS-6 EARTHWORK

PART 1: GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Preparing subgrades for walks, pavements, and curbing.
- 2. Subbase course for concrete walks and pavements.
- 3. Subbase course for asphalt paving.
- 4. Excavating and backfilling for utility trenches.

1.2 DEFINITIONS

- A. Backfill: Soil material used to fill an excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Aggregate layer placed between the subbase course and asphalt paving.
- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
- F. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by the Owner or Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for "Undercut".
- G. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by the Owner or Engineer. Unauthorized excavation, as well as remedial work directed by the Owner or Engineer, shall be without additional compensation.

- H. Fill: On site soil materials used to raise existing grades.
- I. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- J. Subbase Course: Aggregate layer placed between the subgrade and base course for asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or asphalt walk.
- K. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- L. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.3 PROJECT CONDITIONS

A. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth moving operations.

PART 2: MATERIALS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Engineered Fill: Delaware Department of Transportation borrow Type C.

PART 3: EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.3 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 - Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
- B. Excavations at Edges of Tree- and Plant-Protection Zones:
 - Excavate by hand to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.

3.4 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.5 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
 - 1. Clearance: 18 inches each side of pipe or conduit.
- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.
 - 1. Excavate trenches 6 inches deeper than elevation required to allow for bedding course.

3.6 SUBGRADE INSPECTION

- A. Proof-roll subgrade below the building slabs, paver walkway and pavements with a fully-loaded pneumatic-tired dump truck to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
- B. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by the Owner or Engineer, without additional compensation.

3.7 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by the Owner or Engineer.
 - 1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by the Owner or Engineer.
 - Unauthorized excavation will be filled at no cost to the Owner.

3.8 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.
- B. The Contractor shall take precautions as necessary to minimize the potential for disturbance or softening of the pavement subgrade materials from inclement weather or construction traffic. As a minimum, this shall include the placement of backfill on the same day as the excavation. Any soft areas which develop and are considered by the Owner or Engineer the fault of the Contractor or result of Contractor's means and methods shall be undercut and replaced by the Contractor with graded aggregate base course at no additional cost to the Owner.

TS-7 UNDERCUTTING

PART 1: GENERAL

1.1 DESCRIPTION

- A. This work shall consist of undercutting and replacing unsuitable subgrade soils as directed by the Owner or Engineer, including excavation, removal of undercut materials from the site, backfilling, clean-up, and any other items incidental to undercutting.
- B. Undercutting shall occur as needed and as directed by the Owner or Engineer.

PART 2: MATERIALS

2.1 GRADED AGGREGATE

A. DelDOT Type B

PART 3: EXECUTION

3.1 CONSTRUCTION METHODS

- A. The Contractor shall provide all tools, equipment, materials, labor and work for the excavation and removal of the unsuitable subgrade soils and their subsequent replacement with the DelDOT GABC backfill soils as directed by the Owner's representative. All work under this item shall be performed in a safe and workmanlike manner.
- B. Following the removal of the existing pavement section in areas proposed for asphalt paving or the excavation to subgrade in areas for proposed sidewalk or curb construction, the Contractor will proof roll the subgrade. The Owner's representative will review the proof roll of the exposed subgrade and provide recommendations for the undercutting of unsuitable subgrade soils as required. The depth and extent of undercut excavation, if required, will be determined by the Owner's representative subsequent to the proof roll to be performed by the Contractor.
- C. Excavated materials may be temporarily laid on the adjacent pavement. Stockpiling of materials overnight will not be permitted. Materials which are excavated and laid on the adjacent pavement shall be removed and hauled off-site by the end of each workday. Subsequently, the affected pavement areas shall be swept clean at the end of each workday. All excess stockpiled materials shall become the property of the Contractor and be removed from the site at the completion of the project at no additional expense to the Owner.

- D. Undercut areas shall be immediately covered by the geotextile fabric, pulled tight and lapped a minimum of 12 inches. Graded aggregate shall then be placed in a lift thickness not to exceed 8 inches, compacted with at least 3 passes of a minimum 10-ton vibratory roller.
- E. Any soft areas that develop after initial construction shall be undercut and replaced with graded aggregate at no additional cost to the Owner.

TS-8 ROADWAY MILLING

PART 1: DESCRIPTION

1.1 DESCRIPTION OF WORK

- A. This work shall consist of milling to the specified or required depths as indicated in the contract documents for each street to be milled, and disposal of existing bituminous concrete pavement as noted on the Contract Drawings.
- B. The Contractor shall furnish all materials, equipment, and labor necessary to mill / profile existing asphaltic surfaces and shall consist of one or more passes of milling / profiling existing asphaltic surfaces and roadway preparations in accordance with these specifications and good construction practice.

1.2 RELATED REQUIREMENTS

A. Section TS- 6 Earthwork for subgrade preparation.

1.3 QUALITY ASSURANCE

- A. Specifications: DelDOT Standard Specifications, latest edition.
- B. Workmen Qualifications: Provide workmen thoroughly trained and experienced in the skills required to operate a milling machine and who understand the design and are completely familiar with the work.

1.4 REFERENCED STANDARDS

A. DelDOT Specifications, Latest Edition

1.5 SUBMITTALS

A. Submit for review in accordance with Submittals Section of Contract Documents.

PART 2: PRODUCTS

2.1 Applicable Sections

PART 3: EXECUTION

3.1 EXECUTION

A. Milling / profiling existing asphaltic surface and roadway preparation shall

- consist of one or more passes of milling / profiling existing asphaltic surface and roadway preparations in accordance with DelDOT Specifications and good construction practice.
- B. Milling / profiling existing asphaltic surface in reasonably close conformity with the grade of profile established by the Contract Documents.
- C. The planed surface shall be free from gouges, ridges, sooting, oil film and other imperfections of workmanship and shall have a mosaic appearance suitable as a riding surface.
- D. The milling / profiling shall incorporate a machine capable of cutting at least 3-1/4" inches deep in flexible pavement while leaving a uniformly cut and drivable roadway surface capable of handling traffic prior to placement of the overlay.
- E. The machine must be capable of the following:
 - 1. Ground speed shall be independent of cutter speed.
 - 2. Self-contained water system for control of duct and fine particles.
 - 3. Shall be capable of working in wet and dry conditions down to 32 degrees Fahrenheit.
 - 4. Width shall be such to allow controlled traffic.
- F. Road and adjacent area to be cleaned daily of all milled asphalt, rubbish, trash, and debris.
- G. Milled streets to be resurfaced within five (5) consecutive calendar days of milling/profiling operation, unless otherwise approved by the Owner or Engineer.
- H. Milling / profiling must be completed as close to utility castings as possible, with remaining asphaltic surface to be removed by appropriate equipment or cut out by conventional methods.
- I. The milling / profiling work shall be performed with a pavement milling machine of a type that has operated successfully on a considerable mileage of work comparable to that proposed to be performed under this contract.
- J. Milling / profiling width and depth may be varied by Owner's or Engineer's representative to accomplish desired results.

- K. Prior to the placement of any bituminous concrete, the edges of the milled area shall be swept clean, and a tack coat shall be thoroughly applied with a brush to provide full coverage of the saw cut edge and any abutting curbs and sidewalks.
- L. Prior to the placement of the new pavement, butt joints shall be constructed at each termination location or location of adjacent asphalt surfaces including driveways and parking areas for the surface course along the existing pavement. The edge of the existing pavement shall have a clean, straight, and true edge, and should be saw cut, if necessary.
- M. All manholes and cleanouts within the pavement areas shall be vertically adjusted flush with the new pavement surface to promote positive pavement drainage. Catch basins / manholes should be adjusted using Portland cement concrete bricks and mortar, or with cast in place concrete.

TS-9 PAVING

PART 1: GENERAL

1.1 SUMMARY

- A. The Contractor shall install WMA Superpave pavement and base courses in accordance with details provided on the Drawings and Specifications.
- B. Work shall include all labor, materials, and equipment necessary to perform all paving and surfacing where shown on the contract drawings. The type of material, thickness and typical sections shall be as shown on the Contract Drawings.

1.2 RELATED REQUIREMENTS

A. Section TS- 6 Earthwork for subgrade preparation, fill material, unboundaggregate subbase and base courses, and aggregate pavement shoulders.

1.3 SUBMITTALS

- A. Material Certificates: For each paving material. Mixes containing recycled materials must perform equal to mixes produced from all new materials.
- B. Mix designs for bituminous concrete shall be submitted in writing by the Contractor sufficiently in advance of paving operations to allow for review approval. The design information shall include the following:
 - 1. The use for which the material is proposed.
 - 2. The designation, source, and anticipated gradation of each of the component aggregates.
 - 3. The estimated percentage of each aggregate required to yield the desired blend.
 - 4. The resulting percentage passing each sieve size stipulated by the appropriate band.
 - 5. The source of the asphalt material to be used.
- C. Proctor Tests: For graded aggregate base courses.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by the Delaware Department of Transportation.
- B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the Delaware Department of Transportation for asphalt paving work.
 - 1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
- B. Weather Limitations: Apply tack coats only when ambient temperature is above 40° F and rising, and when temperature has not been below 35° F for 12 hours immediately prior to application. Do not apply when base is wet or contains an excess of moisture.
- C. Construct asphaltic concrete surface course (wearing course) only when atmospheric temperature is above 40° F and when base is dry. Binder course may be placed when air temperature is above 35° F and rising.
 - 1. Tack Coat: Minimum surface temperature of 60 deg F (15.6 deg C).
 - 2. Asphalt Base Course: Minimum surface temperature of 40 deg F (4.4 deg C) and rising at time of placement.
 - Asphalt Surface Course: Minimum surface temperature of 60 deg F (15.6 deg C) at time of placement.

PART 2: MATERIALS

2.1 GRADED AGGREGATE BASE COURSE

A. DelDOT Type B

2.2 AGGREGATES

A. Coarse Aggregate: ASTM D 692, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.

- B. Fine Aggregate: ASTM D 1073 or AASHTO M 29, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.
- C. Mineral Filler: ASTM D 242 or AASHTO M 17, rock or slag dust, hydraulic cement, or other inert material.

2.3 ASPHALT MATERIALS

- A. Asphalt Binder: AASHTO M 320 or AASHTO MP 1a, in accordance with Delaware Dept. of Transportation Standards.
- B. Tack Coat: AASHTO M 140 emulsified asphalt, or AASHTO M 208 cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.

2.4 MIXES

- A. Warm-Mix Asphalt: Plant mixes approved by the Delaware Department of Transportation and complying with the following requirements:
 - 1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
 - Base Course: Superpave Type "B" 115 gyrations, PG 64-22 carbonate stone. DelDOT Specification 401809.
 Surface Course: Superpave Type "C" 115 gyrations, PG 64-22 carbonate stone. DelDOT Specification 401800.

PART 3: EXECUTION

3.1 SUBGRADE AND BASE COURSE UNDER PAVEMENTS AND WALKS

A. Contractor shall take precautions as necessary to minimize the potential for disturbance or softening of the pavement subgrade materials from inclement weather or construction traffic. The subgrade soil shall be proofrolled by a minimum 10-ton vibratory roller or a fully loaded tandem dump truck in the presence of a qualified geotechnical engineer acting as the owner's representative in the field. Any soft, wet, or yielding areas encountered within the pavement areas shall be excavated to the depth required for placement of graded aggregate base course. If excavated areas are soft, wet, or yielding, these areas shall be undercut to firm subgrade and backfilled as recommended by the geotechnical engineer. See Section 7 Undercutting.

- B. Place graded aggregate base course on subgrades free of mud, frost, snow, or ice.
- C. Graded aggregate base course placed adjacent to granite or concrete curb that is removed and replaced for curb ramp installation or retrofit shall be a minimum of 12 inches wide as measured from the face of curbing and a minimum of 8 inches in depth.
- D. Graded aggregate base course placed for roadway patching shall be a minimum of 8 inches at all locations.
- E. Graded aggregate base course placed for trench restoration shall be a minimum of 8 inches in depth.
- F. On prepared subgrade, place graded aggregate base course under pavements and walks as follows:
 - 1. Shape graded aggregate base course to required crown elevations and cross-slope grades.
 - 2. For base courses greater than 6 inches in compacted thickness, place in equal layers of no less than 3 inches and not greater than 6 inches of compacted thickness.
 - Compact base course at optimum moisture content plus or minus 2% to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.2 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed and partially completed surfaces become eroded, rutted, settled, and where they lose compaction due to subsequent construction operations or weather conditions.

3.3 SURFACE PREPARATION

A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.

- B. Herbicide Treatment: Apply herbicide according to manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted-aggregate base before applying paving materials.
- C. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.10 gal./sq. yd.
 - 1. Allow tack coat to cure undisturbed before applying asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.4 MILLING OVERLAY

- A. The contractor shall be responsible to establish final site grading that provides positive site drainage at all areas on the finished pavement surface. Following its placement, the surface course shall be compacted in accordance with DelDOT's Standard Specification requirements.
- B. The interface between the new and existing pavement should be sawcut to a depth of approximately 1/2-inch and be filled with a hot poured joint sealant in strict accordance with Section 808 of the DelDOT Standard Specifications and the manufacturer's printed label instructions.
- C. Millings may be temporarily laid on the adjacent pavement. Stockpiling of materials overnight will not be permitted. Millings shall be removed and hauled off-site by the end of each workday. Subsequently, the affected pavement areas shall be swept clean at the end of each workday. Where possible, it is preferred that excavated materials be directly loaded onto trucks for subsequent off-site disposal.
- D. The completed pavement surface shall be graded such that a minimum 1.25% cross slope will be provided by paving application, to match the surrounding grades, and shaped to provide for positive surface drainage away from the existing structures.

3.5 PLACING WMA SUPERPAVE

A. Machine on prepared surface, spread uniformly, and strike off. Place by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted per DelDOT standards.

B. Base Course:

1. Base course placed for road patches and pipe trench repair shall be 4 inches along Buttonwood Road, and minimum of 2.25 inches at along all other roadways. Base course will be placed in equal lifts with a maximum lift thickness of 2 inches.

C. Surface Course:

1. Surface course placed following milling operations, road patches and pipe trench repair shall be a minimum of 3.25 inches along the Buttonwood Road. Along all other roadways, the surface course shall be a minimum of 2.75 inches. Surface course will be placed in equal lifts with a maximum lift thickness of 2 inches.

3.6 SPEED HUMPS

A. Construct speed humps as specified in the DelDOT Traffic Calming Manual, Figure III-2.

3.7 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of asphalt course.
 - 1. Clean contact surfaces and apply tack coat to joints.
 - 2. Offset patch joints, in successive courses, a minimum of 3 inches.
 - 3. Provide single longitudinal joint at roadway centerline. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
 - 4. Offset transverse joints, in successive courses, a minimum of 24 inches.

5. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."

3.8 COMPACTION

- A. General: Begin compaction as soon as placed paving will bear roller weight without visible displacement. Compact paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.
 - 1. Complete compaction before mix temperature cools to 185 degrees F.
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while asphalt is still hot enough to achieve specified density. Continue rolling until asphalt course has been uniformly compacted.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
 - 1. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.9 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:
 - 1. Base Course: Plus or minus ½ inch.
 - 2. Surface Course: Plus or minus ¼ inch.

B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely and longitudinally to paved areas:

Base Course: 1/4 inch
 Surface Course: 1/8 inch

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: The Contractor will engage a qualified testing agency to perform tests and inspections.
- B. Test in-place asphalt courses for compliance with DelDOT Standard Specifications and requirements for density, thickness, and surface smoothness. Contractor shall obtain five core samples from the finished paving to verify thickness requirements. The location of the core samples will be determined by the City or Engineer. Repair areas where core samples were removed. Replace and compact asphalt where core tests were taken.
- C. Remove and replace or install additional asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.11 WASTE HANDLING

- A. All millings and other debris to be removed and disposed of in accordance with all applicable federal, state, and local regulations.
- B. See contract drawings for additional requirements.

3.12 COMPLETION

- A. Following completion of pavement reconstruction, the Contractor shall stripe to match the existing pavement striping and markings.
- B. Following completion of construction, the Contractor shall restore all disturbed areas to their pre-construction condition.

TS-10 CAST-IN-PLACE CONCRETE

PART 1: GENERAL

1.1 DESCRIPTION OF WORK

A. This work shall consist of excavation, partial demolition / removal of existing concrete, removal of excess materials from the site, placement of new concrete, backfill and clean-up.

1.2 WORK INCLUDES

- A. Work of this section includes the following:
 - 1. Sidewalk 4 inches thick over 4 inches graded aggregate base course.
 - 2. Curb and Gutter DelDOT curb and gutter type 1-6 or match existing over 6 inches graded aggregate base course.
 - 3. Valley gutter not used.
- B. All work included in this Section shall conform to applicable provisions of ACI, ASTM, and CRSI standards, guidelines, and practices.

PART 2: MATERIALS

2.1 MATERIALS

A. Forms:

1. Forms for Exposed Finish Concrete: Unless otherwise indicated, construct formwork for exposed concrete surfaces with plywood, metal, metal-framed plywood faced or other acceptable panel-type materials, to provide continuous, straight, smooth, exposed surfaces. Furnish in largest practicable sizes to minimize number of joints and to conform to joint system shown on drawings. Provide form material system shown on drawings. Provide form material with sufficient thickness to withstand pressure of newly-placed concrete without bow of deflection.

B. Reinforcing Materials:

- 1. Welded Wire Fabric: ASTM A185, welded steel wire fabric.
- C. Concrete Materials:

- 1. Portland Cement: ASTM C150, Type I, unless otherwise acceptable to Owner or Engineer. Use one (I) brand of cement throughout project.
- 2. Normal Weight Aggregates: ASTM C33, and as herein specified. Provide aggregates from a single source for exposed concrete.
 - a. For exterior exposed surfaces, do not use fine or coarse aggregates containing spalling-causing deleterious substances.
- Water: Potable.

2.2 CONCRETE MIXES

- A. Ready-Mix Concrete: Comply with requirements of ASTM C94, and as herein specified.
 - During hot weather, or under conditions contributing to rapid setting of concrete, a shorter mixing time than specified in ASTM C94 may be required.
 - 2. When air temperature is between 85°F (30°C) and 90°F (32°C), reduce mixing and delivery time form 1-1/2 hours to 75 minutes, and when air temperature is above 90°F (32°C), reduce mixing and delivery time to 60 minutes.

PART 3: EXECUTION

3.1 FORMS

- A. Design, erect, support, brace and maintain formwork to support vertical and lateral loads that might be applied until such loads can be supported by concrete structure. Construct formwork so concrete members and structures are of correct size, shape, alignment, elevation, and position.
- B. Design formwork to be readily removable without impact, shock, or damage to cast-in-place concrete surfaces and adjacent materials.

- C. Construct forms to sizes, shapes, lines, and dimensions shown, and to obtain accurate alignment, location, grades, level and plumb work in finished structures. Provide for openings, offsets, sinkages, keyways, recesses, moldings, rustications, reglets, chamfers, blocking, screeds, bulkheads, anchorages and inserts, and other features required in work. Use selected materials to obtain required finishes. Solidly butt joints and provide back-up at joints to prevent leakage of cement paste.
- D. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces where slope is too steep to place concrete with bottom forms only. Kerf wood inserts for forming keyways, reglets, recesses, and the like, to prevent swelling and for easy removal.
- E. Provide temporary openings where interior area of formwork is inaccessible for cleanout, for inspection before concrete placement, and for placement of concrete. Securely brace temporary openings and set tightly to forms to prevent loss of concrete mortar. Locate temporary openings on forms at inconspicuous locations.
- F. Form Ties: Factory-fabricated, adjustable-length, removable or snapoff metal form ties, designed to prevent form deflection, and to prevent spalling concrete surfaces upon removal.
 - 1. Unless otherwise indicated, provide ties so portion remaining within concrete after removal is 1" inside concrete and will not leave holes larger than I" diameter in concrete surface.
- G. Provisions for Other Trades: Provide openings in concrete formwork to accommodate work of other trades. Determine size and location of openings, recesses and chases from trades providing such items. Accurately place and securely support items built into forms.
- H. Cleaning and Tightening: Thoroughly clean forms and adjacent surface to receive concrete. Remove chips, wood, sawdust, dirt, or other debris just before concrete is placed. Retighten forms and bracing as required to eliminate mortar leaks and maintain proper alignment.

3.2 PLACING REINFORCEMENT

A. Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars", for details and methods of reinforcement placement and supports, and as herein specified.

- B. Before placing, clean surface to remove loose rust and mill scale, earth, ice, and other materials which reduce or destroy bond with concrete.
- C. Accurately position, support, and secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers, as required.
- D. Place reinforcement to obtain at least minimum coverages for concrete protection. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement operations. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.
- E. Install welded wire fabric in as long lengths as practicable. Lap adjoining pieces at least one full mesh and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.
- F. Reinforcement shall not be bent or straightened in a manner injurious to the material.
- G. Reinforcement shall be secured in position and reviewed by the Owner or Engineer before pouring concrete.

3.3 JOINTS

- A. Construction Joints: Locate and install construction joints as indicated.
- B. Provide keyways at least 1-1/2" deep in construction joints in walls, slabs and between walls and footings.
- C. Place construction joints perpendicular to main reinforcement. Continue reinforcement across construction joints.
- D. Construction Joints in Slabs-on-Grade: Construct isolation joints in slabs-on-grade and vertical surfaces, such as column pedestals, foundation walls and elsewhere as indicated.

3.4 PREPARATION OF FORM SURFACES

- A. Clean re-used forms of concrete matrix residue, repair and patch as required to return forms to acceptable surface condition.
- B. Coat contact surfaces of forms with a form-coating compound before reinforcement is placed.

- 1. Thin form-coating compound only with thinning agent of type, and in amount, and under conditions of form-coating compound manufacturer's directions. Do not allow excess form-coating material to accumulate in forms or to come in contact with in-place concrete surfaces against which fresh concrete will be placed. Apply in compliance with manufacturer's instructions.
- Coat steel forms with a non-staining, rust-preventative form oil or otherwise protect against rusting. Rust-stained steel formwork is not acceptable.

3.5 CONCRETE PLACEMENT

- A. Preplacement Inspection: Before placing concrete, inspect and complete formwork installation, reinforcing steel, and items to be embedded or castin. Notify other crafts to permit installation of their work; cooperate with other trades in setting such work. Moisten wood forms immediately before placing concrete where form coatings are not used.
- B. Coordinate the installation of joint materials and moisture barriers with placement of forms and reinforcing steel.
- C. General: Comply with ACI 304 "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete", and as herein specified.
 - Deposit concrete continuously or in layers of such thickness that no concrete will be placed on concrete which is hardened sufficiently to cause the formation of seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as herein specified. Deposit concrete as nearly as practicable to its final location to avoid segregation.
- D. Placing Concrete in Forms: Deposit concrete in forms in horizontal layers not deeper than 24" and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic to avoid cold joints.
- E. Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures for consolidation of concrete in accordance with ACI recommended practices.

- F. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations not farther than visible effectiveness of machine. Place vibrators to rapidly penetrate placed layer and at least 6" into preceding layer. Do not insert vibrators in lower layers of concrete that have begun to set. At each insertion limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing segregation of mix.
- G. Placing Concrete Slabs: Deposit and consolidate concrete slabs in a continuous operation, within limits of construction joints, until the placing of a panel or section is completed.
- H. Consolidate concrete during placing operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.
- I. Bring slab surfaces to correct level with straightedge and strikeoff. Use bull floats or darbies to smooth surface, free of humps or hollows. Do not disturb slab surfaces prior to beginning finishing operations.
- J. Maintain reinforcing in proper position during concrete placement operations.
- K. Cold Weather Placing: Protect concrete work from physical damage or reduced strength which could be caused by frost, freezing actions, or low temperatures, in compliance with ACI 306 and as herein specified.
- L. When air temperature has fallen to or is expected to fall below 40°F (4°C), uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50°F (10°C), and not more than 80°F (27°C) at point of placement.
- M. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
- N. Hot Weather Placing: When hot weather conditions exist that would seriously impair quality and strength of concrete, place concrete in compliance with ACI 305 and as herein specified.
- O. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90°F (32°C). Mixing water may be chilled or chopped ice may be used to control temperature provided water equivalent of ice is calculated to total amount of mixing water. Use of liquid nitrogen to cool concrete is Contractor's option.

- P. Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedment in concrete.
 - 1. Fog spray forms, reinforcing steel and subgrade just before concrete is placed.
- Q. Use water-reducing retarding admixture (Type D) when required by high temperatures, low humidity, or other adverse placing conditions.

3.6 FINISH OF FORMED SURFACES

- A. Rough Form Finish: For formed concrete surfaces not exposed-to-view in the finish work or hidden by other construction, unless otherwise indicated. This is the concrete surface having texture imparted by form facing material used, with tie holes and defective areas repaired and patched. Fins and other projections exceeding 1/4" in height, shall be rubbed down or chipped off.
- B. Smooth Form Finish: For formed concrete surfaces exposed-to-view, or that are to be covered with a coating material applied directly to concrete, such as waterproofing, dampproofing, painting or other similar system. Repair and patch defective areas. Fins or other projections shall be completely removed and smoothed.
- C. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces occurring adjacent to formed surfaces, strike-off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.7 CONCRETE CURING AND PROTECTION

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
 - 1. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 7 days.
 - 2. Begin final curing procedures immediately following initial curing and before concrete has dried. Continue final curing for at least 7 days in accordance with ACI 301 procedures. Avoid rapid drying at end of final curing period.

- B. Curing Methods: Perform curing of concrete by curing and sealing compound, by moist curing, by moisture-retaining cover curing, and by combinations thereof, as herein specified.
 - 1. Provide moisture curing by following methods.
 - a. Keep concrete surface continuously wet by covering with water.
 - b. Continuous water-fog spray.
 - 2. Provide moisture-cover curing as follows:
 - a. Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width with sides and end lapped at least 3" and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 - 3. Provide curing and sealing compound to slabs, as follows:
 - a. Apply specified curing and sealing compound to concrete slabs as soon as final finishing operations are complete (within 2 hours). Apply uniformly incontinuous operation by power-spray or roller in accordance with manufacturer's directions. Recoat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - b. Do not use membrane curing compounds on surfaces which are to be covered with coating material applied directly to concrete, liquid floor hardener, waterproofing, dampproofing, membrane roofing, flooring (such as ceramic or quarry tile, glue-down carpet), painting, and other coatings and finish materials, unless otherwise acceptable to the City or Engineer.
 - 4. Curing Unformed Surfaces: Cure unformed surfaces, such as slabs, floor topping, and other flat surfaces by application of appropriate curing method.
 - a. Final cure concrete surfaces to receive liquid floor hardener or finish flooring by use of moisture-retaining cover, unless otherwise directed.

5. Sealer and Dustproofer: Apply a second coat of specified curing and sealing compound only to surfaces given a first coat.

3.8 REMOVAL OF FORMS

A. Formwork not supporting weight of concrete, such as sides of beams, walls, columns, and similar parts of the work, may be removed after cumulatively curing at not less than 50°F (10°C) for 24 hours after placing concrete, provided concrete is sufficiently hard to not be damaged by form removal operations, and provided curing and protection operations are maintained.

3.9 RE-USE OF FORMS

- A. Clean and repair surfaces of forms to be re-used in work. Split, frayed, delaminated, or otherwise damaged form facing material will not be acceptable for exposed surfaces. Apply new form coating compound as specified for new formwork.
- B. When forms are extended for successive concrete placement, thoroughly clean surfaces, remove fins and laitance, and tighten forms to close joints. Align and secure joint to avoid offsets. Do not use "patched" forms for exposed concrete surfaces, except as acceptable to the City or Engineer.

TS-11 INSTALL DETECTABLE WARNING SURFACES (TRUNCATED DOME BLOCKS)

PART 1: GENERAL

1.1 DECRIPTION OF WORK

- A. The work consists of furnishing all materials and installing a detectable warning surface system on an existing sidewalk or curb ramp that complies with the Americans with Disabilities Act (ADA) (1990) for outdoor facilities.
- B. Contractor shall adhere to guidelines provided in the document "DelDOT Pedestrian Accessibility Standards for Facilities in the Public Right of Way 2021 Edition", last revised November 2022. Specifically refer to Chapter 4. This document is available at:

https://www.deldot.gov/Publications/manuals/pedestrianAccessibility/pdfs/2021/Pedestrian-Accessibility-Standards-for-Facilities-in-the-Public-Right-of-Way-2021-Edition.pdf?cache=1674842432462

PART 2: MATERIALS

2.1 MATERIALS

- A. Precast concrete, or fired clay brick, paver units each with the truncated dome pattern set with the existing sidewalk surface. Stamped systems or ceramic tiles will not be accepted.
- B. Contractor shall certify that the surface is slip resistant.
- C. Final surface of the retrofit system shall have a red brick color when placed within or adjacent to a concrete sidewalk and a different color when placed within or adjacent to a brick sidewalk.
- D. All materials show conform to DelDOT Standard Specifications.

PART 3: EXECUTION

3.1 RETROFITTING EXISTING RAMPS WITHOUT DOME BLOCKS

- A. Saw cut entire existing sidewalk or curb ramp at location that will allow installation of truncated domes. Remove existing materials and install new base to allow for thickness of paver units. Entire section of new sidewalk and base material under new truncated dome paver units shall be constructed at a lower elevation to permit the installed paver units to be flush with the surrounding ramp or sidewalk surfaces. Paver units shall be set in a bed or mortar and have mortared joints.
- B. At edges, changes in grade of up to ¼ inch may be vertical. Changes in grade between a ¼ inch and ½ inch shall be beveled. No changes in grade greater than ½ inch will be acceptable.
- C. For installations in existing brick sidewalks or ramps, Contractor shall remove existing bricks as necessary. Paver units can be placed over same existing base material and lift thickness and shall be placed so they are flush with surrounding bricks. Previously removed bricks can be cut or reshaped for use in filling gaps between paver units and unremoved bricks.
- D. Paver units shall be vibrated into leveling course with a low amplitude vibrator capable of a 3,500 to 5,000 pound compaction force. At minimum of three passes across paver units will be performed.
- E. Dry sand shall be spread to fill joints immediately after vibrating. Brush and vibrate sand until joints are completely filled. Remove excess sand.

TS-12 PAINTING AND STRIPING

PART 1: GENERAL

1.1 WORK INCLUDES

A. Application of road painting and striping.

1.2 REFERENCES

A. 2011 Delaware Manual on Uniform Traffic Control Devices (MUTCD).

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site at such times to assure continuity of installation.
- B. Store and protect members to prevent physical damage.
- C. Materials shall be stored and handled per manufacturers recommendations

PART 2: PRODUCTS

2.1 STRIPING MATERIALS

A. Striping materials must be in conformance with MUTCD specifications.

2.2 SIGN MATERIALS – NOT USED

PART 3: EXECUTION

3.1 EXAMINATION

- A. Verify that site conditions are ready to receive work and field measurements are as on Drawings.
- B. Road conditions must meet manufacturer's recommendations before application of road striping.
- C. Beginning of installation means installer accepts existing conditions.

3.2 PREPARATION

A. Prepare support equipment for the erection procedure, temporary shoring and bracing, and induced loads during erection.

3.3 STRIPING INSTALLATION

- A. All painted lines shall be applied at a minimum thickness of 15 mils, with 6-8 pounds of reflective glass beads applied per gallon of paint. All permanent markings such as elongated arrows, stop lines, crosswalks, preferential and bike lane markings must be an approved type thermoplastic material, applied a minimum of 120 mils thickness. All letters, arrows and symbols shall be in conformance with the "Standard Alphabets for Highway Signs and Pavement Markings" adopted by the Federal Highway Administration.
- B. When the removal of pavement markings is necessary for re-striping, the old markings must be ground off, sand-blasted or covered with a chip-seal. Covering the markings with black paint is prohibited.
- 3.4 SIGN INSTALLATION NOT USED

TS-13 SEEDING AND RESTORATION

PART 1: GENERAL

1.1 WORK INCLUDED

- A. All disturbed areas.
- B. Preparation of subsoil.
- C. Placing topsoil.
- D. Fertilizing.
- E. Seeding.
- F. Mulching.

1.2 DEFINITIONS

A. Noxious Weeds: Includes Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwork, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

1.3 REGULATORY REQUIREMENTS

A. Comply with regulatory agencies for fertilizer and herbicide composition.

1.4 QUALITY ASSURANCE

A. Provide seed mixture in containers showing percentage of seed mix, year of production, net weight, date of packaging, and location of packaging.

1.5 SCHEDULING AND COORDINATION

- A. Coordinate Work of this Section with Work of other Sections.
- B. Schedule site restoration operations to minimize the time disturbed areas will be left exposed to erosion.

1.6 SUBMITTALS

A. Product Data: Provide data on all seed mixes with certified statement of weight, composition, mixture, percentage of purity, and germination as verification that the proper materials and volumes have been used. Also provide data on all soil amendment materials, herbicides, or other chemicals to be used for Work of this Section.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- C. Deliver fertilizer in original, unopened waterproof bags showing weight, chemical analysis, and name of the manufacturer.

PART 2: PRODUCTS

2.1 SEED MIXTURE

- A. Permanent grass seed mixture shall be:
 - 1. Tall Fescue 125 LBS/Acre
 - 2. Perennial Ryegrass 15 LBS/Acre
 - 3. Kentucky Bluegrass 10 LBS/Acre
- B. The date of the last germination of the seed shall be within a period of six months prior to commencement of planting operations. Seed shall be from same of previous year's crop; each variety of seed shall have a purity of not less than 85%, a percentage of germination not less than 90%, shall have a weed content of not more than 1% and contain no noxious weeds.

2.2 TOPSOIL

A. Excavated material from site and free of roots, rocks larger than one inch, subsoil, debris, and weeds.

2.3 MULCHING AND BINDER

- A. Dry oat or wheat straw, free from weeds and foreign matter detrimental to plant life. Hay is not acceptable.
- B. Synthetic binder for mulch shall be non-asphaltic emulsion, Mulch Mate Super Tack or approved equal.

2.4 SOIL SUPPLEMENTS

A. Add limestone and fertilizer in accordance with manufacturer's instructions based on a soil test and type of grass provided.

2.5 WATER

A. Clean, fresh, and free of substances or matter which could inhibit vigorous growth of grass.

PART 3: EXECUTION

3.1 INSPECTION

A. Verify that subgrade is ready to receive the work of this Section.

3.2 PREPARATION OF SUBSOIL

- A. Prepare subsoil to eliminate uneven areas and low spots. Maintain lines, levels, profiles, and contours. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials, weeds, and undesirable plants and their roots. Remove contaminated subsoil.
- C. Prepare subgrade to obtain satisfactory bond between subsoil and topsoil by scarifying subsoil to a depth of 3 inches where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted subsoil. This operation shall not be performed when subgrade is frozen, excessively wet, or dry. Scarify immediately prior to topsoil placement.

3.3 PLACING TOPSOIL

- A. Spread topsoil to a minimum depth of 6 inches over area to be seeded. Rake until smooth.
- B. Place topsoil during dry weather and on dry, unfrozen subgrade.
- C. Remove vegetable matter and foreign non-organic material while spreading.
- D. Grade to eliminate rough, low, or soft areas, and to ensure positive drainage.

3.4 SOIL SUPPLEMENTS

- A. Apply limestone and fertilizer according to manufacturer's instructions.
- B. Apply after smooth raking of topsoil and prior to roller compaction.
- C. Do not apply lime or fertilizer at same time or with same machine as will be used to apply seed.
- D. Mix thoroughly into upper 2 inches of topsoil.
- E. Lightly water to aid the dissipation of fertilizer.
- F. Any irregularities or depressions caused by liming or fertilizing operations shall be corrected prior to seeding.

3.5 SEEDING

- A. Apply seed either by hydroseeding or mechanical spreading.
- B. If using mechanical spreading apply evenly in two intersecting directions. Rake in lightly.
- C. Do not seed area in excess of that which can be mulched on same day.
- D. Do not sow immediately following rain, when ground is too dry, or during windy periods.
- E. Roll seeded area with roller not exceeding 112 lbs.

3.6 MULCHING

- A. Immediately following seeding and compacting, apply mulch at 135 lb/1000 square foot for an approximate thickness of 2 inches.
- B. Apply mulch binder at a rate recommended by manufacturer immediately after placement of mulch.
- C. Apply water with a fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.

3.7 MAINTENANCE

- A. Areas shall be mowed not less than once each 10 days to help prevent weeds from establishing.
- B. General restored areas shall be cut to a height no less than 2 1/2".

- C. Neatly trim edges and hand clip where necessary.
- D. Control growth of weeds. If necessary, apply herbicides in accordance with manufacturer's instructions. Remedy damage resulting from improper use of herbicides.
- E. Reseed any areas which do not show even stand.
- F. Contractor shall water restored areas until Final Completion.

3.8 GUARANTEE PERIOD

- A. All restored areas shall be guaranteed by the Contractor for not less than one full year from the date of Final Completion.
- B. During first planting season after Final Completion, any restored areas not demonstrating satisfactory stands, as determined by the City or Engineer, shall be renovated, reseeded, and maintained by Contractor until satisfactory stands are attained at all restored areas.
- C. A satisfactory stand shall be defined as an even stand of grass, after cutting, at least 2 1/2" tall with at least 85% germination.

TS-14 CRACK AND JOINT SEALING

PART 1: GENERAL

1.0 DESCRIPTION

A. This work shall consist of cleaning and sealing cracks and joints in existing pavement, including preparation, placement of crack sealant, clean-up, and any other items incidental to crack sealing.

PART 2: MATERIALS

2.1 MATERIALS

- A. The Contractor shall furnish all materials required for this item including, but not limited to:
 - Crack and Joint Sealant: Hot poured joint sealant conforming to the requirements of Sections 1042 and 1043 of the DelDOT Standard Specifications
 - 2. Slurry Seal: Joint sealer modified with equal parts of joint sealant and mason sand (DelDOT Standard Specification Section 804).

PART 3: CONSTRUCTION METHODS

3.1 METHODS

- A. The Contractor shall provide all tools, equipment, materials, labor and work for the sealing of existing cracks in the pavement (1/8" or wider) or for joints between bituminous concrete pavement and adjacent concrete pavement areas. All work under this item shall be performed in a safe and workmanlike manner.
- B. Prior to placement of the crack sealer, the cracks should be routed with a wire brush to a depth of 1 inch and blown clean and dry with a compressed air heat lance (minimum air temperature of 200° F).
- C. Where vegetation is present in cracks in the pavement, spray with an approved chemical herbicide (e.g., Roundup) at least 24 hours prior to cleaning and placement of crack sealant.

- D. Subsequent to cleaning, all cracks in with a width ranging from 1/8 inch to a ½ inch shall be sealed with a hot poured crack sealer in accordance with the manufacturer's printed label instructions. Rope-like joint sealants heated in place with a torch shall not be permitted. A slurry seal shall be utilized to seal cracks wider than 1/2 inch in width.
- E. Following placement of the joint sealant, the hot-pour material shall be squeezed flush with the adjoining pavement. If the work area is not blocked off from vehicular and pedestrian traffic, the sealed crack shall be dusted with sand to prevent tracking.

TS-15 REMOVE AND RESET GRANITE CURB

PART 1: GENERAL

1.1 DECRIPTION OF WORK

A. The work consists of removing existing granite curb, temporarily storing granite curb on site, resetting granite curb, and setting new granite curb.

PART 2: MATERIALS

2.1 REUSE OF EXISTING MATERIALS

A. Existing granite curbs shall be reused whenever and wherever possible. Granite curbs shall be stockpiled in such a manner to protect them from damage until reuse.

2.2 NEW MATERIALS

- A. In the event that existing curbs cannot be reused, new granite curbs shall be supplied by the contractor and shall match the color and texture of existing adjacent curbs as closely as possible.
- B. Samples of new curbs shall be provided to the City prior to any installation. Curbs shall not be installed until the City approves samples.

PART 3: EXECUTION

3.1 EXECUTION

- A. Removal of granite curb shall utilize existing expansion joints if possible. In areas where expansion joints cannot be used, granite curb sections and adjacent roadway sections shall be isolated from remaining curb and pavement by saw cutting. All portions of existing curb, pavement, and base courses shall be removed. Contractor will exercise care in the removal and temporary storing of granite curb.
- B. Contractor shall prepare a base course of a minimum of 6 inches properly compacted graded aggregate prior to resetting of granite curb. Granite curb shall be reset the same day it is removed to minimize possible damage or vandalism.
- C. Roadway patches to be in accordance with Section TS-9.

TS-16 REMOVE AND RESET BRICK SIDEWALK

PART 1: GENERAL

1.1 DECRIPTION OF WORK

- A. The work consists of removing existing brick work and reinstalling previously used bricks.
- B. All brick work shall be in conformance with Section 611 of DelDOT Standard Specifications for Road and Bridge Construction, August 2001, or as later amended.

PART 2: MATERIALS

2.1 REUSE OF EXISTING MATERIALS

A. Existing bricks shall be reused whenever and wherever possible. Bricks shall be stockpiled in such a manner to protect them from damage until reuse.

2.2 MATERIALS

- A. Bricks shall be whole brick of standard size with straight and parallel edges and square corners. They shall be of compact texture, full weight and entirely true, free from injurious cracks and flaws, tough, strong and shall have a clear ring when struck together.
- B. New bricks shall match the color and texture of existing adjacent bricks as closely as possible.
- C. Samples of new bricks shall be provided to the City prior to any installation. Bricks shall not be installed until the City approves samples.

PART 3: EXECUTION

3.1 EXECUTION

A. All brick shall be laid on its face in either a perpendicular or diagonal pattern to match adjacent brick work. Brick shall be placed on a layer of sand not less than one (1) inch thick over a layer of well compacted aggregate base not less than four (4) inches in thickness. Aggregate shall be placed over well compacted subgrade.

- B. Contractor may submit an alternate design to the City varying from that specified in Section 3.1.A. above. Alternate design will not be utilized unless or until approved by the City.
- C. All irregular spaces shall be filled with pieces chipped as near as possible to fit same, and the whole to be covered with a thin layer of sand, which is to be thoroughly mixed into the spaces between the bricks.
- D. Contractor shall warrantee brick work for two years from the date of final acceptance for each individual installation. Any bricks found to have settled in this time period such that an edge of ¼ inch or greater is created with adjacent bricks shall be replaced at no cost to the City.

ADDENDUM #2

City of New Castle, Delaware Contract No. 2025-001 FY25 Citywide Paving Contract October 2, 2024

This addendum is hereby made part of the Contract Documents for the referenced project. Please note the following additions, changes, corrections, and/or information and include the requirements stated herein in connection with this Contract. Work or materials not specifically mentioned herein are to be as described in the original Contract Documents. This addendum #1 contains a total of three (3) pages including this page.

- 1. On the Invitation for Bid, the bid due date is hereby changed to 1:30 PM on Thursday, October 10, 2024.
- 2. In the Instructions to Bidders, Article 4, Section 4.1.2, the bid due date is hereby changed to 1:30 on Thursday, October 10, 2024.

If you have any questions, please e-mail Brian N. Bolender, P.E. at brian.bolender@aecom.com or call 302.781.5900

END OF ADDENDUM #2

INVITATION TO BID

Sealed bids for **the City of New Castle FY2025 Citywide Paving Contract** will be received by the City Administrator until 1:30 p.m. on Thursday, October 10, 2024, at the City Administration Building, 220 Delaware Street, New Castle, at which time they will be publicly opened and read. Bids received after the stated time will be returned unopened. The Contractor shall begin work on or about November 15, 2024.

Project involves roadway resurfacing portions of Buttonwood Avenue, West 10th Street, Kings Way, School Street, Foundry Street and Cherry Street. Work includes mobilization / demobilization, field engineering and surveying, maintenance of traffic, excavation and removal of existing materials, undercutting, roadway milling, type B and type C asphalt, graded aggregate base course, granite curb, concrete sidewalk and curb, blacktop curbing, speed humps, pavement markings, detectable warning surfaces, erosion and sediment control, and restorations. The Contractor shall complete all work within 120 calendar days of the Notice to Proceed.

Bidding documents may be obtained by contacting the City at: info@newcastlecity.delaware.gov or during normal business hours at the City Administration Building, 220 Delaware Street, New Castle, beginning Friday, September 13, 2024. A Pre-Bid Meeting will be held virtually on Friday, September 20, 2024, at 1:30 p.m. Attendance at this meeting is optional. Prospective bidders will need to register in advance when they obtain the bidding documents. A Teams meeting link will be provided prior to the meeting.

Bids shall be submitted in a sealed envelope and shall be marked clearly as follows: **Sealed Bid – Proposal for FY2025 Citywide Paving Contract** Requirements for a 10% Bid Bond, 100% Performance Bond, 100% Payment Bond and Maintenance Bond, and Contractor's Insurance are included in the Contract Documents.

Minority Business Enterprises (MBE), Disadvantaged Business Enterprises (DBE) and Women-Owned Business Enterprises (WBE) will be afforded full opportunity to submit bids on this contract and are encouraged to do so.

Each Bidder must deposit with their bid a security equivalent to 10% of the bid amount, form and subject to the conditions provided in the instructions for bidders.

The City of New Castle reserves the right to reject any or all bids and makes such award as appears most advantageous to the City.

The City may extend the time and place for the opening of the bids from that described in the advertisement, with not less than two calendar days-notice by certified delivery, facsimile machine, e-mail, or other electronic means to those bidders who have obtained bid packets.

END OF ADVERTISEMENT FOR BIDS

INVITATION TO BID INV-1

FY2025 CITYWIDE PAVING CONTRACT

- 3.4.3 No Addenda will be issued later than four calendar days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which extends the time or changes the location for the opening of bids.
- 3.4.4 Each bidder shall ascertain prior to submitting the Bid that he or she has received all Addenda issued and shall acknowledge their receipt in their Bid in the appropriate space. Not acknowledging issued Addenda could be grounds for determining a bid to be non-responsive.

ARTICLE 4: BIDDING PROCEDURES

4.1 PREPARATION OF BIDS

- 4.1.1 A Pre-bid meeting will be held virtually on Friday, September 20, 2024 at 1:30 p.m. Attendance at the Pre-bid meeting is optional. Prospective bidders will need to register in advance when they obtain the bidding documents. A Teams meeting link will be provided prior to the meeting.
- 4.1.2 Bids will be received by the City Administrator until 1:30 p.m. on Thursday, October 10, 2024, at the City Administration Building, 220 Delaware Street, New Castle, at which time they will be publicly opened and read. Bids received after the stated time will be returned unopened.
- 4.1.3 Submit the bids on the Bid Forms included with the Bidding Documents.
- 4.1.4 Submit the original Bid Form for each bid. Bid Forms may be removed from the project manual for this purpose.
- 4.1.5 Execute all blanks on the Bid Form in a non-erasable medium (typewriter, computer printer, or manually in ink).
- 4.1.6 Interlineations, alterations or erasures must be initialed by the signer of the Bid.
- 4.1.7 BID ALL REQUESTED ALTERNATES AND UNIT PRICES, IF ANY. If there is no change in the Base Bid for an Alternate, enter "No Change". The Contractor is responsible for verifying that they have received all addenda issued during the bidding period. Work required by Addenda shall automatically become part of the Contract.
- 4.1.8 Make no additional stipulations on the Bid Form and do not qualify the Bid in any other manner.
- 4.1.9 Each copy of the Bid shall include the legal name of the Bidder and a statement whether the Bidder is a sole proprietor, a partnership, a corporation, or any legal entity, and each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current Power of Attorney attached, certifying agent's authority to bind the Bidder.
- 4.1.10 Bidder shall complete the Non-Collusion Statement form included with the Bid Forms and include it with their Bid.

4.2 BID SECURITY

4.2.1 All bids shall be accompanied by a deposit of either a good and sufficient bond to the Agency for the benefit of the Agency with corporate surety authorized to do business in this State, the form of the bond and the surety to be approved by the Agency, a security of the bidder