STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

BID PROPOSAL

CONTRACT T202104203

HEP KC, US13 & BRENFORD/BIG OAK ROAD INTERSECTION IMPROVEMENTS

Advertisement Date: March 4, 2026

INCLUDED IN THIS DOCUMENT:

BID PROPOSAL:
GENERAL DESCRIPTION
PROSPECTIVE BIDDER'S NOTES
GENERAL NOTICES
PREVAILING WAGES
SPECIAL PROVISIONS
STATEMENTS
SAMPLE AFFIDAVIT - CRAFT TRAINING
QUANTITY SHEET SUMMARY

ADDITIONAL BID PROPOSAL ITEMS:

ATTACHED OR POSTED DOCUMENTS:
PROJECT PLANS
QUESTIONS & ANSWERS (if posted)
DIESEL FUEL FORM

PAPER BIDDERS CONTACT DELDOT FOR BID SUBMITTAL DOCUMENTS:
DRUG TESTING AFFIDAVIT;
CERTIFICATION FORM;
BID BOND FORM;
CD FOR BID PRICE ENTRY & PRINTING

This Bid Proposal and related documents can be viewed on bids.delaware.gov and, for subscribers bidx.com/de/

Internet Bids for Bidders with Bid Express® accounts can be submitted at BIDX.com/de; **OR**;

Paper Bids with CD will be received in the Bidder's Room at the DelDOT Administration Building, Dover, DE;

ALL BIDS DUE PRIOR TO 2:00 P.M. Local Time, MARCH 31, 2026

GENERAL DESCRIPTION

A. BIDS DUE: MARCH 31, 2026 PRIOR TO 2:00 P.M. Local Time – unless changed via Addendum.

BIDS MUST BE SUBMITTED VIA:

(a) Internet - Bidders with DelDOT Bid Express® accounts can submit bids at bidx.com/de/.
OR:
(b) Paper Bid Delivered To: Delaware Department of Transportation, Administration Building
North Entrance, Bidders Room, 800 Bay Road, Dover, DE 19901

For paper bids, contact DelDOT at dot-ask@delaware.gov or (302) 760-2031 to request a CD for bidding, required forms, and instructions. Bidders enter their Bid Item prices onto the supplied CD then print the form and deliver in a sealed envelope; the Bid Form, completed CD, and required documents prior to the Bid due date and time. *(CD's cannot be used to submit bids to bidx.com)*

Do not submit both Internet and Paper Bids. *If so, the Internet bid and documents will be rejected.*

BID OPENING: Bids will be publicly opened and read aloud at the Date and Time of the Bid Opening. The Bid Opening will be held at the 'Paper Bid Delivered To' address shown above. Bidder bears the risk of late delivery, bids received after the stated time will be returned unopened.

NEW

Attendance is not required. DelDOT offers a call-in number to hear the Bid Opening telephonically.
The telephone number to call is (302) 504-8986.
When prompted, enter Meeting number (access code): 651 529 280#
It is anticipated the telephone access information will remain the same for all Bid Openings.

B. PRE-BID MEETING: No

C. LOCATION: Kent County
These improvements are more specifically shown on the Location Map(s) of the attached Plans.

D. DESCRIPTION: The improvements consist of furnishing all labor and materials for This project which includes the addition of turn lanes on the side streets, improvements on US13, signal upgrades and multi-modal improvements. Follow other incidental construction in accordance with the location, notes and details shown on the plans, and as directed by the Engineer.

E. COMPLETION TIME: All work on this contract must be complete within 194 Calendar Days.
Extensions of contract time due to weather are specified in the Standard Specifications Section 108.7F, weather days.
It is estimated a Notice to Proceed is issued such that work starts on or about May 4, 2026.

F. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DELAWARE DEPARTMENT OF TRANSPORTATION, JANUARY 2025 apply to this Bid Proposal and Project. The Contractor shall make himself aware of any revisions and corrections and apply them to the applicable item(s) of this contract. The Standard Specifications can be viewed here. Units of Measure can be found at 101.4.

G. ATTACHMENTS: Included as part of this Bid Proposal are; *Project Plans*; *Questions & Answers* (if posted); *Addenda* (if issued), *Referenced Documents, Documents Posted with this Bid Proposal*; and *Bid documents mailed to contractors.*

H. ADDENDA: All Addenda are posted on the internet at bids.delaware.gov, and bidx.com/de/ and are included as part of the Bid Proposal. The Bidder is responsible to check the Website as needed to ensure that the Bidder is aware of Addenda that are included in the Bid Proposal. If Addenda are issued, the final Addendum will be posted no later than the end of the day two business days prior to the bid date. Each Addendum number and issue date must be entered on the submitted Certification Form. This original Bid Proposal will not be updated, you must refer to each Addendum.

I. QUESTIONS: E-MAIL TO; **dot-ask@delaware.gov**

Questions regarding this project are to be e-mailed to the above address no less than **six business days** prior to the bid opening date in order to receive a posted response. Please include the Contract number in the subject line. Questions and responses are posted at bids.delaware.gov, and bidx.com/de/. The date of the final posted Questions and Answers document must be entered on the submitted Certification Form.

J. ROAD USER COSTS:

Late Opening of Temporary Lane Closures

Interim Road User Costs (RUC) for delays in opening lanes will be assessed according to the below chart. Refer to the Allowable Lane and Turn Lane Closure Matrix in the CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL plans for start and end times of allowable lane closures.

Table 1

North Bound and South Bound Lane Closure and Turn Lane Closure	
Time All Lanes Reopened After End of Allowable Lane Closure Hours	**Road User Cost**
1st 15-minute increment	$437.50
2nd 15-minute increment	$875
3rd 15-minute increment	$1,312.50
4th 15-minute increment	$1,750.00
5th 15-minute increment	$2,187.50
6th 15-minute increment	$2,625.00
7th 15-minute increment	$3,062.50
8th 15-minute increment	$3,500.00
**After the first two hours beyond the allowable lane closure hour limit, RUC will accrue at $437.50 per 15min, up to a day total of $19,250. The RUC values within the chart are not cumulative, payments made after the first two hours are.*	

Example of calculation for assessment of Road User Cost:

For the use of this example, the lane closure matrix on the MOT plans will have a lane open time of 7:00 AM.

1) Failure to reopen US Northbound Lane until 10:05 AM, during the 5th 15-minute increment, local time:

   Per Table 1, a RUC of $2,187.50 will be assessed.

2) Failure to reopen US 13 Northbound Lane until 11:20 AM, local time:

   Per Table 1, a RUC of $8,800 will be assessed.
   - $3,500 for the first two-hour period
   - 12:05 PM – 2:20 PM = $437.50 x (6) 15min increments = $2,625.00

Assessment of the RUC will be made through Item 763525 – Road User Cost. The engineer will be the sole approving authority as to when the project is complete after traffic is returned to the ultimate alignment and when the contractors work activities will permit highway traffic ultimate lane width and shoulder widths.

Scheduled Road Closure:

A RUC of $7,500 will be assessed for each calendar day the Brenford Road is not fully opened to traffic in excess of the allowable closure duration identified in the Plans. The full daily RUC is assessed regardless of what time of day the roadway or ramp is reopened, starting at 12:00 AM. As such, no consideration will be given for partial calendar days.

Example of calculation for assessment of Road User Cost:

The duration of the detour according to the Plans is 79 calendar days. If the roadway is reopened at 12:05 AM on day 80, the full amount of the $7,500 RUC will be assessed.

Assessment of the RUC will be made through Item 763525 – Road User Cost. The engineer will be the sole approving authority as to when the project is complete after traffic is returned to the ultimate alignment and when the contractors work activities will permit highway traffic ultimate lane width and shoulder widths.

A RUC of $2,500 will be assessed for each calendar day the Big Oak Road is not fully open to traffic in excess of the allowable closure duration identified in the Plans. The full daily RUC is assessed regardless of what time of day the roadway or ramp is reopened, starting at 12:00 AM. As such, no consideration will be given for partial calendar days.

Assessment of Road User Cost:

The duration of the detour according to the Plans is 42 calendar days. If the roadway is reopened at 12:05 AM on day 43, the full amount of the $2,500 RUC will be assessed.

Assessment of the RUC will be made through Item 763525 – Road User Cost. The engineer will be the sole approving authority as to when the project is complete after traffic is returned to the ultimate alignment and when the contractors work activities will permit highway traffic ultimate lane width and shoulder widths.

K. REVISED SPEC LANGUAGE:

The Revised Inspection Framework – January 2026 (2026 Inspection Framework) shall apply to this contract.

Delete from Section 101.3

Primary inspection. The inspection (formerly referred to as Final Inspection) conducted by the engineer to determine if the contractor has satisfactorily completed the project, or a portion of the project, in accordance with the contract.

Insert within Section 101.3

Acceptance Inspection. The inspection (formerly referred to as Primary Inspection) conducted by the Administering Section, contractor, and accepting section confirming that primary inspection punch list items have been addressed.

Primary inspection. The inspection (formerly referred to as initial inspection) conducted by the Department to review all contract work has been completed in accordance with the Plans, Standard Specifications, Special Provisions, and Standard Construction Details. The inspection is confirmation of the work completed per the contract documents.

Project Acceptance. The Department's notification to the Contractor that the time charges will cease, and construction activities are completed, releasing the contractor from liability and repairs or maintenance to the completed work.

Revise Section 104.12.A as follows.

A. Before acceptance inspection, clean rubbish, excess materials, temporary structures, and equipment from the project, from any publicly owned borrow source used to complete the work, and from areas affected by the contractor in connection with the work within the right-of-way. Cut all grass and weeds taller than 6-inches. The cost of the final cleanup is incidental to Item 763000, Initial Expense, De-Mobilization.

Revise Section 105.4.F as follows.

F. Submit copies of manufacturer's catalog cuts, drawings, wiring diagrams, and other relevant documents with working drawings for electrical and mechanical equipment. After the Department has reviewed all items of a particular system, prepare an instruction book for the particular system. Fasten and bind the items listed below in a leather or heavy plastic cover book with a title clearly shown. Provide five copies of the book to the engineer before acceptance inspection. Make the books available when connecting and energizing electrical and mechanical systems. Ensure that the final bound copies reflect changes or adjustments made during the work. Include the following in the instruction book:

1. An equipment list.
2. A complete description of the equipment.
3. The sequence of operation including inter-locking and protective features.
4. The use of by-pass switches.
5. A detailed description of all wiring circuits.
6. A recommended spare parts list.
7. Renewal parts bulletins.
8. Instruction bulletins for the provided equipment.
9. Diagrams and drawings of reduced size suitable for binding.
10. An index listing all items.

Revise Section 105.13.D as follows.

D. Include the cost of maintenance work during construction and before completion of the acceptance inspection punch list in the proposal. The Department will pay the cost of maintenance work occurring after completion of the acceptance inspection punch list.

Revise Section 105.14.A as follows.

A. The engineer may order opening of certain sections of the work to traffic or other use before the contractor completes the work or before the engineer accepts the work. The Department will not consider opening sections of the work as constituting acceptance of the work or a waiver of any contract provisions. The engineer will pay the cost of repairing damage to the work caused by opening work to vehicular traffic unless opening the roadway is due to the fault, or inactivity of, the contractor or the contractor caused the damage. All other maintenance costs including, but not limited to, mowing grass and general cleanup are the contractor's responsibility until completion of the acceptance inspection punch list to the Department's satisfaction. Maintenance costs for work involving landscaping and vegetative growth are the contractor's responsibility until final acceptance.

Revise Section 105.16 as follows.

A. Partial Acceptance.

1. The decision to partially accept a portion of the project is solely at the discretion of the engineer. The engineer may partially accept portions of the work. The Department will not consider partial acceptance as constituting acceptance of the work that has not been partially accepted or a waiver of any contract provisions. The Department will maintain the partially accepted portion of the project, including repairing damage caused by the public.

B. Project Acceptance
   1. The Department will cease counting contract time when the project reaches substantial completion as defined in Section 101.3, Definitions.
   2. Substantial Completion Verification
      a. Upon receiving the contractor's notice of substantial completion of the project, the Department will verify all contract items are complete as defined in Section 101.3, Definitions. Items not deemed complete shall be completed by contractor prior to Department issuance of Substantial Completion.
      b. After issuance of Substantial Completion, request Primary Inspection from the Department.
      c. The Department will schedule the Primary Inspection within 30 calendar days of the request.
   3. Primary Inspection
      a. The Department/Administering Section will conduct a Primary Inspection with the completion of 105.16.2 Substantial Completion Verification. The Administering Section will note and provide a written punch list by stations and in detail identifying work or conditions requiring correction. The punch list will include ADA inspection deficiencies.
      b. Perform the corrective work noted on the punch list within 30 calendar days upon receipt of the punch list created by the Administering Section, unless the parties mutually agree to extend the time frame.
      c. Upon completion of the primary inspection punch list, request an acceptance inspection from the Department. Prior to acceptance inspection scheduling, the Administering Section will confirm and annotate the primary inspection punch list and ensure ADA Inspection deficiencies have been addressed and documented.
      d. The Administering Section will schedule Acceptance inspection with the Maintenance District within 30 days of confirmation of primary punch list item completion.
   4. Acceptance (formerly primary) Inspection.
      a. The Department will conduct an acceptance inspection with the completion of 105.16.B.3, primary inspection. The Administering Section will provide a written punch list identifying deficiencies not satisfactorily addressed from the primary inspection punch list within 7 calendar days of the acceptance inspection.
      b. Perform the corrective work noted on the punch list within 15 calendar days upon receipt of the punch list created by the Administering Section, unless the parties mutually agree to extend the time frame.
      c. The Administering Section will verify remediation work and will provide a list with dates that remedial activities were resolved to the Maintenance District when requesting Project Acceptance.

C. Project Acceptance
   1. The Administering Section will notify the Maintenance District that acceptance inspection punch list items have been addressed.
   2. The Maintenance District and/or other accepting entities will verify acceptance inspection punch list items have been addressed within 30 calendar days of notice from the Administering Section.

D. Final Acceptance
   1. The engineer will provide final acceptance in writing that will state the acceptance date as defined in Section 101.3, Definitions.

E. Project Closeout
   1. Upon final acceptance, provide the exempted documents, certificates, or proofs of compliance within 90 calendar days.
   2. The Department will not issue the final payment until the contractor executes and delivers the required documents.

Revise Section 108.8.K as follows.

K. Once the Department determines that the work is substantially complete, the Department will suspend time charges and the assessment of liquidated damages. Failure to complete all punch list work identified during the primary and acceptance inspections within the timeframes allotted, will result in the Department restarting liquidated damages in accordance with the chart specified in Section 108.9, Schedule of Liquidated Damages. The assessment of post-substantial-completion liquidated damages will continue until project completion.

Revise Section 610.3.9.A.2 as follows.

2. The engineer will measure the width, length, and depth of each crack and establish the precise location of the crack termination points relative to permanent reference points on the member. The engineer will monitor and document the growth of individual cracks at an inspection interval the engineer will choose to determine if cracks are active or dormant after acceptance inspection.

Revise Section 722.3.2.A as follows.

A. Provide on-site field instruction by the system manufacturer, at a location determined by the engineer. Provide a minimum of 2 training sessions consisting of installation training before beginning cable barrier construction and maintenance training before acceptance inspection. The manufacturer shall establish the training duration and shall provide field training on all aspects of the system. Coordinate the training schedule and location with the engineer. The engineer will advise the appropriate department staff, including construction inspectors and maintenance personnel regarding the training location and schedule. Provide all training materials in both hard copy and electronic PDF format.

Revise Section 722.3.2.C.1 as follows.

1. Hold the maintenance training a minimum of 7 calendar days before acceptance inspection of the system. Submit the proposed training date to the engineer a minimum of 14 calendar days prior to the training session date for review and approval. Include the following participants:
   a. District Maintenance Engineer, or designated representative;
   b. District Maintenance Superintendent, or designated representative;
   c. Area Yard Supervisor, or designated representative; and
   d. District maintenance personnel.

Revise Section 722.3.3.L as follows.

L. Within 10 calendar days of the primary inspection, supply spare parts for the HTCB system. Deliver the parts to the DelDOT maintenance facility as directed by the engineer. Provide an extra supply of the following:
   1. Socketed-type line posts, including post hardware, caps, reflective sheeting, straps, spacers, and socket covers. Include 200 posts and accessories.
   2. Rigging screws and threaded terminals. Provide enough materials to complete 8 turnbuckle assemblies.
   3. Anchor posts including post hardware and caps, reflective sheeting, straps, fittings, spacers, and socket covers. Provide enough materials to complete 3 end anchor installations.
   4. Fitting gaskets or socket covers. Provide 100 socket covers.

Revise Section 843.3.5.C as follows.

C. Repair defects identified by the Department during periodic or primary inspections in accordance with this specification, including all highway lighting systems and components within the project limits. Begin highway lighting system repairs immediately following notice of the lighting system defect unless weather limitations prevent the corrective work. Provide notification to the Department before beginning corrective work.

Revise Section 843.3.5.D as follows.

D. The Department will not consider the highway lighting system as substantially complete until correction of the deficiencies noted during the primary and acceptance inspections. Provide a maintenance bond for item 843001 – Electrical Testing upon substantial completion. Provide a maintenance bond meeting the following requirements:
   1. A bond sum equal to 100 percent of the value of all highway lighting system items the Department paid to the contractor;
   2. With original signatures, in ink, and not mechanical reproductions or facsimiles of any kind, naming the contractor as the principle;
   3. term of 1-year beyond the completion of the highway lighting system work; and
   4. written by a surety or insurance company licensed to write surety bonds in the State of Delaware by the Delaware Department of Insurance.

Revise 911.3.6.G as follows.

G. Water bi-weekly during the period June 15 through October 1. Continue watering, without interruption, until completing watering of all the plants on the project. Use water in accordance with Section 911.2.9. The Department will allow use of tree watering bags as a part of the watering operation. Remove the tree watering bags before acceptance inspection.

L. FLAGGERS:

A. Included in the Bid Proposal are the prevailing wages for highway construction as determined by the Department of Labor of the State of Delaware in accordance with Title 29 Del. C. §6960, relating to wages and the regulations implementing that Section.

B. Flaggers must be bid at a minimum equal to the Laborer wage rate and may be bid up to, but not to exceed, 3 times the Laborer wage rate in accordance with the County where the Work is being performed.

C. The Department will adjust the bid to the minimum for prices bid below the minimum acceptable bid and to the maximum for prices bid above the maximum allowable bid prior to award of the Contract.
   1. Flagger overtime must be bid at minimum of 1.45 times and may be bid up to a maximum of 4.35 times, the Laborer wage rate in accordance with the County where the Work is being performed.
   2. When a Contract for a Project contains both Federal Davis-Bacon and State of Delaware prevailing wage standards, the employer's minimum wage obligations are determined by whichever standards are higher.

D. Overtime:
   1. Payment for overtime will be considered on a weekly basis for time worked in excess of 40 hours for a continuous 7-day period beginning Monday and ending Sunday inclusive.
   2. Time worked on other Projects or Work activities other than flagging will not be counted in the normal 40 hours or the overtime.

E. The cost of the flagging operation when performed by others who are not the Contractor's employees will not be included in the 50% subcontracting limit as outlined in Section 108.1.

M. PROSPECTIVE BIDDERS NOTES:

1. CRAFT TRAINING REQUIREMENT (29 Del. C. §6960A)

a) The awarded contractor must include a craft training program for each craft in the project if at the time the contractor executes the contract, all of the following apply:

1. This project requires prevailing wages.
2. The contractor employs 10 or more total employees.
3. This project is not a federal highway project (except for the US 301 project from the MD-DE state line to SR1).
4. There is an apprenticeship program for a craft in the project on the list provided by the Delaware Department of Labor.

b) The awarded contractor must commit that all subcontractors provide craft training if the above applies to the subcontractor.

c) The contractor must satisfy the craft training requirement before the contract is executed. A contractor or subcontractor may satisfy the craft training requirement by doing any of the following for each craft required:

1. Having at least 1 active apprentice in a craft training program for the craft.
2. Having at least 1 active apprentice who completes a craft training program for the craft within the 6 months before the date the contract was executed.
3. Being a member of a consortium that provides craft training for the craft and all of the following apply to the craft training program for the craft:
   (a). The consortium requires a regular financial contribution.
   (b). The contractor or subcontractor has access to the craft training program.
   (c). There is at least 1 active apprentice in the craft training program.
4. Making a payment under paragraph (e) of this section.

d) The craft training program under above paragraphs c)1. and c)2. may be provided by the contractor or subcontractor or through agreement with another entity.

The active apprentice under paragraphs c)1. and c)2. does not have to work on this project.

e) A contractor or subcontractor may satisfy the craft training requirement by making a payment in the amount established under § 204 of Title 19, for the craft into the Apprenticeship and Training Fund of the Department Labor. For each calendar year, a contractor or subcontractor satisfies the craft training requirement for all contracts executed during that year when payments made after January 1 equal the following amounts:

1. For employers with 10 through 25 employees, payments that total $10,000.
2. For employers with more than 25 employees, payments that total $20,000.

f) PENALTY: If the successful bidder fails to comply with the Craft Training Requirements:

1. The contractor must pay the amount of the payment required under paragraph e) above to the Apprenticeship and Training Fund.
2. An amount that does not exceed 10 percent of the payment under paragraph f)1. of this section.
3. A penalty assessed under paragraph f)1. may be fully or partially remitted or refunded by the agency awarding the contract only if the contractor establishes compliance within 60 days of the notice of the penalty. A claim for remission or refund of a penalty may only be granted if an application for the remission or refund is filed within 1 year of the notice of the penalty.
4. Any contractor or subcontractor who fails to provide required craft training under 29 Del. C. § 6960A may be subject to suspension or debarment.

2. **BIDDERS MUST BE REGISTERED** with DelDOT in order to submit a bid. Registrations are now completed online through SimpliGov. To complete registration or for more information, click here.

3. **SURETY BOND** - Each proposal must be accompanied by a deposit of either surety bond or security for a sum equal to at least 10% of the amount bid.

4. **DELAWARE'S CONTRACTOR REGISTRATION ACT** - 19 Del.C. §§ 3601 *et seq*, requires all contractors and subcontractors to register with the Delaware Department of Labor before performing construction services or maintenance. Refer to the GENERAL NOTICES section for further information.

5. **DRUG TESTING** - Regulation 4104; The state Office of Management and Budget has developed regulations that require Contractors and Subcontractors to implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds pursuant to 29 Del.C. §6908(a)(6). **Refer to the full requirements at the following link:**
http://regulations.delaware.gov/register/december2017/final/21%20DE%20Reg%20503%2012-01-17.htm
Note a few of the requirements;

* At bid submission - Each bidder must submit with the bid a single signed affidavit certifying that the bidder and its subcontractors has in place or will implement during the entire term of the contract a Mandatory Drug Testing Program that complies with the regulation (*a blank affidavit form is attached)*;

* At least two business days prior to contract execution - The awarded Contractor shall provide to DelDOT copies of the Employee Drug Testing Program for the Contractor, each participating DBE firm, and all other listed Subcontractors;
* Subcontractors - Contractors that employ Subcontractors on the job site may do so only after submitting a copy of the Subcontractor's Employee Drug Testing Program along with the standard required subcontractor information. A Subcontractor shall not commence work until **DelDOT** has approved the program in writing.

6. **PERFORMANCE-BASED RATING SYSTEM** - 29 Del.C. §6962 (c)(12)(a) requires DelDOT to include a performance-based rating system for contractors. The Performance Rating for each Contractor shall be used as a prequalification to bid at the time of bid. Refer to *'General Notices'* for details.

7. **NO RETAINAGE** will be withheld on this contract unless through the Performance-Based Rating System.

8. **EXTERNAL COMPLAINT PROCEDURE** can be viewed on DelDOT's Website, Contractor Compliance/EEO - Delaware Department of Transportation or request a copy by calling (302) 760-2555.

9. **DELAWARE BUSINESS LICENSE;** a copy of your firm's Business License must be submitted with your bid.

10. **FLATWORK CONCRETE** TECHNICIAN CERTIFICATION TRAINING:
Section 501.3, 503.3, 505.3, 610.3, 701.3 and 702.3 of the 2025 Standard Specifications require contractors to provide an American Concrete Institute (ACI) or National Ready-Mix Concrete Association (NRMCA) certified concrete flatwork technician to supervise all finishing of flatwork concrete.

11. **SIGNAGE LANGUAGE**:
In order to maintain effective communication with the traveling public, only place signs, banners, flags, or other displays within the projects limits that meet the requirements of the latest version of the Delaware Manual on Uniform Traffic Control Devices. Any signs or other materials which deviate from the MUTCD, must be preapproved by the Engineer. The only signage and materials which may be displayed upon vehicles and equipment within the Project area are signs denoting the name of the Contractor and any subcontractors and other signs and/or materials required and approved pursuant to the MUTCD and the Engineer. Contractor shall immediately remove any signs or materials within the Project that does not meet these requirements immediately upon notification by the Engineer. Failure to remove signs or other materials following notification from the Engineer will result in Liquidated Damages being assessed in the manner and amount specified in the Standard Specifications section 108.9.A.

12. **DIESEL FUEL COST PRICE ADJUSTMENT FORM** is posted and part of this Bid Proposal.

- end –

remainder of page is blank

GENERAL NOTICES

CONTRACTOR REGISTRATION ACT

On July 1, 2021, the Contractor Registration Act, as codified in 19 Del.C. §§ 3601 *et seq,* took effect. This law requires all contractors to register with the Delaware Department of Labor before performing construction services or maintenance. The Contractor Registration Act applies to all contractors that engage in construction and maintenance within the State of Delaware. Additionally, it requires contractors to have Delaware workers' compensation insurance where required, compliance with labor laws, and proof of a state business license. The Delaware Department of Labor's Office of Contractor Registration is responsible for enforcement of the requirements of the Contractor Registration Act. If you have any questions about the contractor registration process, please call 302-430-7739 or email Contract.Registry@delaware.gov. Registration at https://onestop.delaware.gov/.

SPECIFICATIONS :

The Delaware specifications entitled "*Standard Specifications for Road and Bridge Construction January, 2025*", hereinafter referred to as the *Standard Specifications*; and *Revisions* to the Standard Specifications effective as of the advertisement date of this Bid Proposal and hereby included by reference; the *Special Provisions*; *Notes on the Plans*; this *Bid Proposal* including referenced documents; any *Addenda* thereto; and any posted *Questions and Answers*; shall govern the work to be performed under this contract. The Contractor shall make itself aware of these specifications, revisions and corrections, and apply them to the applicable item(s) of this contract.

CLARIFICATIONS :

Under any Section or Item included in the Contract, the Contractor shall be aware that when requirements, responsibilities, and furnishing of materials are outlined in the details and notes on the Plans and in the paragraphs preceding the " Basis of Payment" paragraph in the Standard Specifications or Special Provisions, no interpretation shall be made that such stipulations are excluded because reiteration is not made in the "Basis of Payment" paragraph.

The Department requires the use of various electronic applications for various documentation processes.
These processes will be identified, and the Contractor's required use will be detailed during the Preconstruction Meeting.
No additional payments will be made to the contractor to use or interface with the applications.

ATTESTING TO NON-COLLUSION :

The Department requires as a condition precedent to acceptance of bids a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract. The form for this sworn statement is included in the proposal and must be properly executed in order to have the bid considered.

QUANTITIES :

The quantities shown are for comparison of bids only. The Department may increase or decrease any quantity or quantities without penalty or change in the bid price.

PERFORMANCE-BASED RATING SYSTEM

29 Del.C. §6962 (c)(12)(a) requires a Department of Transportation project, excluding a Community Transportation Fund or municipal street aid contract, to include a performance-based rating system. At the time of bid, the Performance Rating for each Contractor shall be used as a prequalification to bid.

Bidders with Performance Rating scores equal to or greater than 85% shall be permitted to bid. Bidders with scores of less than 85% who comply with the retainage requirements of 29 Del.C. §6962 shall be permitted to bid provided the *Agreement to Accept Retainage* (located on the Certification Page) is executed and submitted with the bid. Lack of an executed *Agreement to Accept Retainage* will result in the rejection of the bid by the Department. Successful bidders awarded

Department contracts who have no performance history within the last five (5) years will be assigned a provisional Performance Rating of 85% at the date of advertisement.

Notification of Performance Rating. The Department shall post publicly the Performance Rating for all Contractors on the Department's website. DelDOT will complete performance-based evaluations on the construction company contracted by the Department to build the project (the "Contractor"). Provisions to appeal Performance Ratings are described in the regulations. The regulations are set forth in Section 2408 of Title 2, Delaware Administrative Code, found here.

PREFERENCE FOR DELAWARE LABOR:

Delaware Code, Title 29, Chapter 69, Section 6962, Paragraph (d), Subsection (4)b: "In the construction of all public works for the State or any political subdivision thereof, or by firms contracting with the State or any political subdivision thereof, preference in employment of laborers, workmen or mechanics shall be given to bona fide legal citizens of the State who have established citizenship by residence of at least 90 days in the State. Each public works contract for the construction of public works for the State or any political subdivision thereof shall contain a stipulation that any person, company or corporation who violates this section shall pay a penalty to the Secretary of Finance equal to the amount of compensation paid to any person in violation of this section."

EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS :

Delaware Code, Title 29, Chapter 69, Section 6962, Paragraph (d), Subsection (7) states;

a. As a condition of the awarding of any contract for public works financed in whole or in part by State appropriation, such contracts shall include the following provisions:

   During the performance of this contract, the contractor agrees as follows:

   1. The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, sexual orientation, gender identity 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, sexual orientation, gender identity 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.

   2. 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, sexual orientation, gender identity or national origin.

   3. The contractor will ensure employees receive equal pay for equal work, without regard to sex. Employee pay differential is acceptable if pursuant to a seniority system, a merit system, a system which measures earnings by quantity or quality of production, or if the differential is based on any other factor other than sex.

TAX CLEARANCE :

As payments to each vendor or contractor aggregate $2,000, the Division of Accounting will report such vendor or contractor to the Division of Revenue, who will then check the vendor or contractor's compliance with tax requirements and take such further action as may be necessary to ensure compliance.

LICENSE :

A person desiring to engage in business in this State as a contractor shall obtain a license upon making application to the Division of Revenue.

CONTRACTOR / SUBCONTRACTOR LICENSE: 29 DEL. C. §6967:

(b) No agency shall accept a proposal for a public works contract unless such contractor has provided a proper and current copy of its occupational and/or business license, as required by Title 30, to such agency.

(c) Any contractor that enters a public works contract must provide to the agency to which it is contracting, within 30 days of entering such public works contract, copies of all occupational and business licenses of subcontractors and/or independent contractors that will perform work for such public works contract. However, if a subcontractor or independent contractor is hired or contracted more than 20 days after the contractor entered the public works contract the occupational or business license of such subcontractor or independent contractor shall be provided to the agency within 10 days of being contracted or hired.

DIFFERING SITE CONDITIONS:

SUSPENSIONS OF WORK and SIGNIFICANT CHANGES IN THE CHARACTER OF WORK:

Differing site conditions: During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract of if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the engineer will investigate the conditions, and if he/she determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of his/her determination whether or not an adjustment of the contract is warranted.

No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice. No contract adjustment will be allowed under their clause for any effects caused on unchanged work.

Suspensions of work ordered by the engineer: If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The engineer will notify the contractor of his/her determination whether or not an adjustment of the contract is warranted.

No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of this contract.

Significant changes in the character of work: The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the work under the contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work.

If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.

The term "significant change" shall be construed to apply only to the following circumstances:

(A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or

(B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

RIGHT TO AUDIT

The Department shall have the right to audit the books and records of the contractor or any subcontractor under this contract or subcontract to the extent that the books and records relate to the performance of the contract or subcontract. The books and records shall be maintained by the contractor for a period of 3 years from the date of final payment under the prime contract and by the subcontractor for a period of 3 years from the date of final payment under the subcontract (29 Del.C. §6930)

PREVAILING WAGES

Included in this proposal are the minimum wages to be paid various classes of laborers and mechanics as determined by the Department of Labor of the State of Delaware in accordance with Title 29 Del.C. §6960, relating to wages and the regulations implementing that Section.

REQUIREMENT BY DELAWARE DEPARTMENT OF LABOR FOR SWORN PAYROLL INFORMATION

Title 29 Del.C. §6960 stipulates;

(b) Every contract based upon these specifications shall contain a stipulation that the employer shall pay all mechanics and laborers employed directly upon the site of the work, unconditionally and 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. The specifications shall further stipulate that the scale of wages to be paid shall be posted by the employer in a prominent and easily accessible place at the site of the work, and that there may be withheld from the employer so much of accrued payments as may be considered necessary by the Department of Labor to pay to laborers and mechanics employed by the employer the difference between the rates of wages required by the contract to be paid laborers and mechanics on the work and rates of wages received by such laborers and mechanics to be remitted to the Department of Labor for distribution upon resolution of any claims.

(c) Every contract based upon these specifications shall contain a stipulation that sworn payroll information, as required by the [Delaware] 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.

Bidders are specifically directed to note the Department of Labor's prevailing wage regulations implementing §6960 relating to the effective date of the wage rates, at Part VI., Section C., which in relevant part states:

"Public agencies (covered by the provisions of 29 Del.C. §6960) are required to use the rates which are in effect on the date of the publication of specifications for a given project. In the event that a contract is not executed within one hundred twenty (120) days from the date the specifications were published, the rates in effect at the time of the execution of the contract shall be the applicable rates for the project."

Contractors with questions may contact:

Department of Labor, Division of Industrial Affairs,
4425 N. Market Street, Wilmington, DE 19802
Telephone (302) 761-8200
https://dia.delawareworks.com/labor-law/

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 14, 2025

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
BRICKLAYERS	66.79	66.79	71.09
CARPENTERS	67.79	62.56	50.80
CEMENT FINISHERS	72.72	44.60	45.46
ELECTRICAL LINE WORKERS	36.72	59.33	29.04
ELECTRICIANS	83.92	83.92	83.92
IRON WORKERS	89.37	32.59	34.62
LABORERS	56.58	52.08	51.11
MILLWRIGHTS	22.01	21.36	18.46
PAINTERS	83.14	83.14	83.14
PILEDRIVERS	98.33	32.46	91.23
POWER EQUIPMENT OPERATORS	84.74	54.11	49.57
SHEET METAL WORKERS	31.09	27.76	25.12
TRUCK DRIVERS	53.26	38.59	46.99

CERTIFIED: 3/2/2026 BY: For Fran Chudzik
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: T202104203 REVISED HEP KC US13 AND BRENFORD BIG OAK ROAD INTERSECTION IMPROVEMENTS KENT COUNTY, Kent County

SPECIAL PROVISIONS

S.P. Code	SPECIAL PROVISION DESCRIPTION
401502-25	ASPHALT CEMENT COST ADJUSTMENT
401510-25	TACK COAT
401580-25	RIDE QUALITY OF BITUMINOUS CONCRETE PAVEMENT
401699-25	QUALITY CONTROL/QUALITY ASSURANCE OF BITUMINOUS CONCRETE
701507-25	CURB RETAINING WALL
701510-25	CURB/SIDEWALK OPENING
710503-25	ADJUST GAS VALVE BOXES
711500-25	ADJUST AND REPAIR EXISTING SANITARY MANHOLE
711502-25	ADJUST AND REPAIR EXISTING SANITARY CLEANOUT
763501-25	CONSTRUCTION ENGINEERING
763520-25	ELECTRONIC TICKETING
763525-25	ROAD USER COST
763598-25	FIELD OFFICE, SPECIAL I
763626-25	DIESEL FUEL COST PRICE ADJUSTMENT
806500-25	TRAFFIC OFFICERS
834501-25	PARTIAL REMOVAL OF CONCRETE POLE BASES AND CABINET FOUNDATIONS

401502 - ASPHALT CEMENT COST ADJUSTMENT

For Sections 304, 401, 402, 403, 404, and 405, payments to the Contractor shall be adjusted to reflect increases or decreases in the Delaware Posted Asphalt Cement Price when compared to the Project Asphalt Cement Base Price, as defined in these Special Provisions.

The Delaware Posted Asphalt Cement Price will be issued monthly by the Department and will be the industry posted price for Asphalt Cement, F.O.B. Philadelphia, Pennsylvania. The link for the posting is https://deldot.gov/Business/bids/index.shtml?dc=asphalt_cement_english.

The Project Asphalt Cement Base Price will be the Delaware Posted Asphalt Cement Price in effect on the date of advertisement.

All deviations of the Delaware Posted Asphalt Cement Price from the Project Asphalt Cement Base Price are eligible for cost adjustment. No minimum increases or decreases or corresponding percentages are required to qualify for cost adjustment.

Actual quantity of asphalt cement qualifying for any Asphalt Cement Cost Adjustment will be computed using the weight of eligible asphalt that is shown on the QA/QC pay sheets as a percentage for the delivered material.

If the mix was not inspected and no QA/QC pay sheet was generated, then the asphalt percentage will be obtained from the job mix formula for that mix ID. The asphalt percentage eligible for cost adjustment shall only be the virgin asphalt cement added to the mix.

There shall be no separate payment per ton cost of asphalt cement. That cost shall be included in the various unit prices bid per ton for those bid items that contain asphalt cement (mentioned above).

The Asphalt cement cost adjustment will be calculated on grade PG 64-22 asphalt regardless of the actual grade of asphalt used.

If the Contractor exceeds the authorized allotted completion time, the price of asphalt cement on the last authorized allotted workday, shall be the prices used for cost adjustment during the time

liquidated damages are assessed. However, if the industry posted price for asphalt cement goes down, the asphalt-cement cost shall be adjusted downward accordingly.

NOTE:

Application of Asphalt Cement Cost Adjustment requirements as indicated above shall apply only to those contracts involving items related to bituminous base and pavements, and with bitumen, having a total of 1,000 tons or more of hot-mix bid quantity in case of Sections 401, 402 and 403; and 15,000 gallons or more in case of Sections 304, 404 and 405.

12/14/2020

401510 – TACK COAT

Description:

The Department will not measure and will make no payment for this item. This language replaces Section 1011 of the Standard Specifications.

SECTION 1011 -TACK COAT

1011.1 Description.

Provide material in accordance with 1011.2 for thin lift maintenance applications, or as directed by the engineer. Provide material in accordance with Section 1011.3 and selected from the approved product list and in accordance with manufacturer recommendations for all other applications.

1011.2 Asphalt Cement (PG Graded).

Provide PG-64-22 (PG 64S-22) as tack coat in lieu of emulsified asphalts.

1011.3 Emulsified Asphalts.

1. Anionic emulsified asphalt in accordance with M140 except the sieve test requirement for field samples collected at the point of use shall be a maximum of 0.4 percent.
2. Cationic emulsified asphalt in accordance with M208 except the sieve test requirement for field samples collected at the point of use shall be a maximum of 0.4 percent.
3. Polymer-modified cationic emulsified asphalts in accordance with M316 except the sieve test requirement for field samples collected at the point of use shall be a maximum of 0.4 percent.
4. Non-Tracking emulsified asphalt in conformance with Table 1011.3-1.

Table 1011.3-1 Non-Tracking Emulsified Asphalt Requirements.

Property	Test Method	Requirement
Saybolt Viscosity at 77 F, (SFS)	AASHTO T59	15-100
Storage Stability Test, 24 hours, (%)	AASHTO T59	1 maximum
Residue by Distillation or Residue by Evaportation, (%)	AASHTO T59	50 minimum
Sieve Test, No. 20, (%)	AASHTO T59	0.4 maximum for field samples
Penetration at 77 F, 100 g, 5 s, (dmm)	AASHTO T49	10-40
Solubility in Trichloroethylene, (%)	AASHTO T44	97.5 minimum

6/11/2024

401580 - RIDE QUALITY OF BITUMINOUS PAVEMENT

Description:

This specification outlines requirements for an acceptable ride surface in addition to requirements established in DelDOT Standard Specifications. The Contractor is responsible for providing smoothness characteristics that meet these requirements. The Contractor is responsible for providing equipment, maintenance of traffic (MOT) as required by the Delaware MUTCD, and performing testing in accordance to this specification. All costs for testing and MOT are incidental to this item. Both the International Roughness Index (IRI) and deviations located within a 10' straightedge are used to characterize smoothness in this Special Provision.

Definitions:

Class 1 Project - a project that consists of full depth construction. Full depth construction is considered to be when contract documents or modifications provide opportunity for preparation of the subgrade prior to paving.

Class 2 Project - a project that consists of a minimum of two smoothness opportunities.

Class 3 Project - a project that consists of one smoothness opportunity.

Deviation - a hump or depression that exceeds defined tolerances.

Smoothness Opportunity - a smoothness opportunity is considered to be any of the following; roadway milling, placement of a leveling course, in-place recycling, or placement of a lift of bituminous concrete. The final wearing surface is considered one smoothness opportunity.

Equipment:

The Contractor must have a 10' straightedge available during all paving operations.

The Contractor must also have a high speed or lightweight inertial profiling system that meets requirements of AASHTO M328 capable of collecting data in both wheelpaths simultaneously.

Prior to the start of corrective actions, the Contractor must provide to the Engineer:

1. Manufacturer, Make, and Model of the test system
2. Equipment Owner,
3. Relevant Certifications,
4. Manufacturer Calibration Procedures, and
5. Relevant Operator Training information.

Testing:

The Contractor is responsible for testing the pavement surface using an approved inertial profiler in accordance to manufacturer and AASHTO R57 from the start of paving limits to the end of pavement

limits. Testing must be performed 3 times in each lane paved in the direction of traffic flow. Testing must be performed within seven (7) days of completion of project paving operations in each location.

The Contractor is responsible for providing information relative to locations that are to be excluded from calculation of the International Roughness Index. These areas must still meet 10' straightedge requirements.

Areas that are to be tested but will be removed prior to IRI analysis are:

1. 50 feet prior to the first bridge deck expansion joint and 50 feet after the last expansion joint if a bridge deck is excluded from smoothness operations.
2. 50' longitudinally from the center of an existing obstruction within the test area such as a manhole, water main, or catch basin that impedes paving operations.
3. 50' longitudinally from transverse joints that separate it from existing pavement not included on this contract.

Areas that are not to be profiled but are still subject to 10' straightedge requirements are:

1. Shoulder areas
2. Parking lots
3. Ramps, Streets, or Acceleration / Deceleration lanes less than 1000' in length.

Submission Requirements:

Test results must be submitted to the Engineer within five working days of completion of testing. Results not received within the allotted time frame will be assessed a charge of $1,000.00 per day at the discretion of the Engineer.

The Contractor is required to submit summary table IRI reports from their test equipment for 1 run for each lane and direction of paving. This report must also include:

1. Profiling Company Name
2. Date of Test
3. Contract Number
4. Location Description
5. Testing Personnel

The Contractor is required to submit ERD files for each of the 3 tests run in each lane and direction of paving to the Engineer for analysis. The Contractor must provide to the Engineer written documentation indicating the start and end of bridges and the center of obstructions relative to the stationing used on the testing that are not subject to IRI analysis.

Acceptance and Payment:

Acceptance of the final pavement will be based on Engineer calculated IRI values using ProVAL software upon removal of allowable areas of exemption and the number of deviations found in the pavement surface. The IRI measurements will be calculated in 0.1 mile (528 foot) sections for payment purposes. The average value of the three test runs will be used and the average value will be rounded to the nearest tenth. Payments for each section will be based on estimated tonnage calculated from plan

thickness and widths using the average maximum specific gravity ("Rice") for all surface mix used at that location.

Deviations equal to or in excess of 0.25" in 10' are to be corrected at the Contractor's expense or will have a discount charge of $200.00 per deviation.

*Estimated Tonnage = [L*W*T) * Rice * 62.4 (lb/ft;)*(0.0005 tons / 12 in.)*

Where: L = Length Segment (ft.)
W = Lane Width (ft.)
T = Plan Thickness (in.)

*IRI Incentive / Disincentive = Estimated Tonnage * UP * (PA-100)/100*

Where: UP = Contract Unit Price (Dollars)
PA = Pay Adjustment (Table A)

The total pay adjustment for paving work performed on each location is:

*(3 IRI adj for each section) - Total Deviations * 200*

It is possible to receive incentive for IRI measurements and a discount charge for excessive deviations on the same project. If a 528' section has an IRI value resulting in a deduction of at least 84% of the section pay, the deviation discount charge for that section is disregarded and the IRI discount charge is the only action taken for that section.

Table A: Payment Adjustments for IRI	
Class 1	
IRI per 0.1 mile Segment (in./mi.)	**Pay Adjustment**
≤ 50	103%
> 50 and < 145	100+ 0.2(65- IRI)
≥ 145	84%
Class 2	
IRI per 0.1 mile Segment (in./mi.)	**Pay Adjustment**
≤ 60	106%
> 60 and < 170	100+ 0.2(90- IRI)
≥ 170	84%

Correction to the paving surface, such as diamond grinding with approved equipment, patching, or other measures may be taken at the Contractor's expense and at the Engineers discretion to correct pavement surfaces assessed a discount charge. The Engineer may require corrective actions including remove &

replace if the deviation discount charge exceeds 50% of the cost of materials or the IRI pay adjustment is 84%. Deviations must be corrected if it is determined that they are at a height or depth that may create a safety concern.

4/10/2019

401699 - QUALITY CONTROL/QUALITY ASSURANCE OF BITUMINOUS CONCRETE

.01 Description

This item shall govern the Quality Assurance Testing for supplying bituminous asphalt plant materials and constructing bituminous asphalt pavements and the calculation for incentives and disincentives for materials and construction. The Engineer will evaluate all materials and construction for acceptance. The procedures for acceptance are described in this Section. Include the costs for all materials, labor, equipment, tools, and incidentals necessary to meet the requirements of this specification in the bid price per ton for the bituminous asphalt. Payment to the Contractor for the bituminous asphalt item(s) will be based on the Contract price per ton and the pay adjustments described in this specification.

.02 Bituminous Concrete Production B Quality Acceptance

(a) Material Production - Tests and Evaluations.

All acceptance tests shall be performed by qualified technicians at qualified laboratories following AASHTO or DelDOT procedures and shall be evaluated using Quality Level Analysis. The Engineer will conduct acceptance tests. The Engineer will directly base acceptance on the acceptance test results, the asphalt cement quality, the Contractor=s QC Plan work, and the comparisons of the acceptance test results to the QC test results. The Engineer may elect to utilize test results of the Contractor in some situations toward judging acceptance.

Supply and capture samples, as directed by the Engineer under the purview of the Engineer from delivery trucks before the trucks leave the production plant. Hand samples to the Engineer to be marked accordingly. The sample shall represent the material produced by the Contractor and shall be of sufficient size to allow the Engineer to complete all required acceptance tests. The Engineer will direct the Contractor when to capture these samples, on a statistically random, unbiased basis, established before production begins each day based upon the anticipated production tonnage. The captured sample shall be from the Engineer specified delivery truck. The Contractor may visually inspect the specified delivery load during sampling and elect to reject the load. If the contractor elects to reject the specified delivery truck, each subsequent load will be inspected until a visually acceptable load is produced for acceptance testing. All visually rejected loads shall not be sent to a Department project.

The first sample of the production day will be randomly generated by the Engineer between loads 0 and 12 (0-250 tons). Subsequent samples will be randomly generated by the Engineer on 500-ton sub-lots for the production day. Samples not retrieved in accordance with the Contractor’s QC plan will be deemed unacceptable and may be a basis for rejection of material produced. Parallel tests or dispute resolution tests will only be performed on material captured at the same time and location as the acceptance test sample. Parallel test samples or Dispute Resolution samples will be created by splitting a large sample or obtaining multiple samples that equally represent the material. The Engineer will perform all splitting and handling of material after it is obtained by the Contractor.

The Contractor may retain dispute resolution samples or perform parallel tests with the Engineer on any acceptance sample.

The Engineer will evaluate and accept the material on a lot basis. All the material within a lot shall have the same JMF (mixture ID). The lot size shall be targeted for 2000 tons or a maximum period of three days, whichever is reached first. If the 2000th ton target lot size is achieved during a production day, the lot size shall extend to the end of that production day. The Contractor may interrupt the production of one JMF in order to produce different material; this type of interruption will not alter the determination of the size or limits of material represented by a lot. The Engineer will evaluate each lot on a sublot basis. The size for each sublot shall be 100 to 500 tons and testing for the sub lots will be completed on a daily basis. For each sublot, the Engineer will evaluate one sample.

The target size of sub-lots within each lot, except for the first sample of the production day, is equal-sized 500 ton sub lots and will be based upon anticipated production, however, more or fewer sublots, with differing sizes, may result due to the production schedule and conditions. If the actual production is less than anticipated, and it's determined a sample will not be obtained (based upon the anticipated tonnage), a new sample location will be determined on a statistically random, unbiased basis based upon the new actual production. If the actual production is going to be 50 tons or greater over the anticipated sub lot production, a new sample location will be determined on a statistically random, unbiased basis based upon the new actual production. The Engineer will combine the evaluation and test results for all of the applicable sublots in order to evaluate each individual lot.

If the Engineer is present, and the quantity exceeds 25 tons, a statistically random sample will be used for analysis. When the anticipated production is less than 100 tons and greater than 25 tons, and the Engineer is not present, the contractor shall randomly select a sample using the Engineer=s random location program. The captured sample shall be placed in a suitable box, marked to the attention of the Engineer, and submitted to the Engineer for testing. A box sample shall also be obtained by the contractor at the same time and will be used as the Dispute Resolution sample if requested by the Engineer. The Contractor shall also obtain one liquid asphalt sample (1 pint) per grade of asphalt used per day and properly label it with all pertinent information.

The Engineer will conduct the following tests in order to characterize the material for the pavement compaction quality and to judge acceptance and the pay adjustment for the material:

- AASHTO T312 - Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
- AASHTO T166, Method C (Rapid Method) - Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface Dry Specimens
- AASHTO T308 - Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- AASHTO T30 - Mechanical Analysis of Extracted Aggregate
- AASHTO T209 - Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt (HMA)
- ASTM D7227 - Standard Practice for Rapid Drying of Compacted Asphalt Specimens using Vacuum Drying Apparatus

(b) Pavement Construction - Tests and Evaluations.

The Engineer will directly base acceptance on the compaction acceptance test results, and on the inspection of the construction, the Contractor's QC Plan work, ride smoothness as referenced in the contract

documents, lift thickness as referenced in the contract documents, joint quality as referenced in the contract documents, surface texture as referenced in the contract documents, and possibly the comparisons of the acceptance test results to the independent test results. For the compaction acceptance testing, the Engineer will sample the work on a statistically random basis and will test and evaluate the work based on daily production.

Notify the Engineer of any locations within that road segment that may not be suitable to achieve minimum (93%) compaction due to existing conditions prior to paving the road segment. Schedule and hold a meeting in the field with the Engineer in order to discuss all areas that may potentially be applicable to Table 5a before paving starts. Areas that will be considered for Table 5a will be investigated in accordance with the method described in Appendix B. If this meeting is not held prior to paving, no areas will be considered for Table 5a. Areas of allowable exemptions that will not be cored include the following: partial-depth patch areas, driveway entrances, paving locations of less than 100 tons, areas around manholes and driveway entrances, and areas of paving that are under 400 feet in continuous total length and/or 5 feet in width.

The exempt areas around manholes will be a maximum of 4 feet transversely on either side from the center of the manhole, and 20 feet longitudinally on either side from the center of the manhole. The exempt areas around driveway entrances shall be the entire width of the driveway, and 3 feet from the edge of the longitudinal joint next to the driveway. Areas of exemption that will be cored for informational purposes only include: areas where the mat thickness is less than three times the nominal maximum aggregate size as directed by the Engineer, violations of Section 401.08 in the Standard Specifications as directed by the Engineer, and areas shown to contain questionable subgrade properties as proven by substantial yielding under a fully legally loaded truck. Failure to obtain core samples in these areas will result in zero payment for compaction regardless of the exempt status.

The Engineer will evaluate and accept the compaction work on a daily basis. Payment for the compaction will be calculated by using the material production lots as referenced in **.02 Acceptance Plan (a) Material Production - B Tests and Evaluation** and analyzing the compaction results over the individual days covered in the material production lot. The compaction results will be combined with the material results to obtain a payment for this item.

The minimum size of a compaction lot shall be 100 tons. If the compaction lot is between 101 and 1000 tons, the Engineer shall randomly determine four compaction acceptance test locations. If the compaction lot is between 1001 and 1500 tons, the Engineer shall randomly determine six compaction acceptance test locations. If the compaction lot is between 1501 and 2000 tons, the Engineer shall randomly determine eight compaction acceptance test locations. If the compaction lot is greater than 2000 tons, the Engineer shall randomly determine two compaction acceptance test locations per 500 tons.

If a randomly selected area falls within an Engineer approved exemption area, the Engineer will select one more randomly generated location to be tested per the requirements of this Specification. If that cannot be accomplished, or if an entire location has been declared exempt, the compaction testing shall be performed as per these Specifications, but a note will be added to the results that the location was an Engineer approved exempt location.

Testing locations will be a minimum of 1.0 feet from the newly placed longitudinal joint and 50 feet from a new transverse joint. Cut one six (6) inch diameter core through the full lift depth at the exact location marked by the Engineer. Cores submitted that are not from the location designated by the Engineer

will not be tested and will be paid at zero pay. Notify the Engineer prior to starting paving operations with approximate tonnage to be placed. The Contractor is then responsible for notifying the appropriate Engineer test personnel within 12 hours of material placement. The Engineer will mark core locations within 24 hours of notification. After determination of locations, the Contractor shall complete testing within two operational days of the locations being marked. If the cores are not cut within two operational days, the area in question will be paid at zero pay for compaction testing.

Provide any traffic control required for the structural number investigation, sampling, and testing work at no additional cost to the Department. Commence coring of the pavement after the pavement has cooled to a temperature of 140°F or less. Cut each core with care in order to prevent damaging the core. Damaged cores will not be tested. Label each core with contract number, date of construction, and number XX of XX upon removal from the roadway Place cores in a 6-inch diameter plastic concrete cylinder mold or approved substitute for protection. Separate cores in the same cylinder mold with paper. Attach a completed QC test record for the represented area with the corresponding cores. The Engineer will also complete a test record for areas tested for the QA report and provide to Materials & Research. Deliver the cores to the Engineer for testing, processing, and report distribution at the end of each production day. Repair core holes per Appendix A, Repairing Core Holes in Bituminous Asphalt Pavements. Core holes shall be filled immediately. Failure to repair core holes at the time of coring will result in zero pay for compaction testing for the area in question.

The Engineer will conduct the following tests on the applicable portion of the cores in order to evaluate their quality:

- AASHTO T166, Method C (Rapid Method) B Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface Dry Specimens
- AASHTO T209 - Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt
- ASTM D7227 - Standard Practice for Rapid Drying of Compacted Asphalt Specimens using Vacuum Drying Apparatus

The Engineer will use the average of the last five test values of the same JMF (mixture ID) material at the production plant in order to calculate the average theoretical maximum specific gravity of the cores. The average will be based on the production days test results and as many test results needed from previous days production to have an average of five samples. If there are less than five values available, the Engineer will use the JMF design value in addition to the available values to calculate the average theoretical maximum specific gravity.

.03 Payment and Pay Adjustment Factors

The Engineer will determine pay adjustments for the bituminous asphalt item(s) in accordance with this specification. The Engineer will determine a pay adjustment factor for the material produced and a pay adjustment factor for the pavement construction. Pay adjustments for material and construction will be calculated independently. When the pay adjustment calculation for either material or construction falls to zero payment per tables 4, 5, or 5a, the maximum pay adjustment for the other factor will not exceed 100.

Pay Adjustment factors will only be calculated on in place material. Removed material will not be used in payment adjustment calculations. Material Production Pay Adjustments will be calculated based upon 70% of the contract unit price and calculated according to section .03(a) of this specification. Pavement construction Pay Adjustments will be calculated based upon 30% of the contract unit price and

calculated according to section .03(b) of this specification.

(a) Material Production - Pay Adjustment.

Calculate the material pay adjustment by evaluating the production material based on the following parameters:

Table 2 - Material Parameter Weight Factors		
Material Parameter	**Single Test Tolerance (+/-)**	**Weight Factor**
Asphalt Content	0.4	0.30
#8 Sieve (>=19.0 mm)	7.0	0.30
#8 Sieve (<=12.5 mm)	5.0	0.30
#200 Sieve (0.075mm Sieve)	2.0	0.30
Air Voids (4.0% Target)	2.0	0.10

Using the JMF target value, the single test tolerance (from Table 2), and the test values, the Engineer will use the following steps to determine the material pay adjustment factor for each lot of material:

1. For each parameter, calculate the mean value and the standard deviation of the test values for the lot to the nearest 0.1 unit.
2. For each parameter, calculate the Upper Quality Index (QU):
   QU = ((JMF target) + (single test tolerance) - (mean value)) / (standard deviation).
3. For each parameter, calculate the Lower Quality Index (QL):
   QL = ((mean value) - (JMF target) + (single test tolerance)) / (standard deviation).
4. For each parameter, locate the values for the Upper Payment Limit (PU) and the Lower Payment Limit (PL) from Table 3 - Quality Level Analysis by the Standard Deviation Method. (Use the column for An@ representing the number of sublots in the lot. Use the closest value on the table when the exact value is not listed).
5. Calculate the PWL for each parameter from the values located in the previous step:
   PWL = PU + PL - 100.
6. Calculate each parameter=s contribution to the payment adjustment by multiplying its PWL by the weight factor shown in Table 2 for that parameter.
7. Add the calculated adjustments of all the parameters together to determine the Composite PWL for the lot.
8. From Table 4, locate the value of the Pay Adjustment Factor corresponding to the calculated PWL. When all properties of a single test are within the single test tolerance of Table 2, Pay Adjustment factors shall be determined by Column B. When any property of a single test is outside of the Single Test Tolerance parameters defined in Table 2, the Material Pay Adjustment factor shall be determined by Column C.
9. For each lot, determine the final material price adjustment:

Final Material Pay Adjustment =

(Lot Quantity) x (Item Bid Price) x (Pay Adjustment Factor) x 70%. This final pay calculation will be paid to the cent.

In lieu of being assessed a pay adjustment penalty, the Contractor may choose to remove and replace the material at no additional cost to the Department. When the PWL of any material parameter in Table 2 is below 60, the Engineer may require the removal and replacement of the material at no additional cost to the Department. Test results on removed material shall not be used in calculation of future PWL calculations for Mixture ID.

The test results from the Engineer on production that is less than 100 tons will be combined with the two most recently completed Engineer tests with the same Mixture ID to calculate payment for the lot encompassing the single test. If that cannot be accomplished, the approved JMF will be used to calculate payment for the lot encompassing the single test. Payment for previously closed lots will not be affected by the analysis.

When a sample is outside of the allowable single test tolerance for any Materials criteria in Table 2, that sample will be isolated. For payment purposes, the test result of the out of acceptable tolerance sample will be combined with the two previous acceptable samples of the same JMF and analyzed per this specification. The material that is considered out of the acceptable tolerance will only include the material within the represented sub-lot (i.e., a maximum of 500 tons). If the previous acceptable test result is from the previous production day, only the material produced on the second production day will be considered out of tolerance. All future sub lots will not include the isolated test. The pay factors for the out of tolerance sample lot will be calculated using column C of table 4.

If, during production, a QA sample test result does not meet the acceptable tolerances and the Contractors QC sample duplicates the QA sample test result, the Contractor can make an appropriate change to the mixture (within the JMF boundaries), and request to have that sample further isolated. After the Contractor has made appropriate changes, the Contractor will visually inspect each produced load. The first visually acceptable load will be sampled and tested. If that sample test result shows compliance with the specifications, the material that is considered out of the acceptable tolerance will include the material from the previous acceptable test result to the third load after the initially sampled and tested sample. If the sample does not meet the specification requirements, the Engineer will no longer accept material. Production may resume when changes have been made and an acceptable sample and test result is obtained.

Table 3 B Quality Level Analysis by the Standard Deviation Method

PU or PL	QU and QL for An@ Samples						
	n = 3	n = 4	n = 5	n = 6	n = 7	n = 8	n = 9
100	1.16	1.50	1.79	2.03	2.23	2.39	2.53
99	-	1.47	1.67	1.80	1.89	1.95	2.00
98	1.15	1.44	1.60	1.70	1.76	1.81	1.84
97	-	1.41	1.54	1.62	1.67	1.70	1.72
96	1.14	1.38	1.49	1.55	1.59	1.61	1.63

95	-	1.35	1.44	1.49	1.52	1.54	1.55
94	1.13	1.32	1.39	1.43	1.46	1.47	1.48
93	-	1.29	1.35	1.38	1.40	1.41	1.42
92	1.12	1.26	1.31	1.33	1.35	1.36	1.36
91	1.11	1.23	1.27	1.29	1.30	1.30	1.31
90	1.10	1.20	1.23	1.24	1.25	1.25	1.26
89	1.09	1.17	1.19	1.20	1.20	1.21	1.21
88	1.07	1.14	1.15	1.16	1.16	1.16	1.17
87	1.06	1.11	1.12	1.12	1.12	1.12	1.12
86	1.04	1.08	1.08	1.08	1.08	1.08	1.08
85	1.03	1.05	1.05	1.04	1.04	1.04	1.04
84	1.01	1.02	1.01	1.01	1.00	1.00	1.00
83	1.00	0.99	0.98	0.97	0.97	0.96	0.96
82	0.97	0.96	0.95	0.94	0.93	0.93	0.93
81	0.96	0.93	0.91	0.90	0.90	0.89	0.89
80	0.93	0.90	0.88	0.87	0.86	0.86	0.86
79	0.91	0.87	0.85	0.84	0.83	0.82	0.82
78	0.89	0.84	0.82	0.80	0.80	0.79	0.79
77	0.87	0.81	0.78	0.77	0.76	0.76	0.76
76	0.84	0.78	0.75	0.74	0.73	0.73	0.72
75	0.82	0.75	0.72	0.71	0.70	0.70	0.69
74	0.79	0.72	0.69	0.68	0.67	0.66	0.66
73	0.75	0.69	0.66	0.65	0.64	0.63	0.63
72	0.74	0.66	0.63	0.62	0.61	0.60	0.60
71	0.71	0.63	0.60	0.59	0.58	0.57	0.57
70	0.68	0.60	0.57	0.56	0.55	0.55	0.54
69	0.65	0.57	0.54	0.53	0.52	0.52	0.51
68	0.62	0.54	0.51	0.50	0.49	0.49	0.48
67	0.59	0.51	0.47	0.47	0.46	0.46	0.46
66	0.56	0.48	0.45	0.44	0.44	0.43	0.43
65	0.52	0.45	0.43	0.41	0.41	0.40	0.40
64	0.49	0.42	0.40	0.39	0.38	0.38	0.37

63	0.46	0.39	0.37	0.36	0.35	0.35	0.35
62	0.43	0.36	0.34	0.33	0.32	0.32	0.32

Table 3 B Quality Level Analysis by the Standard Deviation Method							
	QU and QL for An@ Samples						
PU or PL	n = 3	n = 4	n = 5	n = 6	n = 7	n = 8	n = 9
61	0.39	0.33	0.31	0.30	0.30	0.29	0.29
60	0.36	0.30	0.28	0.27	0.27	0.27	0.26
59	0.32	0.27	0.25	0.25	0.24	0.24	0.24

Table 4 - PWL Pay Adjustment Factors		
PWL	Pay Adjustment Factor (%) Column B	Pay Adjustment Factor (%) Column C
100	+5	0
99	+4	-1
98	+3	-2
97	+2	-3
96	+1	-4
95	0	-5
94	-1	-6
93	-2	-7
92	-3	-8
91	-4	-9
PWL<91	PWL - 100	PWL - 100

(b) Pavement Construction - Pay Adjustments.

The Engineer will determine the pavement construction pay adjustment by evaluating the construction of the pavement, based on the following parameter:

- Degree of compaction of the in-place material

Using the test values for the cores, the Engineer will use the following steps to determine the pavement construction pay adjustment for each lot of work.

1. Calculate the core bulk specific gravity values from the sublot tests values, to the nearest 0.001 unit. Obtain the Theoretical maximum Specific Gravity values from the corresponding laboratory sublot tests.
2. Calculate the Degree of Compaction:
   Degree of Compaction =
   ((Core Bulk Specific Gravity) / (Theoretical Maximum Specific Gravity)) x 100% recorded to the nearest 0.1%.
3. The average compaction for the sublots shall be averaged together for the compaction level of the lot. The lots compaction test level shall be averaged and recorded to the nearest whole percent.
4. Locate the value of the Payment Adjustment Factor corresponding to the calculated degree of compaction from Table 5 or Table 5a.

5. Determine the pavement construction price adjustment by using the following formula:
   Construction Pay adjustment = (Lot Quantity) x (Bid Price) x (Pay Adjustment Factor) x 30%.

Table 5: Compaction Price Adjustment Highway Locations

Degree of Compaction (%)	Range	Pay Adjustment Factor (%)
>= 97.0	>= 96.75	-100*
96.5	96.26 B 96.74	-5
96.0	95.75 B 96.25	-3
95.5	95.26 B 95.74	-2
95.0	94.75 B 95.25	0
94.5	94.26 B 94.74	0
94.0	93.75 B 94.25	1
93.5	93.26 B 93.74	3
93.0	92.75 B 93.25	5
92.5	92.26 B 92.74	3
92.0	91.75 B 92.25	0
91.5	91.26 B 91.74	0
91.0	90.75 B 91.25	-5
90.5	90.26 B 90.74	-15
90.0	89.75 B 90.25	-20

89.5	89.26 B 89.74	-25
89.0	88.75 B 89.25	-30
88.5	88.26 B 88.74	-50
=<88.0	=<88.25	-100*

* or remove and replace it at Engineer's discretion

Table 5A: Compaction Price Adjustment Other[1] Locations		
Degree of Compaction	Range	Pay Adjustment Factor (%)
>= 97.0	>= 96.75	-100*
96.5	96.26 B 96.74	-5
96.0	95.75 B 96.25	-3
95.5	95.26 B 95.74	-2
95.0	94.75 B 95.25	0
94.5	94.26 B 94.74	0
94.0	93.75 B 94.25	0
93.5	93.26 B 93.74	1
93.0	92.75 B 93.25	3
92.5	92.26 B 92.74	1
92.0	91.75 B 92.25	0
91.5	91.26 B 91.74	0
91.0	90.75 B 91.25	0
90.5	90.26 B 90.74	0
90.0	89.75 B 90.25	0
89.5	89.26 B 89.74	0
89.0	88.75 B 89.25	-1
88.5	88.26 B 88.74	-3
88.0	87.75 B 88.25	-5
87.5	87.26 B 87.74	-10
87.0	86.75 B 87.25	-15
86.5	86.26 B 86.74	-20
86.0	85.75 B 86.25	-25

85.5	85.26 B 85.74	-30
85.0	84.75 B 85.25	-40
84.5	84.26 B 84.74	-50
=< 84.0	=<84.25	-100*

* or remove and replace at Engineer's discretion

[1] This chart is to be used for areas where the structural value of the area to be paved is less than 1.75 as determined by the Engineer. See Appendix B - Method for Obtaining Cores for Determination of Roadway Structure. This chart is applicable to rehabilitation work only; full depth construction will not be considered for Table 5a.

.04 Dispute Resolution

Disputes or questions about any test result shall be brought to the attention of the Contractor and the Engineer within two operational days of reported test results. The following dispute resolution procedures will be used. The Engineer and the Contractor will review the sample quality, the test method, the laboratory equipment, and the laboratory technician. If these factors are not the cause of the dispute, a third-party dispute resolution will be used.

Third party resolution testing can be performed at either another Contractor=s laboratory, the Engineer=s laboratory, or an independent accredited laboratory. Unless otherwise mutually agreed upon by DAPA and the Engineer, the Engineer=s qualified laboratory in Dover and qualified personnel shall conduct the necessary testing for third party Dispute Resolution after the Engineer has provided reasonable notice to allow the Contractor to witness this testing. When disputes over production testing occur, the samples used for Dispute Resolution testing will be those samples the properly captured, labeled, and stored, as described in the second paragraph of the section of these specifications titled **.02 Acceptance Plan, (a) Material Production - Tests and Evaluations**. If no samples are available, the original testing results will be used for payment calculations.

Dispute Resolution samples for air void content will be heated by a microwave oven.

If there is a discrepancy between the Engineer=s acceptance test result and the Contractor=s test result, the Contractor may ask for the Dispute Resolution sample to be tested. The Contractor may request up to two dispute resolution samples be tested per calendar year without charge. Any additional Dispute Resolution samples run at the Contractors request where the results substantiate the acceptance test result will be assessed a fee of $125. Any additional Dispute Resolution samples that substantiate the Contractors test result will not be assessed the fee.

When disputes over compaction core test results occur, the Engineer=s acceptance core will be used for the dispute resolution sample. The Contractor will be advised on when the testing will occur as referenced above to witness the testing. The results of the dispute resolution testing shall replace all of the applicable disputed test results for payment purposes.

Appendix A - Repairing Core Holes in Bituminous Asphalt Pavement

Description.

This appendix describes the procedure required to repair core holes in a bituminous concrete pavement.

Materials and Equipment.

The following material shall be available to complete this work:

- Patch Material - DelDOT approved High Performance Cold Patch material shall be used.

The following equipment shall be available to complete this work:

- Sponge or other absorbent material - Used to extract water from the hole.
- Compaction Hammer - mechanical (electrical, pneumatic, or gasoline driven) tamping device with a flat, circular tamping face smaller than 6 inches in diameter.

Construction Method.

After core removal from the hole, remove all excess water from within the hole, and prevent water from re-entering the hole.

Place the patch material in lifts no greater than 3 inches and compact with mechanical tamping device. If the hole is deeper than 3 inches, use two lifts of approximately equal depths so that optimum compaction is achieved. Make sure that the patch surface matches the grade of the existing roadway. Make every effort to achieve the greatest possible compaction

Performance Requirements.

The Engineer will judge the patch on the following basis:

- The patch shall be well compacted
- The patch surface shall match the grade of the surrounding roadway surface.

Basis of Payment.

No measurement or payment will be made for the patching work. The Contractor must gain the Engineer=s acceptance of the patching work before the Engineer will accept the material represented by the core.

Appendix B - Method for Obtaining Cores for Determination of Roadway Structure

The Contractor is responsible for obtaining cores in areas that they propose are eligible for compaction price adjustments according to Table 5a in this specification. Table 5a is not applicable for new full-depth pavement box construction. Cores submitted for this process shall be obtained according to the following process.

1. Contact Materials & Research (M&R) personnel to determine if information about the area is already available. If M&R has already obtained cores in the location that is being investigated, the contractor may opt to use the laboratory information for the investigation and not core the area on their own.

2. If M&R does not have information concerning the section of the roadway, the contractor needs to contact M&R to arrange for verification of coring operations. Arrangements shall be made to allow for an individual from M&R to be on the site when the cores are obtained. Cores will be turned over to M&R for evaluation.

3. The Contractor is responsible for providing all traffic control and repairing core holes in accordance to 401699 Appendix A - Repairing Core Holes in Bituminous Asphalt Pavements.

4. Cores are to be taken throughout the entire project for the area in question. Cores will be spaced, from the start of the project in increments determined based on field and project specifics. Cores will be evenly distributed throughout the project location. The cores will be taken in the center of the lane in question.

5. Additional cores may be taken at other locations, if surface conditions indicate that there may be a substantial difference in the underlying section. The location of these cores should be documented and submitted to M&R.

6. Cores shall be full depth and include underlying materials. If there is a stone base included in the pavement section, at a minimum 1 core must have information concerning the thickness of the base. This is determined by augering to the subgrade surface.

7. The calculations used to determine the structural capacity of the roadway is as follows. If the contractor finds, upon starting the coring process, that the areas are of greater thickness than applicable to Table 5a, they may terminate the coring process on their own and retract the request.

Structural Number Calculations

Each pavement box material is assigned a structural coefficient based upon AASHTO design guides. The structural coefficient is used to determine the total strength of the pavement section.

Materials used in older pavement sections are assigned lower structural coefficients to compensate for aging of the materials. The coefficients used to determine the structural number of an existing pavement are:

Existing Material	Structural Coefficient
HMA	0.32
Asphalt Treated Base	0.26
Soil Cement	0.16
Surface Treatment (Tar & Chip)	0.10
GABC	0.14
Concrete	0 - 0.7*

* The Structural Coefficient of Concrete is dependent upon the condition of the concrete. Compressive strengths & ASR analysis are used to determine condition - contact the Engineer if this situation arises.

Newly placed materials use a different set of structural coefficients. They are as follows:

New Material	Structural Coefficient
HMA	0.40
Asphalt Treated Base (BCBC)	0.32
Soil Cement	0.20
GABC	0.14

Example:

Location includes placement of a 1.25" Type C overlay on 2.25" Type B. Existing roadway is cored and is shown to consist of 2" HMA on 7" GABC.

Calculation:

For the Type B lift the calculation would be:

Existing HMA	2 * 0.32	=	0.64
GABC	7 * 0.14	=	0.98
			1.62

For the Type C lift the calculation would be:

Newly Placed B	2.25 * 0.4	=	0.90
Existing HMA	2 * 0.32	=	0.64
GABC	7* 0.14	=	0.98
			2.52

11/3/20

701507 – CURB RETAINING WALL

Description:

This work consists of providing all materials and constructing the curb retaining wall.

Materials:

A.	GABC	Section 1005
B.	Concrete Structures	Section 610
C.	Concrete Reinforcement	Section 611
D.	Curing Compound	Section 1022
E.	1/2-inch Preformed Expansion Joint Material	Section 1042
F.	Bituminous Joint Sealant	Section 1042

Construction:

Place curb retaining wall in accordance with the Plans and the Standard Construction Details.

Method of Measurement:

The Department will measure the quantity of curb retaining wall in linear foot.

Basis of Payment:

A. The Department will pay for curb retaining wall at the contract unit price per linear foot. Price and payment will constitute full compensation for:
   1. Providing and placing materials;
   2. excavating within the template of the item;
   3. backfill and backfilling;
   4. foundation preparation;
   5. compaction;
   6. providing forms and forming; and
   7. removal of surplus material and replacement of cracked or damaged curb retaining wall.

B. The Department will pay for:
   1. Excavation and embankment outside the template of the item in accordance with Section 202.
   2. Rock removal in accordance with Section 202.
   3. Undercut excavation in accordance with Section 202.
   4. PCC removal in accordance with Section 211.
   5. Sawcutting in accordance with Section 762.

701510 - CURB/SIDEWALK OPENING

Description.

This work consists of providing all materials and constructing curb/sidewalk openings.

Materials.

A.	PCC, Class B	Section 1022
B.	Curing Compound	Section 1022
C.	1/2-inch Preformed Expansion Joint Material	Section 1042
D.	Bituminous Joint Sealant	Section 1042
E.	Bar Reinforcement	Section 611 and Section 1037

Construction.

Construct curb/sidewalk in accordance with Section 701.3 and 705.3

Method of Measurement.

The Department will measure the quantity of curb/sidewalk openings as the actual number installed in place and accepted.

Basis of Payment.

The Department will pay for curb/sidewalk openings at the contract unit price per each. Price and payment will constitute full compensation in accordance with Section 701.5 and 705.5.

12/1/2022

710503 – ADJUST GAS VALVE BOXES

Description:

This work consists of adjusting gas valve boxes.

Construction:

Adjust the gas valve box to be flush with the pavement surface in accordance with the contract or as directed by the engineer. Locate the valve box directly over the valve, plumb and level.

Method of Measurement:

The Department will measure the adjusting of gas valve boxes as the number of each adjusted.

Basis of Payment:

The Department will pay for the quantity of adjusted gas valve boxes at the contract unit price per each. Price and payment will constitute full compensation for all incidentals to complete the Work.

8/15/2024

711500 - ADJUST AND REPAIR EXISTING SANITARY MANHOLE

Description.

This work consists of adjusting and repairing existing sanitary manholes.

Materials.

A. Manhole frames, lids, and castings	Section 711 and Section 1039.7
B. PCC, Class B	Section 1022
C. Bar Reinforcement	Section 1037

Construction.

A. Vertically adjust the sanitary manhole to be flush with the pavement or surrounding surface in accordance with the contract or as directed by the engineer.

B. Repair any damage to the existing sanitary manhole to the satisfaction of the engineer and utility owner in accordance with Section 711.3

C. If there is a conflict between the Department's specifications and the specifications of the utility owner, the utility owners specifications take precedence.

Method of Measurement.

The Department will measure the adjustment and repair of existing sanitary manholes as the number of each accepted.

Basis of Payment

The Department will pay for adjust and repair existing sanitary manholes at the contract unit price per each and in accordance with Section 711.5.

8/15/2024

711502 - ADJUST AND REPAIR EXISTING SANITARY CLEANOUTS

Description.

This work consists of adjusting and repairing the existing sanitary cleanouts.

Materials.

A. PCC, Class B	Section 1022
B. Pipe	Section 1031 Use pipe and other materials similar to the original cleanout structure and approved by the utility owner.
C. Borrow, Type C	Section 1001

Construction.

A. Perform the work in accordance with the contract and the utility owner's specifications. In cases of conflict between the contract and the utility owner's specifications, the utility owner's specifications take precedence.

B. Remove the existing cleanout cover. Rebuild masonry found to be in poor condition using materials conforming with the original structure and acceptable to the utility owner.

C. Adjust the top of the cleanout to the proper grade prior to the paving operation.

Method of Measurement.

The Department will measure the quantity of each sanitary cleanout adjusted and repaired to the satisfaction of the engineer and utility owner.

Basis of Payment

A. The Department will pay for the quantity of sanitary cleanouts satisfactorily adjusted and repaired at the contract unit price per each. Price and payment will constitute full compensation for:

1. adjusting and repairing the cleanouts;
2. all materials;
3. excavation;
4. backfill and backfilling; and
5. all incidentals required to complete the Work.

763501 - CONSTRUCTION ENGINEERING
763597 – UTILITY CONSTRUCTION ENGINEERING

DESCRIPTION:

A. This work consists of construction lay out. Subsection 105.10 Construction Stakes, Lines and Grades will be replaced by this spec.

B. The Department will only establish the following:
   1. Original and final cross-sections for borrow pits.
   2. Final cross-sections:
      a. Top and bottom pay limit elevations for all excavation bid items that are not field measured by construction inspection personnel.
      b. The contractor shall notify the engineer when these pay limit elevations are ready and allow for a minimum of two calendar days for the engineer to obtain the information.
   3. Line and grade for extra work added on to the Plans.

C. When applicable, this work will also consist of providing construction and right-of-way/easement information to utility companies performing work (as defined in the Utility Statement) within the LOC.

MATERIALS:

Not applicable.

CONSTRUCTION METHODS:

A. Equipment
   1. Use and provide written certification that the equipment/instrument has been calibrated and is within manufacturer's tolerance. The certification shall be dated a maximum of 9-months before the start of construction. Renew the certification a minimum of every 9-months. The equipment/instrument shall have a minimum measuring accuracy of [3mm+2ppmxD] and an angle accuracy of up to 2.0-arc-seconds or 0.6-milligons.
   2. If the use of GPS technology in construction stakeout is chosen, provide the engineer with a GPS rover and automatic level for the duration of the contract. The GPS rover must be in good working condition and of similar make and model. Provide formal training on the GPS system being used to a maximum of 4, of the engineer’s appointees. The formal training must be up to 8-hours or to the satisfaction of the engineer. At the end of the contract, the engineer will return the GPS rover. If any of the equipment/instruments are found to be out of adjustment or inadequate to perform its function, they shall be immediately replaced to the satisfaction of the engineer.

3. Choosing to use GPS technology does not give the authority to use machine control. Construction Engineering (GPS) Machine Control Grading shall only be used if noted in the contract outlining the available files that will be provided and "the Release for delivery of documents in electronic form to a contractor" are signed by all parties prior to delivery of any electronic files. Only files designated in the contract shall be provided. If machine control grading is allowed on the project, see the machine control section of this specification. GPS technology and machine control technology shall not be used in the construction of bridges.

B. Engineering/Survey Staff

1. Provide and have available an adequate engineering staff that is competent and experienced to set lines, grades, and compatibility with the scope of the project. Additionally, employ an engineer or surveyor, licensed in the State of Delaware, to be responsible for the quality and accuracy of the work done by the engineering staff. When individuals or firms other than the contractor perform any professional services under this item, that work shall not be subject to the subcontracting requirements of Section 108.1. Assume full responsibility for any errors and/or omissions in the work of the engineering staff.

C. Performance Requirements

1. Construction Engineering shall include establishing:
   a. the survey points and survey centerlines;
   b. finding, referencing, offsetting the project control points;
   c. running a horizontal and vertical circuit to verify the precision of given control points.
2. Establishing plan coordinates and elevation marks for:
   a. culverts,
   b. slopes,
   c. subbase,
   d. subsurface drains,
   e. paving,
   f. subgrade,
   g. retaining walls,
   h. any other stakes required for control lines and grades.
3. Setting vertical control elevations for:
   a. footings,
   b. caps,
   c. bridge seats and deck screed.

4. Preserve the Department's project control points and benchmarks. Establish and preserve any temporary control points (traverse points or benchmarks) needed for construction. Any project control points (traverse points) or benchmarks conflicting with construction of the project shall be relocated. Replace any or all stakes that are destroyed at any time during the life of the contract as directed by the engineer. Re-establish centerline points and stationing prior to final cross-sections by the engineer. The vertical control error of closure shall not exceed 0.035-feet. The horizontal control precision ratio shall have a minimum precision of 1:20,000 feet of distance traversed prior to adjustment.
5. Perform construction centerline layout of all roadways, ramps, connections, and driveways from project control points set by the engineer. Use the profiles and typical sections provided in the plans shall calculate proposed grades at the edge of pavement or verify information shown on the Plans.
6. Advise the engineer of any horizontal or vertical alignment revisions needed to establish smooth transitions to existing facilities. Immediately bring to the attention of the engineer any potential drainage problem within the project limits. The engineer must approve any proposed variation in profile, width, or cross slope.
7. Establish the working points at centerlines of bearings on bridge abutments and on piers, mark the location of anchor bolts to be installed, check the elevation of bearing surfaces before and after they are ground, and set anchor bolts at their exact elevation and alignment in accordance with the contract. Before completion of the fabrication of beams for bridge superstructures, verify the locations, both vertically and horizontally, of all bearings and assume full responsibility for fabricated beams fitting and bearing as constructed. After beam erection and concurrently with the Department project surveyors or their designated representative, survey top of beam elevations at a maximum of 10-foot stations and compute screed grades. Submit the beam elevations to the engineer for review and approval before the stay-in-place forms are set. Construction stakes and other reference control marks shall be set at intervals as established by the engineer to assure that all components of the structure are constructed in accordance with the lines and grades shown on the plans. Take full responsibility for all structure alignment control, grade control and all necessary calculations to establish and set these controls.
8. Investigate proposed construction for possible conflicts with existing and proposed utilities. Report any conflicts to the engineer for resolution.

9. Stake all sidewalk and curb ramp grades in accordance with the contract. Review the stakeout with the engineer prior to construction. The engineer must approve any deviation from the Contract in writing.
10. Stake all drainage inlets in accordance with the Contract. The offsets and top of grate elevations need to be calculated for each type of drainage inlet specified in the contract in order to line up the drainage inlet's flow line with the specified curb or ditch flow line as shown in the contract. The engineer must approve any deviations from the Contract in writing.
11. If wetland areas are involved and specifically defined on the plans the following shall apply:
    a. Do not enter, damage, or destroy wetland areas, which exist beyond the LOC. These provisions will be strictly enforced, and all personnel shall understand the importance of these provisions.
    b. Delineate wetlands at the LOC throughout the entire project, before any clearing operations commence as shown on the plans to the satisfaction of the engineer.
    c. Use orange vinyl flagging material with "Wetland Boundary" printed on the flagging. In wooded areas, tie the flagging on the trees, at approximate 20-foot intervals through wetland areas. In open field and yard areas that have been identified as wetlands, drive 6-foot posts into the ground at approximate 50-foot intervals and tie with the flagging. The flagging shall extend approximately 12-inches in length beyond the post. Use oak posts with cross sectional dimensions of 1 1/2-inches to 2-inches by 1 1/2-inches to 2-inches or 1/4-inch rebar.
    d. If the flagging has been destroyed and the engineer determines that its use is still required, reflag the area. Flagging shall be replaced within 48-hours of notification that replacement is needed. After 48-hours the engineer may proceed to have the area reflagged.
    e. Remove all posts and flagging at Project acceptance.
    f. Assume any responsibility for any damages to wetlands located beyond the LOC, which occurs from his/her operations during the life of the contract. Restore all temporarily disturbed wetland areas to their preconstruction conditions.
12. Whenever the engineer will be recording data for establishment of pay limits, the Contractor will be invited to obtain the data jointly with the engineer's survey crew(s) in order to agree with the information. If the Contractor's representative is not able to obtain the same data, then the information obtained by the engineer shall be considered the information to be used in computing the quantities in question.

D. Submittals

1. All computations, survey notes, electronic files, and other records necessary to accomplish the work shall be preserved and made available to the Department in a neat and organized manner at any time as directed by the engineer. The engineer may check all or any portion of the stakeout survey work or notes and any necessary correction to the work shall be made as soon as possible. Provide the engineer with such assistance as may be required for checking all lines, grades, and measurements necessary for the execution of the work. Checking by the engineer shall not relieve responsibility for the accuracy or completeness of the work. Copies of all notes must be provided to the engineer at the completion of the Project.
2. Submit any of the following at the engineer's request:
    a. Proposed method of recording information in field books to ensure clarity and adequacy.
    b. A printout of horizontal control verification, as well as coordinates, differences, and error of closure for all reestablished or temporary control points.
    c. A printout of vertical control verification, with benchmark location elevation and differences from plan elevation.
    d. Sketch of location of newly referenced horizontal control, with text printout of coordinates, method of reference and field notes associated with referencing control - traverse closure report.
    e. Description of newly established benchmarks with location, elevation, and closed loop survey field notes - bench closure report
    f. All updated electronic and manuscript survey records.
    g. Stakeout plan for each structure and culvert.
    h. Computations for buildups over beams, screed grades, and overhang form elevations.
    i. A report showing differences between supplied baseline coordinates and field obtained coordinates, including a list of preliminary input data.
    j. Any proposed plan alteration to rectify a construction stakeout error, including design calculations, narrative and sealed drawings.
    k. Baseline for each borrows pit location.
    l. Detailed sketch of proposed overhead ground mounted signs or signals showing obstructions that may interfere with their installation.
    m. Copies of cut sheets.

E. Machine Control Grading

1. Machine control grading to be used on the project if authorized by the engineer.
2. Use of this procedure and equipment is intended for grading the subgrade surface; it is not intended for the use in constructing final surface grades.
3. Materials:
   a. Provide all equipment required to perform GPS machine control grading, including equipment needed by to verify the work to the engineer.
   b. Use manufacturer's GPS machine control equipment and system to achieve the grading requirements in accordance with the Contract.
4. Construction
   a. Convert the electronic data provided by the Department into the format required for the equipment.
   b. The Department will provide no additional electronic data.
   c. Perform at least one 500-foot test section with the selected GPS system to demonstrate the capabilities, knowledge, equipment, and experience to properly operate the system and meet acceptable tolerances. The engineer will evaluate and make the determination as to whether additional 500-foot test sections are required. Failure to demonstrate this ability to the satisfaction of the engineer, construct the project using conventional surveying and staking methods.
   d. DelDOT Responsibilities:
      i. The Department will set initial vertical and horizontal control points in the field for the project as indicated in the contract.
      ii. The Department will provide the project specific localized coordinate system.
      iii. The Department may provide data in an electronic format as indicated in the general notes.
         (1.) The information provided shall not be considered a representation of actual conditions to be encountered during construction. Providing this information does not relieve the responsibility of making an investigation of conditions to be encountered. This includes site visits and basing the bid on information obtained from these investigations, and the professional interpretations and judgments of the Contractor.
         (2.) The Department will develop and provide electronic data for use as part of the Contract in the format as indicated in the Plans.
      iv. The Department will provide the following electronic files:

(1.) ASCII data files with coordinates and elevations for proposed points as selected by the engineer.

(2.) Existing digital terrain model in .dtm file format compatible with software currently used by the Department.

(3.) Proposed digital terrain model in .dtm file format compatible with software currently used by the Department.

(4.) Design file in .dgn file format, that contains 3D features lines for the proposed design, 3D feature lines are for the proposed top surface elevation only.

v. The engineer will perform spot checks of the machine control grading results, surveying calculations, records, field procedures, and actual staking. If the work is not being performed in a manner that will assure accurate results, the engineer may order the work to be redone to the requirements of the contract. The engineer may also require the use of conventional surveying and staking.

e. Contractor's responsibilities:

i. No less than 2-weeks before the scheduled preconstruction meeting, submit to the engineer for review a written machine control grading work plan which shall include the equipment type, control software manufacturer and version, and proposed location of the local GPS base station used for broadcasting differential correction data to rover units.

ii. If the need to establish new control points, traverse from existing control points and verify to be accurate by conventional surveying techniques.

iii. Assume all risks and liabilities of any assumptions or manipulations marked from the electronic information provided or if chosen to develop a separate digital terrain model.

iv. Ensure that the electronic data provided will function in their machine control grading system.

v. Provide the engineer with a GPS rover and Automatic Level, for use during the duration of the contract. At the end of the contract, the GPS rover and Automatic Level will be returned. Provide a total of 8-hours of formal training on the GPS machine control system to the engineer and up to 3 additional Department appointees per rover.

vi. Review and apply the data provided by the Department to perform GPS machine control grading.

vii. Convert the electronic data provided by the Department into a format compatible with their system.

viii. At the beginning of each workday check and if necessary, recalibrate the GPS machine control system in accordance with the manufacturer's recommendations, or more frequently as needed to meet the requirements of the project.

ix. Meet the accuracy requirements as detailed per the Department’s standards.

x. Establish secondary control points at appropriate intervals and at locations along the length of the project. These points shall be outside the project limits and/or where work is performed. These points shall not to exceed 1000-foot intervals. The horizontal position of these points shall be determined by conventional survey traverse and adjustments from the original baseline control points. The conventional traverse shall meet or exceed the Department's Standards. The elevation of these control points shall be established using differential leveling from the project benchmarks, forming a closed loop. A copy of all new control point information including closure report shall be provided and approved by the engineer prior to construction activities. Assume responsibility for all errors resulting from these efforts and correct deficiencies to the satisfaction of the engineer.

xi. Provide stakes at all alignment control points, at every 500-foot stationing, and where required for coordination activities involving environmental agencies and utility companies.

xii. Set hubs, at a minimum of 500-foot intervals, at the top of finished grade at all hinge points on the cross section on the main line and at least 4 cross sections on side roads and ramps as directed by the engineer or as shown on the plans. Placement of a minimum of 4 control points outside the limits of disturbance for the excavation of borrow pits, Stormwater Management Ponds, and wetland mitigation sites. These control points shall be established using conventional survey methods for use by the engineer to check the accuracy of the construction.

xiii. Preserve all reference points and monuments that are identified and established by the engineer for the Project.

xiv. Provide control points and conventional grades stakes at critical points such as, PC's, PT's, superelevation points, and other critical points required for the construction of drainage and roadway structures.

xv. Follow the guidelines set forth in the "Geometric Geodetic Accuracy Standards and Specifications for Using GPS Relative Positioning Techniques" and follow a minimum of Second Order Class 1, (2-I) classification standards.

xvi. Automated equipment operations have a high reliance on accurate control networks from which to take measurements, establish positions, and verify locations and features. Therefore, a strong contract control network in the field which is the same or is strongly integrated with the project control used during the design of the contract is essential to the successful use of this technology with the proposed Digital Terrain Model (DTM). Consistent and well designed site calibration for all machine control operations are required to ensure the quality of the contract deliverables. The Contract Control Plan is intended to document which horizontal and vertical control will be held for these operations. Continued incorporation of the Base Station(s) as identified in the Contract Control Plan is essential to maintaining the integrity of positional locations and elevations of features. The Contract Control Plan shall be submitted to the Department for review and approval by the Departments Survey Section 3 weeks prior to the start of any machine control work. Operate and maintain all elements of the Machine Grade Control continuously once the operations begin until otherwise approved by the engineer.

5. Contract Control Plan:
   a. Develop and submit a Contract Control Plan for use of Machine Control Grading. Contract control includes all primary and secondary horizontal and vertical control which will be used for the construction contract. Upon the completion of the initial survey reconnaissance and control verification, but prior to beginning primary field operations, submit a Contract Control Plan document. The Contract Control plan shall be signed and sealed by a Delaware licensed Land Surveyor or Delaware Professional Engineer who oversees its preparation for acceptance by the engineer. The plan shall include the following:
      i. A control network diagram of all existing horizontal and vertical control recovered in the field as contract control.
      ii. Include a summary of the calculated closures of the existing control network, and which control has been determined to have been disturbed or out of tolerance from its original positioning.
      iii. An explanation of which horizontal and vertical control points will be held for construction purposes. If necessary, include all adjustments which may have been made to achieve required closures.
      iv. An explanation of what horizontal and vertical control (including base stations) was set to accomplish the required stakeout or automated machine operation. Include how the position of these new control points was determined.

v. Describe the proposed method and technique (technology and quality control) for utilizing the control to establish the existing and/or proposed feature location and to verify the completed feature location and/or measured quantity.

vi. A listing of the horizontal and vertical datums to be used and the combined factor to be used to account for ellipsoidal reduction factor and grid scale factor.

vii. If chosen to use machine control as a method of measuring and controlling excavation, fill, material placement or grading operations as a method of measuring and controlling excavation, fill, material placement or grading operations, the Control Plan shall include the method by which the automated machine guidance system will initially be site calibrated to both the horizontal and vertical contract control, and shall describe the method and frequency of the calibration to ensure consistent positional results.

F. Utility construction methods:

1. The engineer must approve all requests for Utility Construction Engineering before the work begins.
2. Instruct utility companies to submit their requests to the engineer. The engineer will decide if the requested work meets the criteria for Utility Construction Engineering or is normal Construction Engineering and pass the requests along with the decision.
3. The survey crew size shall be adequate to efficiently perform the work required and must be approved by the engineer.
4. Work covered under Utility Construction Engineering will fall into two categories:
   a. Engineering/surveying work that is not necessary for construction of the Project, staking the clear zone line, providing cut/fill grades at proposed utility pole locations, staking back of drainage structures, and staking right-of-way lines where construction of the Project (exclusive of utilities) is within the right-of-way.
   b. Engineering/surveying work that is necessary for construction but must be provided for utility companies well in advance of the need and will likely need to be redone later, as determined by the engineer. This can be any of the Construction Engineering work that when done early cannot be expected to remain undisturbed until needed for construction of the Project (non-utility).

METHOD OF MEASUREMENT:

A. The Department will not measure construction engineering.

B. The Department will measure the quantity of utility construction engineering as the number of hours the survey crew is in the field actively engaged in utility construction engineering work.

BASIS OF PAYMENT:

A. The Department will pay the lump sum unit bid price for this work. Price and payment constitute full compensation for:
   1. the work associated with construction engineering;
   2. providing all equipment and instruments;
   3. providing and placing stakes;
   4. flagging and any reflagging;
   5. reconstruction of work;
   6. all costs related to the development of separate digital terrain model;
   7. reestablishing reference points; and
   8. wetland restoration.

B. The Department will pay for utility construction engineering at the contract unit price per hour actively engaged in performing the work. Price and payment will constitute full compensation for:
   1. Office work;
   2. providing all labor;
   3. equipment;
   4. instruments;
   5. stakes; and
   6. other materials necessary to complete the Work.

C. The Department will make monthly payment in proportion to the amount of work done as determined by the engineer.

D. The Department will not make any adjustment in payment for any issues with equipment to operate the GPS machine control system for any construction items or be justification for granting contract time extension.

E. The Department will not make any consideration for any extension of Contract Time or additional compensation due to delays, corrective work, or additional work that may result from faulty and erroneous construction stakeout, surveying, and engineering required.

F. The Department will not make any adjustments for all liability, costs, or delays if the Contractor chooses to develop a separate digital terrain model.

2/9/23

763520 - ELECTRONIC TICKETING

Description:

This work consists of providing electronic data for material weight tickets delivered to the project. This work also consists of placing an identifying vehicle number on the driver side and the passenger or rear sides of the delivery vehicle. This does not preclude or dismiss any requirement for paper tickets required by the Standard Specifications or other rules and regulations.

General Requirements:

A. Send electronic tickets (eTicket) to the Department's Electronic Ticketing Portal https://tickets.deldot.gov as they are generated. The Department will reject any load that does not have a corresponding eTicket unless the cause is beyond the contractor's control. In such circumstances paper tickets may be permitted at the discretion of the engineer.

B. Payment for material weight delivered to the project will be based upon the eTickets marked *"Delivered",* less waste, excess material weight as noted in 105.12 of the Standard Specifications, and any audit corrections.

C. Do not reissue or reprint tickets that have been marked "*Delivered"* or *"Rejected"* without first notifying the engineer. The engineer may reject a reissued or reprinted ticket at their discretion. When a reissued or reprinted ticket is rejected, payment will be based upon the original ticket.

Data Integration:

Request a list of the Department's naming nomenclature. Include in the request an identification of what system the supplier utilizes for its load read-out weighing system. If necessary, create an Application Programming Interface (API) to integrate with the Department's eTicketing Portal. Utilize the API to provide electronic data from the load read-out weighing system at the material source that is readable by the Department's eTicketing Portal. Update the load read-out weighing system and API as necessary to maintain connection the Department's eTicketing Portal.

The data shall be provided as follows:

Reference Field No.	Description	Examples	Data Type	Required
1	Ticket Number	5126349, 101R, 539-19	String	Yes
2	Contract Number	T202011001	String	Yes

3	Contract Name (Job)	Walnut Street Streetscape Improvements	String	Yes
4	Contractor Name (Customer)	Mumford & Miller, Inc.; A Del Construction	String	Yes
5	Supplier Name	River Asphalt; Allan Myers Materials	String	Yes
6	Supplier Plant	Plant #1 Dagsboro; Dover Asphalt	String	Yes
7	Job Number (Location)	Task 1; Location 5	String	Yes
8	Weigh Master Name	Johnny Scales	String	Yes
9	Weigh Master ID	1234567	String	Yes
10	Left Intentionally Blank			No
11	Mix Design ID (Product)	1628p; AM-WILM-29 76-22	String	Yes
12	Material Type (Product Description)	9.5mm top; 19MM 76-22 NON CARB	String	Yes
13	Item No. (Product Code)	401005; 401016	String	Yes
14	Load Number	75	Number	Yes
15	Identifying Vehicle Number	T-1	String	Yes
16	Hauler	John Doe Trucking	String	Yes
17	Legal Gross Vehicle Weight	73,280	Number	Yes
18	Loading Date & Time	2020-06-15T13:45:30	String	Yes
19	Gross Weight	72,980	Number	Yes
20	Net Weight	27,900	Number	Yes
21	Truck Tare Weight	45,080	Number	Yes
22	Void	280	Number	No
23	Daily Running Total	44.43	Number	Yes

All provided weights shall be accurate to 0.01 tons.

Loads which do not have the required data shall be rejected.

Setup and Calibration:

Conduct a test of each supplier's integration with the Department's eTicketing Portal prior to shipping material. Complete test at least 14 days prior to shipping material unless otherwise approved by the engineer. The test must involve at least four calibration eTickets from each supplier approved for use on the project. The calibration eTickets must accurately reflect the categories 1-7 shown above; all other categories shall be marked *"TEST"*. After the engineer confirms the calibration eTickets have been entered into the Department's eTicket Portal, void the eTickets with the reason *"Calibration Testing"*.

Uptime:

Uptime reliability of the material supplier's ticketing system must be 99.5% over any 30-day rolling period. Uptime is defined as the ability for the Department to receive electronic tickets within a maximum of 10 minutes from when the ticket was created.

Load Identification:

Ensure the identifying vehicle numbers on the delivery vehicle correspond to the ticket. Place the numbers on the delivery vehicles such that at least one can be safely read from within the work area. Delivery vehicles without identifying vehicle numbers shall be rejected.

Method of Measurement:

The Department will not measure electronic ticketing.

Basis of Payment:

A. The cost associated with creating and maintaining an API, providing electronic ticketing data, and placing identifying vehicle numbers on the delivery vehicles is incidental to the item being placed.
B. The Department will make no payment for material that is rejected.

01/18/2022

763525 – ROAD USER COST

Description:

Road User Cost shall be assessed to compensate failure to open the project to unrestricted highway traffic on time in accordance with the contract's General Description.

Method of Measurement:

The Department will not measure Road User Cost.

Basis of Payment:

The assessment will be determined by the Road User Cost documentation in the General Description of the Contract.

8/3/23

763598 – FIELD OFFICE, SPECIAL I
763599 - FIELD OFFICE, SPECIAL II

Description:

This work consists of providing, erecting, equipping, maintaining, and removing modular offices and adjacent parking areas. These field office units may be situated in different locations. Each field office and parking area are for the exclusive use for Department personnel, engineers, designers, consultants, and inspectors.

Materials:

A. Each modular office and adjacent parking lot must meet the requirements in Table 1, Table 2, Table 3 and as described below:
   1. Weatherproof construction; tightly floored and roofed with air space above the ceiling for ventilation; and fully skirted with rigid, watertight covering overlapping the bottom of the exterior siding to the existing ground.
   2. Supported above the ground and safely secured to its support if the support is an in-ground anchored foundation or by tie-downs to the ground.
   3. Contain interior and exterior paneling, lighting, and plumbing fixtures.
   4. Provide suitable indoor toilet facilities in accordance with the requirements of state and local Boards of Health, or of other bodies or courts having jurisdiction in the area.
   5. Connect to the local water and sanitary lines. If public utilities are not available, utilize freshwater and wastewater holding tanks to provide with running water.
   6. Provide an adequate positive locking system on the inside of the restroom doorway to ensure privacy.
   7. When separate facilities for men and women are not available or required, place a sign with the wording "Rest Room" (letter height 1-inch minimum) over the doorway.
   8. Equip with heating and cooling capabilities to provide comfortable working conditions; this includes an exhaust fan, heating equipment, and air conditioning connected to an operational power source.
   9. Provide electrical, water, fuel, or other utility necessary to fully power HVAC equipment. If electrical service is not readily available from the utility provider, provide and maintain a temporary generator (including fuel) until power can be established.
   10. Perform or arrange all necessary utility connections and/or their maintenance.

11. Provide maintenance of the heating, exhaust fan, and air conditioning equipment by validated service contracts for the length of the contract.
12. Provide maintenance of the potable water supply equipment, refrigerator, and microwave by validated service contracts for the length of the contract. Service contracts must allow a Department-authorized individual to deal directly with the service organization to request repair or maintenance.
13. Provide and maintain the interior with new furnishings. All furnishings must be approved by the engineer prior to installation in the modular field office. Office furnishings remain the property of the Contractor at the conclusion of the Project. Place the following furnishings as directed by the engineer:
    a. 12 folding chairs;
    b. 1 large conference table for a minimum of 12 people;
    c. 2 trash cans with lids and new plastic liners at each disposal interval – 1, 30+ gallons, 1, 10+ gallons;
    d. 2 dry erase boards a minimum of 4-foot x 3-foot each with markers and erasers;
    e. 1 floor mat at each entrance;
    f. 1 long-handled large-size broom with synthetic bristles and dustpan;
    g. 2 rough plan racks;
    h. 2 legal size filing cabinets with 4 drawers;
    i. 1 legal size fire-resistant filing cabinet with lock and key with 4 drawers and meeting underwriters' approval for not less than one hour test.
14. Provide and maintain the following office equipment for each modular field office; engineer must approve the equipment prior to installation in the field office. Deliver the equipment in new and working condition:
    a. 2 all-in-one print/copy/scan/fax machine capable of producing 35-pages per minute, double-sided, on 8 1/2-inch x 11-inch and 11-inch x 17-inch paper. Machine must be wireless capable and network capable and be able to print/copy/scan in color and in black and white;
    b. 2 combination electrical surge, spike, and noise protection devices.
15. Provide all consumables required for the office equipment and furnishings for the length of the contract. These consumables must be provided on request and include paper, tape, toner/printer ink, cleaning kits, and batteries. Provide maintenance of all office equipment by a validated service contract for the length of the contract. Service contracts must allow a Department-authorized individual to deal directly with the service organization to request repair.

16. Provide an alarm system in each field office for security with electronic, direct connection to a security service provider. The security systems shall have interior motion, window, and entrance detectors and built in manual fire alarms. The Contractor shall provide validated monitoring and service contracts for the length of the Contract for each field office. These contracts shall allow a Department authorized project person to deal directly with the security service provider to request service and/or repair.
17. Provide and maintain a new telephone equipment system meeting the following requirements:
    a. 3 lines with a call forward busy feature with 1 line being dedicated to communication with the general public;
    b. 1 telephone answering machine having all-digital recording, 14-minute message capacity, selectable message time, voice prompt assistance, day/time stamp, call screening, two-digit LED message indicator, toll saver, power failure memory back-up, and message interrupt from any station;
    c. Locate telephone lines as directed by the engineer;
    d. Allow a Department-authorized project person to deal directly with the telephone company to report outages and/or request repair;
    e. Install and perform initial setup of the specified telephone system. Initial installation, setup costs, and final disconnection shall be the responsibility of the Contractor. All subsequent monthly billings, after initial installation and setup, for each field office telephone system shall be received and paid by the Contractor.

B. Construct a field office parking lot for each modular field office in accordance with all applicable city, county, state, and federal codes.
    1. The parking area and entrance pathways shall be a minimum of 6-inch graded aggregate subbase.
    2. Provide a stabilized construction entrance in accordance with Section 908 adjacent to the parking area within 25-feet of the water service connection.

C. Construct a stair and deck platform at each exterior door with hand and safety rails designed to last the life of the contract. Rails must conform to the requirements of the Architectural Accessibility Board and other federal, state, and local boards, bodies, and/or courts having jurisdiction in the contract limits.

D. Maintenance of the modular field office and its adjacent parking area includes the following:
    1. Remove snow and/or ice from the parking area and from the entrance pathways to the field office within 12-hours of each occurrence.
    2. Maintain and replace all provided items, furnishings, and equipment.
    3. Provide bottled water and drinking cups for the water cooler.

4. Provide lavatory supplies, trash bags, and janitorial supplies.
5. Provide replacement items for all lighting fixtures.
6. Maintain all utilities including telephone system.
7. Provide janitorial and waste disposal services twice a week.
8. Clean up trash and debris from the parking lot once a week.
9. Maintain the facilities in clean and good working condition; keep rest room stocked with adequate lavatory and sanitary supplies at all times during the period of the Contract.

E. Field Office, Special Type I consists of 1 single wide trailer measuring 50-foot length by 12-foot width.

F. Field Office, Special Type II consists of 1 single wide trailer measuring 50-foot length by 12-foot width and 1 double wide trailer measuring 50-foot length by 24-foot width.

G. Remove the field office from the premises when directed by the Department.

TABLE 1. General Field Office Requirements for Each Modular Office

Doors Leading to Exterior	Minimum of 2 insulated doors; equip each with a keyed passage lock and a keyed deadbolt lock.
Electrical Outlets	Located a minimum of every 10 ft along each wall with a minimum of 2 outlets per room.
Exit Sign	1 lighted "EXIT" sign for each exterior passage door.
Fire Extinguisher	1 per exterior door; may be chemical or dry powder and be UL Classification 10-B:C (min.) and be suitable for Types A:B:C fires.
First Aid Kit	Commercial- or industrial-type first aid and safety kit suitable for Project conditions and hazards, including snakebites.
Height (Floor to Ceiling)	8'-0" nominal.
Insulation	Exterior walls, ceiling, and floor must be insulated.
Internet Access	Via a broadband connection with WiFi access utilizing WPA2 security. Options include cable modem, DSL, or similar service; dial-up is not acceptable. Position the WiFi router to provide sufficient coverage in the field office with a

	minimum 50-ft radius. Provide 2 data jacks in locations indicated on the approved office plan accepted by the Department. Provide usernames and passwords for authorized wireless users as determined by the Department Construction Project Manager. Ascertain the means by which the Internet source will be provided. Provide Internet download and upload speeds of at least 100 Mbps at all times. Coordinate the Internet source with the Department Construction Project Manager to assure compatibility with the Department's hardware/software requirements. Provide and maintain an operational wireless access point. At the Department's sole discretion, a 4G LTE wireless hotspot may be acceptable.
Keys	Minimum of 2 complete sets; give to the engineer's representative.
Lighting	One 4,000-lumen overhead light centrally located and evenly spaced every 10 ft along the interior ceiling, with a minimum of 1 overhead light per room.
Microwave	New; minimum 900 watts.
Other Material Requirements	Free of asbestos and all other hazardous materials.
Parking Spaces	12 functional spaces, each measuring 9'-0" x 20'-0".
Refrigerator	New; minimum 2.6 cubic ft.
Smoke Detector	New; minimum 1 working combination smoke and carbon dioxide detector per room.
Water Cooler	New potable water cooler with hot and cold taps; minimum 5-gallon capacity; maintain a supply of at least 5 gallons of extra water at all times.
Windows	Minimum of 6 insulated windows total; minimum glass area of 1,150 sq inches per window. Equip each

	window with a horizontal mini-blind covering the full glass area, a screen, and a locking device. Cover exterior of each window with steel bar grids.
Water Service Connections	At least 1 outside water service connection shall be provided at each field office. Each water connection shall have a 3/4" frost proof hose bib with vacuum breaker and shall include 100 linear feet of 5/8" minimum diameter reinforced, industrial or commercial grade, soft rubber hose per connection.

TABLE 2. Field Office Requirements for Single Wide Modular Field Office

Exterior Dimensions	The single-wide field office shall have minimum exterior dimensions of 50'-0" length by 12-0" width.
Floor Space	The single-wide field office shall be new and have a minimum floor space of 600 square feet.
Furnishing Requirements	2 full-size office desks. Each with filing drawer and fully adjustable ergonomic design swivel chair with armrests and 5-leg base having wheel casters.

TABLE 3. Field Office Requirements for Double Wide Modular Field Office

Exterior Dimensions	The double-wide field office shall have minimum exterior dimensions of 50'-0" length by 24'-0" width.
Floor Space	The double-wide field office shall be new and have a minimum floor space of 1,200 square feet.
Furnishing Requirements	6 full-size office desks. Each with filing drawer and fully adjustable ergonomic design swivel chair with armrests and 5-leg base having wheel casters.

Construction:

A. General Requirements:

1. The Engineer will issue a Notice to Proceed and stipulate the date on or before which the Contractor is expected to begin work in accordance with Section 108.2. Have the office units, their entrances, and their adjacent parking areas and all materials and equipment ready for use at least 7 calendar days prior to the date on which the work is expected to begin as stipulated in the Notice to Proceed and before any construction operations begin. Contract time charges will begin on the day work actually starts or on the date stipulated in the notice to proceed, whichever is earlier. There will be no delays in beginning the contract time charges due to delays in preparing the field office complex.
2. The Contractor is responsible for obtaining all required licenses and permits for installation, and placement of the field office and its parking area.
3. The field office must be available for use by the Department continuously throughout the duration of the Project.

B. Submittals:
   1. Submit a specific location layout drawing and construction details for the proposed field office and its parking area for approval by the engineer.
   2. Submit a copy of all validated field office, equipment, and maintenance service assistance and/or monitoring agreements and/or contracts as mentioned herein to the Department's administrative office on or before the first day the field office is ready for use.

Method of Measurement:

The Department will not measure field offices.

Basis of Payment:

A. The Department will pay for field office at the contract unit price per each month that the field office is acceptably provided as determined by the engineer. Partial months will be paid at the rate of 0.033-months per day. Price and payment will constitute full compensation for:
   1. Providing, placing, and maintaining all materials;
   2. phone installation, final disconnection, and monthly billing costs;
   3. installation and maintenance of stabilized construction entrance;
   4. submittals and all drawings;
   5. removal and restoration of each field office area, entrance, and adjacent parking area to original conditions;
   6. removing hazardous material and/or underground tanks;
   7. obtaining licenses and permits; and
   8. all incidentals required for the Work.

763626 - DIESEL FUEL COST PRICE ADJUSTMENT

Description:

This section defines the criteria for payments to the Contractor to reflect increases or decreases in the cost of diesel fuel consumed in the performance of applicable construction work.

Contract Applicability:

To have the Diesel Fuel Cost Price Adjustment provisions apply to this project, a properly completed Diesel Fuel Cost Price Adjustment Option form must be submitted to the Department with the Bidder's bid proposal. If a properly completed Diesel Fuel Cost Price Adjustment Option form is not provided by the bidder, the Department will consider the option to apply the Diesel Fuel Cost Price Adjustment provisions for the project to be declined. No further opportunity to elect Diesel Fuel Cost Price Adjustment for the project will be made available.

Price Adjustment Provisions:

A. These price adjustment provisions apply to contract items in the contract schedule of prices as grouped by category. Specific pay items to be adjusted are attached as an appendix to this Special Provision. General category descriptions and the fuel usage factors which are applicable to each are as follows:

1. Categories:

Category	Description	Applicability
A	Earthwork	The combined total of applicable item plan quantities must exceed 5,000 CY.
B	Subbase and Aggregate Base Courses	The combined total of applicable item plan quantities must exceed 500 tons.
C	Bituminous Materials (Bases and Pavements)	The combined total of applicable item plan quantities must exceed 500 tons.
D	Rigid Materials (Bases and Pavements)	The combined total of applicable plan quantities must exceed 5,000 CY.
E	Structures	Contract items will be based upon the total value of work performed for each structure including any associated work, i.e. items not grouped under Categories A thru D.

2. Diesel Fuel Usage Factors:

Category	Description	Factor	Units
A	Earthwork	0.34	Gallons per CY
B	Subbase and Aggregate Base Course	0.64	Gallons per Ton
C	Flexible Bases & Pavements	2.98	Gallons per Ton
D	Rigid Bases & Pavements	0.98	Gallons per CY
E	Structures	6.76	Gallons per $1,000 of work performed

Category	Conversion	Factor
B	SY to ton	90 lbs/sy-in
C	SY to ton	112.5 lbs/sy-in
D	SY to CY	Inches of depth/36

3. Delaware Posted Diesel Fuel Price will be issued monthly by the Department at https://deldot.gov/Business/bids/index.shtml?dc=diesel_fuel.
    a. The Project Base Price Index (FB) is the index price posted by the Department on the project advertisement date in $/gallon.
    b. The Fuel Price Index for adjustment (FP), will be the index price posted by the department monthly in $/gallon.

Price Adjustment Determination:

A. The following criteria and conditions will be considered in determining a price adjustment for diesel fuel cost fluctuations on a monthly basis.
    1. Unit Price Adjustment Calculation.
        a. When the ratio FP/FB is calculated to be less than 0.95 or calculated to be greater than

1.05, the Department will adjust unit bid price prices in accordance with the following formula:

AUP = (FP-FB)(F)+(UBP)

where:

AUP = Adjusted Unit Price

FP = Fuel Price Index for the month in which prices are adjusted for applicable construction work.

FB = Project Base Price Index

F = Diesel Fuel Usage Factor (See above chart in section 1.2 for usage factors.)

UBP = Unit Bid Price specified in the Contractor's Bid Proposal

Payment of Adjusted Unit Prices:

A. The unit bid prices of work items affected by the fuel escalation will be adjusted by change order, either up or down. The Diesel Fuel Price Index will be used for all the applicable items performed during the monthly period.

B. If the Contractor exceeds the authorized allotted completion time, the adjusted item prices on the last authorized allotted calendar day or working day shall be the prices used during the time liquidated damages are assessed. However, if the posted price for diesel fuel goes down, the item prices shall be adjusted downward accordingly.

C. Upon completion of the work and determination of final pay quantities, an adjusting work order will be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for FP used in the price adjustment formula will be the average of all FP's previously used for computing price adjustments.

D. The Department reserves the right to inspect the records of the prime contractor and its subcontractors and material suppliers to ascertain actual pricing and cost information for the diesel fuel used in the performance of applicable items of work.

E. When applicable items of work, as specified herein, are added to the contract as Extra Work in accordance with the provisions of Section 104.2.E, no price adjustment will be made for fluctuations in the cost of diesel fuel consumed in the performance of the extra work, unless otherwise approved by the Engineer. The current price for diesel fuel is to be used when preparing required backup data for extra work to be performed at a negotiated price. For extra work performed on force account basis,

reimbursement for material and equipment along with specified overhead and profit markups will be considered to include full compensation for the current cost of diesel fuel.

Any Price Increases or Price Rebates that are calculated based on items of work performed by subcontractors will be added to or deducted from payments due to the Contractor in the appropriate pay period. The Contractor shall then accurately record on the appropriate CN-103 form the additions or deductions into adjusted contract value. The Contractor shall make payment to the subcontractor(s) who actually performed the work in accordance with DelCode Title 17, Chapter 8.

4/25/22

Appendix - Item 763626 Diesel Fuel Cost Adjustment

	Item Numbers
Category A: Earthwork Excavation & Embankment, Borrow (total qty must exceed 5000 CY)	202000, 207000, 207001, 209001, 209006
Category B: Subbase and Agg. GABC, PTB, Soil Cement Base (total qty must exceed 500 T)	301001, 301002
Category C: Flexible Bases and Pavements Warm Mix Asphalts (total qty must exceed 500 T)	401005, 401014, 401016, 401029, 401030, 401036, 401037, 401046
Category D: Rigid Bases and Pavements Concrete, P.C.C. Patching (total qty must exceed 5000 CY)	
Category E: Structures Bridges, Large P.C.C. Structures	

806500 – TRAFFIC OFFICERS

Description:

In accordance with Section 806.1.

Materials:

Not applicable.

Construction:

In accordance with Section 806.3.

Method of Measurement:

In accordance with Section 806.4.

Basis of Payment:

A. The Department will pay for traffic officers at the contract unit price per hour. Price and payment constitute full compensation for providing traffic officers, vehicles, and equipment.
B. For bidding purposes, the Department has fixed the unit price at $180.00 per hour. The Department will pay for traffic officers based on a submitted invoice from the police department plus 10 percent.

834501 - PARTIAL REMOVAL OF CONCRETE POLE BASES AND CABINET FOUNDATIONS

DESCRIPTION:

This work consists of the removal of concrete pole bases and concrete cabinet foundations.

MATERIALS:

A. Borrow, Type F Section 1001

CONSTRUCTION METHODS:

A. Remove and dispose of masonry to a depth of 24-inches below final grade in accordance with Section 211.
B. Backfill voids created by removing obstructions in accordance with Section 207.

METHOD OF MEASUREMENT:

A. The Department will measure the quantity of partial removal of concrete pole bases and cabinet foundations in cubic yards of concrete removed.

BASIS OF PAYMENT:

A. The Department will pay for partial removal of concrete pole bases and cabinet foundations at the contract unit price per cubic yard of concrete removed. Price and payment will constitute full compensation for removal of:

    1. PCC masonry;
    2. anchor bolts;
    3. reinforcing bars;
    4. conduits; and
    5. any other hardware within the concrete.

3/17/2023

STATEMENTS

Included on the following pages:

UTILITY STATEMENTS

RIGHT-OF-WAY STATEMENTS

ENVIRONMENTAL STATEMENTS

RAILROAD STATEMENTS

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

SHANTÉ A. HASTINGS
SECRETARY

UTILITY STATEMENT

STIPULATED - November 24, 2025
CLEARED: January 21, 2026
State Contract No.: T202104203
F.A.P. No.: N/A
Project I.D. No.: 20-42325
HEP KC, US 13 & Brenford/Big Oak Road Intersection Improvements
Kent County

The following utility companies may own and/or maintain facilities within the project limits:

Artesian Water Company - Water
Chesapeake Utilities - Gas
Comcast – Communications
Crown Castle - – Communications
Delaware Electric Cooperative - Electric
Kent County - Sewer
Verizon – Communications

The following is a breakdown of the anticipated involvement per utility company, including any adjustments and/or relocations.

Artesian Water Company

Artesian Water Company, Inc. (AWC) owns and maintains the following underground water facilities within the project limits:

US 13 DuPont Blvd.:

1. Artesian maintains a 12" DIP Pipe along the NB shoulder of US13 entering into the project limits at Sta. 98+50 to exist the project limits at Sta. 120+50 including crossing under Big Oak Road.
2. Artesian maintains a fire hydrant and water valve at Sta. 106+33 right.
3. Artesian maintains water services throughout the project limits.

Artesian does not anticipate any relocations or adjustments. The contractor shall coordinate with Artesian for any conflicts that arise during construction.

In the event there is a conflict with a water valve box, DelDOT's contractor shall adjust each box according to the grade/surface change design requirement. Payment for each water valve adjusted shall be paid as per item #710002– ADJUST WATER VALVE BOXES. The States contractor shall contact the water company representative prior to any adjustments to the existing water facilities. **Cost of any coordination with the utility companies shall be incidental to the contract.**

Wherever the proposed construction will cross an existing water facility, the State Contractor shall test hole to verify the horizontal alignment and vertical depth of the existing water facility. The test holes shall be incidental to the work being performed.

Artesian's review is based upon information contained in DelDOT's **Final Plans** for contract **T202104203**, received on **06/24/2025** and all data available as of this date. Changes in the project scope or in the construction phasing outlined in the previously referenced plan submission may alter the utility company's ability to perform the work. Changes in the project scope or construction phasing may also alter the ability for the company to perform the work in the duration outlined above. Changes in the design or construction means and methods after the contract award date shall be coordinated with the utility company by the State's Contractor to ensure any possible impact is reviewed and approved by the utility. The cost of utility coordination is incidental to the contract. See "general notes" below for additional information.

Should the utility apertures be in conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

Should any conflicts be encountered as a result of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

Under no circumstances shall any valve box, manhole, handhole, or other at grade structure be paved over, filled, or knocked out of vertical alignment during construction.

The Artesian utility facilities will remain in place and active during the duration of this contract. No working/existing Artesian facilities can be taken out of service.

Chesapeake Utilities

Chesapeake Utilities maintains underground facilities within the project limits.

US 13 S. DuPont Blvd.:

1. Chesapeake maintains a 6-inch Coated Steel main along the west side of SB US 13 for the extent of the project.
2. Chesapeake maintains a 2-inch Plastic gas main connected to the 6-inch Coated Steel gas main beginning at Sta. 207+45 L20' then crossing the SB US 13 travel lane to a bend in the median at Sta. 207+45 R28'.
3. The 2-inch plastic gas main travels north within the US 13 median from the bend at Sta. 207+45 R28' to a bend at Sta. 207+70 R38'.

4. The 2-inch plastic gas main crossing NB US 13 from the bend at Sta. 107+69 L31' (SB 207+70 R38') to a bend at Sta. 107+75 R26' (Big Oak Sta. 521+48 R45').
5. The 2-inch plastic gas main along the radius of the sidewalk along NB US 13 from the bend at Sta. 107+75 R26' (Big Oak Sta. 521+48 R45') to a 90 degree bend at Sta. 108+10 R83' (Big Oak Rd Sta. 522+12 R20') including crossing Big Oak Road to the north side at a bend at Sta. 522+12 L20' (NB US 13 Sta. 108+50 R76').
6. The 2-inch plastic gas main travels along the north side of Big Oak Road from the bend at Sta. 522+12 L20' (NB US 13 Sta. 108+50 R76') to end at Sta. 522+53 L21'.

Huntfield Dr.:

1. Chesapeake maintains underground 2" Plastic gas main on the west side of Huntfield Drive from connection to the 6" Steel main at Sta. 213+74 (US 13) left of the construction alignment and travels west to extent out of the project.

Brenford Road:

1. Chesapeake maintains a 6-inch PE gas main enters into the project limits at Sta. 499+00 right of the construction alignment along the south side of Brenford Road to end at Sta. 510+18 R27' at the gas marker post.

Bluegrass Blvd.:

1. Chesapeake maintains a 4-inch PE main connected to the 6-inch gas main on Brenford Road at Sta. 501+51 R35' which crosses Brenford Road to Bluegrass Blvd. then continues along the west side of Bluegrass Blvd. to exit the project limits.

Crabapple Drive:

1. Chesapeake maintains a 2-inch HDPE gas main on the east side of Crabapple Drive from its connection with the 6-inch gas main on Brenford Road at Sta. 502+28 R28' and travels south to extent out of the project limits.

Existing Gas Services:

1. Chesapeake maintains the following existing gas services:
    a. Sta. 522+12 R20' (Big Oak Rd.)
    b. Sta. 522+23 L21' (Big Oak Rd.)
    c. Sta. 522+53 L21' (Big Oak Rd.)
    d. Sta. 208+92 L20' (SB US 13)
    e. Sta. 209+07 L21' (SB US 13)
    f. Sta. 210+10 L19' (SB US 13)

Anticipated Chesapeake Gas Relocation:

US 13 DuPont Blvd:

1. Chesapeake will install a 2" HDPE gas main including a gas valve to the existing 6" gas main located along the west side the SB US 13 lane at Sta. 208+85 L20'.
2. Chesapeake will install a 2" HDPE gas main across US 13 from Sta. 208+85 L20' to the east side of NB US 13 to Sta. 108+85 R78' (SB 208+85 R145') in the grass area. At Sta. 108+85 R78' the gas main will end and be capped.

3. Chesapeake will cut and cap the existing 2" gas main at the 6-inch Coated Steel gas main at Sta. 207+45 L20'. The 2" gas main from Sta. 207+45 L20' to Sta. 108+10 R86' (Big Oak Sta. 522+14 R21') will be retired in place.

Brenford Road:

1. Chesapeake will install a 6" HDPE gas main along the south side of Brenford Road from Sta. 505+50, R26' to 510+17, R25' of the construction alignment. At Sta. 510+17 R25', the gas main will end and the 6" gas main will be capped. The existing gas main will be retired in place.

Big Oak Road:

1. Chesapeake will install a 2" HDPE gas main from the proposed 2" HDPE on the north side of Big Oak Rd at Sta. 522+12 L58' and cross Big Oak Rd to end at Sta. 522+11 R20'.

Gas Services to be retired in placed:

1. Sta. 208+92 L20' (SB US 13) - Chesapeake to confirm this service was retired previously and disconnected at the 6" gas main.
2. Sta. 522+12: 2" service to be retire service crossing Big Oak Rd.

Anticipated Gas Valve Box Adjustments to be performed by the State's Contractor at the following locations:

1. Sta. 202+92, L18'
2. Sta. 501+55, L57': Adjust gas valve

There are two (2) gas valve boxes that will need to be vertically adjusted to match the surface elevation and slope to accommodate the proposed construction. This work is identified in the contract documents with all necessary work to be performed by the State's Contractor as directed by State Engineer. In the event there are additional conflicts with existing gas valve boxes not listed above, State's contractor shall adjust each box according to the grade/surface change design requirements. Payment for each gas valve adjusted shall be paid as per item #710503 – *ADJUST GAS VALVE BOXES.* The State's contractor shall contact the *Gas Company* representative prior to any adjustment to existing gas utilities.

All work shall be done in accordance with the details and specifications of Chesapeake and as shown in the contract documents. The State's Contractor shall contact Chesapeake at **1-800-427-2883**, five (5) calendar days prior to any relocation work beginning. The State's Contractor shall determine the number of days required to perform the work and show the dates and duration for said work in the contract schedule. The work is not considered complete until accepted by Chesapeake.

Chesapeake Utilities Gas will require **twenty-eight (28) calendar days** to complete the proposed gas utility work following **ninety (90) calendar days'** notice and as shown in the bar chart of completion of clearing and grubbing, cuts and fills made, staking of rights-of-way and back of curbs, completion of the Utility Pre-Construction Meeting for this contract scheduled by DelDOT Central District Construction Department, the procurement of any easements by DelDOT. It is anticipated that this work will be completed during the construction phase of this contract. It is anticipated that these relocations/adjustments will be completed by Chesapeake's contractor concurrent to the roadway construction contract.

Chesapeake's review is based upon information contained in DelDOT's Final Plans for contract T202104203 received on **06/24/2025**, and all data available as of this date. Changes in the project scope or in the construction phasing outlined in the previously referenced plan submission may alter the utility company's ability to perform the work. Changes in the project scope or construction phasing may also alter the ability for the company to perform the work in the duration outlined above. Changes in the design or construction means and methods after the contract award date shall be coordinated with the utility company by the State's Contractor to ensure any possible impact is reviewed and approved by the utility. The cost of utility coordination is incidental to the contract. See "general notes" below for additional information.

Should the utility apertures be in conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

Should any conflicts be encountered as a result of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

Under no circumstances shall any valve box, manhole, handhole, or other at grade structure be paved over, filled, or knocked out of vertical alignment during construction.

The Chesapeake utility facilities will remain in place and active during the duration of this contract. No working/existing Chesapeake facilities can be taken out of service.

Caution: When saw-cutting in close proximity to gas facilities, the contractor is recommended to verify the depth of the gas mains and services before saw cutting and/or excavation to ensure shallow pipe is not encountered. The State's Contractor shall exercise caution when excavating along the curb lines at these locations.

Chesapeake Utilities Standard Notes:
The contractor shall be aware that Chesapeake Utilities has requirements while working near Chesapeake Utilities pipelines. These requirements are general in nature and not specific. These requirements are not intended to be all-inclusive. Actual field conditions may change the requirements. Contractor should contact Chesapeake Utilities and consult with their engineer prior to initiating construction and abide by all Federal, State, and Local rules and regulations.

Please coordinate construction activity with your assigned line locator according to the general guidelines below. Your line locator can help determine if additional contacts are required with Chesapeake Utilities Engineering Department before start of excavation activity.

1. It shall be the contractor's responsibility to use the Miss Utility One Call System.
2. It shall be the contractor's responsibility to contact and coordinate with Chesapeake Utilities before starting any construction above or near the pipeline. Chesapeake Utilities may elect to have standby personnel on the job site during construction activity.
3. It shall be the contractor's responsibility to contact and coordinate with Chesapeake Utilities before moving heavy equipment above or near the pipeline. Chesapeake Utilities may require

extra cover, berm or ramp, timber mats, etc. These measures are to be determined by Chesapeake Utilities depending on field conditions.

4. If the pipeline is exposed and suspended, it shall be the responsibility of the contractor to coordinate with Chesapeake Utilities the appropriate supporting measures. These measures are to be determined by Chesapeake Utilities depending on field conditions.
5. If the pipeline is exposed, it shall be the responsibility of the contractor to protect the pipeline from construction activity and the traveling public.
6. A minimum clearance of 12" shall be maintained between Chesapeake Utilities' pipeline and other underground utilities and structures. If this cannot be maintained, Chesapeake Utilities shall determine an appropriate means of protection to the pipeline.

IN EVENT OF PIPELINE EMERGENCY, CALL TOLL FREE 1-800-427-2883.

Comcast - Cable

Comcast Cable maintains the following aerial facilities within the project limits:

US 13 S. DuPont Blvd.:

1. Comcast maintains aerial overhead coax and fiber that crosses US 13 at station 207+75 between DEC pole 73095 and DEC pole 73151.
2. Comcast maintains overhead coax and fiber line along northbound US13 throughout the limits of the project.

Big Oak Road:

1. Comcast maintains aerial OH services along the south side of Big Oak Road between DEC pole 73151 at station 521+ 63, R24' (NB108+01, R36') to Dec pole 73452 at station 522+57, R21'.
2. The comcast service line crosses Big Oak Road between DEC pole 73452 at station 522+57, R21' and DEC pole 73453 at station 522+64, L20'.

Comcast Cable maintains the following underground (U.G.) facilities within the project limits:

Brenford Road:

1. Comcast maintains underground facilities along the north side of Brenford Road from Bluegrass Boulevard station 501+50 left of the construction alignment to station 504+60 left then crosses to the south side (right of the construction alignment) at station 504+60.
2. Comcast maintains underground facilities along the south side (right of the construction alignment) of Brenford Road.
    a. Coax cable extending beyond station 500+00 and ending at DEC pole 73095 (Station 520+00 R18').
    b. Fiber cable beginning at 502+45 and ending at DEC pole 73095 (Station 520+00 R18').
    c. Existing Abandoned (retired) cable running along the south side of Brenford Rd. from Sta. 507+70, RT to DEC Pole #73095 at station 520+00 R18'.
    d. Coax cable enters into the project limits at station 518+72 north side (left) to cross to the south side (right) to station 518+72 R20' then continues to DEC pole 73095 station 520+00 R18'.
3. Comcast maintains crossings along Brenford Road at the following stations:
    a. 502+45 to the east side of Bluegrass Blvd. and continues out of project limits.

b. 504+56
c. 509+10 extending to an existing pole between properties 207 and 208
d. 518+71.91 extending along the existing right-of-way between parcel 218 and 219.

Comcast anticipates the following aerial relocations:

US 13 S. DuPont Blvd.:

1. Aerial overhead coax and fiber to be removed that cross US 13 from Station 207+75 L59' (Brenford Rd. 520+00 R18') DEC pole 73095 to DEC pole 73151 station 107+96 R37' which ends at DEC pole 73452 station 522+57 R23'on Big Oak Road. These facilities will be relocated underground.
2. Aerial Comcast Coax and Fiber along northbound US13 between poles DEC 73447 station 105+42 R33' and DEC 73152 station 110+40 R34', Comcast lines will be transferred to relocated DEC poles.

Big Oak Road:

1. Comcast to install a new aerial Comcast coax service from the new DEC pole station 521+80, R70' (NB107+92, R34') to the new DEC pole at station 522+81 L57' including tying into the underground coax service at station 522+92, L57'.

Comcast anticipates the following underground relocations:

Brenford Road:

1. Coax cable from the existing pedestal at station 504+56 R35'extending from Station 504+56 and ending at DEC pole 73095 (Station 520+00) line to be retired in place.
2. Comcast to install new coax cable along the south side of Brenford Rd. from the existing pedestal at station 504+56 R35' to a new handhole at station 519+82 R83' (SB 207+06 L67').
3. Fiber cable beginning at the existing handhole on the south side from station 504+56 R35' and ending at DEC pole 73095 (Station 520+00) line to be retired in place and relocated
4. Comcast to install new Proposed Comcast underground fiber line along back of right-of-way from the existing handhole on the south side from station 504+56 to a new handhole at station 519+82 R83' (SB 207+06 L67').
5. Coax cable crossing at station 509+10 new proposed Coax Cable will be installed from proposed pedestal 509+10 will splice into existing cable on the northside of Brenford Road.
6. Coax cable crossing at station 518+72 new proposed Coax Cable will be installed from proposed pedestal 518+71 R70' R67'will splice into existing cable on the northside of Brenford Road.

US 13:

1. Comcast to install a new handhole and pedestal on US 13 NB at station 105+43 R32'.
2. Comcast to install coax and fiber across US 13 from NB to new handhole and pedestal on the SB lane at station 205+43 L32' including tying into the aerial facilities at the existing DEC pole # 73447 at station 105+42 R33'.
3. Comcast to install coax and fiber near the ROW line along SB US 13 station 205+43 L32' to new handhole at station 207+06 L67' (519+82 R83').
4. Comcast to install a new node at station 206+L61'.

5. Additional coordination and scheduling will be necessary between DelDOT, DEC and Comcast for the installation of the Proposed Meter at Sta. 207+06, 60' LT.

Comcast will complete these changes. These relocations/adjustments are expected to take approximately One Hundred and twenty (120) calendar days to complete after the company has been given a minimum of Forty-Five (45) calendar days advance notice that work shall begin and the right-of-way, and proposed work has been laid out in the field by the State's contractor, including cuts/fills, required tree trimming and clearing have been performed. In addition, DEC and Verizon have performed the necessary work for Comcast to relocate including but not limited to relocating their aerial facilities. The contractor must use care when working in these underground areas as well as overhead conductor crossings.

Comcast's review is based upon information contained in DelDOT's **Final** Plans for contract **T202104203**, received on **06/24/2025** and all data available as of this date. Changes in the project scope or in the construction phasing outlined in the previously referenced plan submission may alter the utility company's ability to perform the work. Changes in the project scope or construction phasing may also alter the ability for the company to perform the work in the duration outlined above. Changes in the design or construction means and methods after the contract award date shall be coordinated with the utility company by the State's Contractor to ensure any possible impact is reviewed and approved by the utility. The cost of utility coordination is incidental to the contract. See "general notes" below for additional information.

DelDOT has not planned for or coordinated with Comcast for any relocations or physical pole support for excavation nor arranged for the installation of insulation of any communication line during this contract other than as outlined in the above description. All costs associated with any temporary relocations, physical pole support for excavation or the installation of insulation of any communication line during this contract shall be incidental, including the cost of the coordination, to the work being performed.

Should the utility apertures conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

Should any conflicts be encountered because of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

The contractor must use care when working in these underground areas as well as in the vicinity of overhead cable. The time to complete any relocations/adjustments found to be necessary, as directed by the engineer, during the construction of the highway contract will depend on the nature of the work.

No working/existing Comcast facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.

Crown Castle – Cable

Crown Castle maintains the following aerial facilities within the project limits.

US 13 S. DuPont Blvd.:

1. Crown Castle maintains aerial fiber facilities along the south side of SB US 13on the existing pole line throughout the limits of the project.

Crown Castle anticipates the following aerial relocations:

US 13 S. DuPont Blvd.:

1. Crown will be working outside approximately 500' past the project limits north and south in order to extract slack in the fiber coils to relocate their existing facilities. This will eliminate the need for splicing into their facilities.
2. Crown Castle will relocate their aerial fiber onto the new poles beginning at existing pole at Sta. 204+95, L 34' to new DEC Pole at Sta. 206+25, L35'.
3. Crown Castle will relocate their aerial fiber onto the new DEC Pole at Sta. 206+25, L35' to new DEC pole at Sta. 206+80, L 36'.
4. Crown Castle will relocate their aerial fiber onto the new DEC Pole at Sta. 206+80, L 36' to new Vz pole at Sta. 208+53, L33'.
5. Crown Castle will relocate their aerial fiber onto the new DEC Pole at Sta. 208+53, L33' to connect to the existing aerial fiber located on existing Vz pole #84 at Sta. 209+93, L33'.

Crown Castle will complete these changes. These relocations/adjustments are expected to take approximately thirty (30) calendar days to complete after the company has been given a minimum of thirty (30) calendar **days'** notice and as shown in the bar chart that work shall begin and the right-of-way, DEC has relocated their aerial and topped the poles, and proposed work has been laid out in the field by the State's contractor, including cuts/fills, and required tree trimming and clearing has been performed.

Crown Castle's review is based upon information contained in DelDOT's **Final** Plans for contract **T202104203**, received on **06/24/2025** and all data available as of this date. Changes in the project scope or in the construction phasing outlined in the previously referenced plan submission may alter the utility company's ability to perform the work. Changes in the project scope or construction phasing may also alter the ability for the company to perform the work in the duration outlined above. Changes in the design or construction means and methods after the contract award date shall be coordinated with the utility company by the State's Contractor to ensure any possible impact is reviewed and approved by the utility. The cost of utility coordination is incidental to the contract. See "general notes" below for additional information.

DelDOT has not planned for or coordinated with Crown Castle for any relocations or physical pole support for excavation nor arranged for the installation of insulation of any communication line during this contract other than as outlined in the above description. All costs associated with any temporary relocations, physical pole support for excavation or the installation of insulation of any communication line during this contract shall be incidental, including the cost of the coordination, to the work being performed.

Should the utility apertures conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

Should any conflicts be encountered because of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

The contractor must use care when working in these underground areas as well as in the vicinity of overhead cable. The time to complete any relocations/adjustments found to be necessary, as directed by the engineer, during the construction of the highway contract will depend on the nature of the work.

No working/existing Crown Castle facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.

Delaware Electric Co-Op (DEC)

Delaware Electric Coop. owns and maintains aerial and underground facilities throughout the project limits.

Delaware Electric Coop. maintains the following aerial facilities:

US 13 S. DuPont Blvd.:

1. DEC owns and maintains aerial facilities along the east side of NB US13 entering into the project limits to DEC pole #73449 at Sta. 102+54, R34' and continues north past the project limits of Sta. 112+00 R.
2. DEC maintains an aerial crossing on NB US 13 from DEC pole #73449 at Sta. 102+54, R34' to SB US 13 DEC pole #203+32 L33' with guywires.
3. DEC maintains aerial facilities along the west side of SB US 13 beginning at Vz pole #82 at Sta. 212+62 L33' with guywire to continue north past the project limits.

Brenford Road:

1. DEC maintains aerial facilities along the north side of Brenford Road entering into the project limits to pole at Sta. 499+63 L51'.
2. DEC maintains aerial facilities along the north side of Brenford Road from Sta. 499+63 L51' to Vz pole #6 at Sta. 507+63, L54' with guywires.
3. DEC maintains aerial facilities along the north side of Brenford Road from Sta. Vz pole #6 at Sta. 507+63, L54' to pole at Sta. 507+91 L 81' with guywires to continue north out of the project limits.
4. DEC maintains aerial facilities along the south side of Brenford Road beginning at DEC pole #149150 at Sta. 508+78, R21' with guywires to DEC pole #73151 at station 521+ 63, R24' (NB Sta.108+01, R36') including crossing US 13 to the south side of Big Oak Road.
5. DEC maintains aerial facilities across Brenford Road from DEC pole #73092 at Sta. 512+43, R8' with guywires to DEC pole #73093 at Sta. 513+28, R50' continues north to exist the ROW.

Big Oak Road:

1. DEC maintains aerial facilities along the south side of Big Oak Road from DEC pole #73151 at station 521+ 63, R24' (NB Sta.108+01, R36') to continue east past the project limits.

Delaware Electric Coop. maintains the following underground (u.g.) facilities:

Brenford Road:

1. DEC maintains u.g. facilities entering into the project limits at Sta. 500+00 along the south side of Brenford to the DEC pole #149150 at Sta. 508+78, R21' then goes aerial.
2. DEC maintains the following electric cabinet at the southwest corner of Brenford Road and Crabapple DR.
    a. Sta. 502+26, R51'
    b. Sta. 502+40, R48'
3. DEC maintains u.g. facilities along the north side of Brenford Rd. from Vz pole #10 at Sta. 501+20, L54' to Sta. 501+58, L91 continue north along the west side of Bluegrass Blvd. to exit the project limits.
4. DEC maintains u.g. facilities entering into the project on the north side of Brenford Rd. at Sta. 518+84, L 42' to cross Brenford Rd to Sta. 518+29, R3`.
5. DEC maintains u.g. facilities along the south side of Brenford Rd from Sta. 518+29, R3` to DEC pole #520+00, R18' (US 13 SB 207+75 L59').

Big Oak Road:

1. DEC maintains u.g. facilities along the north side of Big Oak Rd. from Vz pole #DST2-1/DEC #11807 at Sta. 525+41, R14' to Sta. 525+86 R25' to exit north onto private property.

Electric Services:

1. DEC maintain electric services throughout the project limits.

Anticipated Delaware Electric Coop. Aerial Relocations and Removals:

New Poles to be installed at the following locations:

1. Sta. 106+30, R34' with guywires (US 13)
2. Sta. 206+25, L34' with guywires (US 13)
3. Sta. 206+80, L35' (US 13)
4. Sta. 107+66, R34' – in line with the existing aerial facilities. (US 13)
5. Sta. 108+92, R34' with guywire (US 13)
6. 108+93, R61' (US 13)
7. Sta. 508+77, R21' with guywires (Brenford)
8. Sta. 511+36, R57' (Brenford)
9. Sta. 513+77', R54' with guywires (Brenford)
10. Sta. 516+29, R53' (Brenford)
11. Sta. 518+69, R64' (Brenford)
12. Sta. 519+79, R72' with a guywire (Brenford)
13. Sta. 522+58, R30' (Big Oak)
14. Sta. 522+82, L57' with guywire (Big Oak)
15. Sta. 524+07, L41' with guywire (Big Oak)

16. Sta. 525+67', L35' with guywires (Big Oak)
17. Sta. 525+86, R28' with guywires (Big Oak)
18. Sta. 528+12, R27' with guywires (Big Oak)

US 13 S. DuPont Blvd.:

1. DEC to install new aerial facilities across US 13 beginning from Sta. 106+30, R34' to a new pole at Sta. 206+25, L34'.
2. DEC to install new aerial facilities along the west side of US 13 from Sta. 206+25, L34' to the new pole at Sta.207+13, L69' (Brenford RD 519+79, R72').
3. Existing aerial facilities will be removed crossing of Brenford Road from DEC pole 73095 at Sta. 520+00 to pole DEC pole #73151 at Sta. 521+ 63, R24' (NB Sta.108+01, R36').

Brenford Road:

1. DEC to install new aerial lines along Brenford Road beginning at Sta. 508+77, R21' to Sta. 519+79, R72'. Aerial lines will be relocated to the back of the right-of-way.
2. DEC will install an aerial facility across Brenford Road from DEC pole #73093 Sta. 513+28, R50' to the new DEC pole at Sta. 513+77' and remove the existing aerial crossing.
3. DEC will remove the existing aerial facilities and poles along Brenford Rd.

Big Oak Road:

1. DEC to install aerial facilities on the new poles on the north side of Big Oak Rd beginning at Sta. 521+80, L70' (Sta. 108+92, R34') to Sta. 525+67', L35'.
2. DEC to install an aerial line across Big Oak Rd from Sta. 522+82, L57' to Sta. 522+58, R30'.
3. DEC to install aerial facilities across Big Oak Rd from new pole at Sta. 525+67', L35' to new pole at Sta. 528+12, R28'.
4. DEC to install aerial facilities along Big Oak Rd from new pole at Sta. 528+12, R28' to connect to the existing aerial facilities on the existing pole #73456 at Sta. 528+26, R17' including install guywires to the pole #73456.

Anticipated Delaware Electric Coop. underground (u.g.) Relocations:

Brenford Road:

1. DEC to install new u.g. lines on the south side of Brenford Rd. from DEC cabinet #132406 station 502+30, R52' to the new DEC pole at Sta. 508+77, R21' to tie into new pole location.
2. DEC to install u.g. facilities from the north side of Brenford Rd. at Sta. 518+84, L 42' to cross Brenford Rd to the new pole at Sta. Sta. 518+69, R64'.

Big Oak Road:

1. All electrical equipment that is no longer needed will be removed as directed by DEC.

DEC will complete this work. These relocations/adjustments are expected to take approximately **sixty (60)** calendar days to complete after the company has been given a **minimum of forty-five (45) calendar days'** notice and as shown in the bar chart that work shall begin, and the right-of-way and proposed work has been laid out in the field by the State's contractor, including cuts/fills, and required tree trimming and clearing has been performed. The contractor must use care when working in these underground areas as well as overhead conductor crossings.

DEC's review is based upon information contained in DelDOT's **Final** Plans for contract **T202104203**, received on **06/24/2025** and all data available as of this date. Changes in the project scope or in the construction phasing outlined in the previously referenced plan submission may alter the utility company's ability to perform the work. Changes in the project scope or construction phasing may also alter the ability for the company to perform the work in the duration outlined above. Changes in the design or construction means and methods after the contract award date shall be coordinated with the utility company by the State's Contractor to ensure any possible impact is reviewed and approved by the utility. The cost of utility coordination is incidental to the contract. See "general notes" below for additional information.

DelDOT has not planned for or coordinated with DEC for any temporary power outages, relocations, physical pole support for excavation nor arranged for the installation of insulation of any power line during this contract other than as outlined in the above description. Due to varying construction possibilities; if a contractors means-and-methods should require support from DEC to fulfill the requirement of 16 Del. C. § 7405B, OSHA Regulations Table A of § 1926.1408, other applicable federal, state or local law or regulation or the Contractor's company policy; it shall be at the Contractor's sole expense and the contractor shall directly coordinate this request with Delaware Electric Coop. All costs associated with any temporary power outages, relocations, physical pole support for excavation or the installation of insulation of any power line during this contract shall be incidental, including the cost of the coordination, to the work being performed. The Department makes no guarantees that the request for any temporary power outages, relocation or the installation of insulation of any power line during this contract will be granted by DEC in part or in total; or during the time periods requested by the Contractor for construction purposes. Any proposed coordination with DEC shall be included in the contractor's CPM schedule. In addition, Delaware Electric Coop. will determine if these outages can be accommodated.

Should the utility apertures be in conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

Should any conflicts be encountered as a result of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

> **16 Del. C. § 7405B** ***requires notification to and mutually agreeable measures from the public utility from any person intending to carry on any function, activity, work or operation within dangerous proximity of any high voltage overhead lines. All contractors/other utilities must also maintain a distance of 10'-0" from all overhead energized lines.***

To report a downed wire, call 1-855-332-9090. For locations of electric facilities, please contact Miss Utility at (800) 282-8555.

No working/existing Delaware Electric Coop.'s facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.

General

DEC relocations shown on highway plans are an approximate proposed location. Actual location of electric facilities could change due to field conditions or any unforeseen conflict.

Kent County – Sewer

Kent County owns and maintains the following sewer facilities within the project limits.

US 13 S. DuPont Blvd.:

1. Kent County maintains a (16in.) Transite sewer force-main on the east side of the median of US 13 entering into the project limits at Sta. 103+00 then continues to beyond the project limits.
2. Kent County maintains a 24" DIP force main on the west side of the median of US 13 entering into the project limits at Sta. 103+00 then continues to beyond the project limits.
3. Kent County maintains sewer ARV manholes & GV's/boxes on both sewer mains throughout the project limits.

Big Oak Road:

1. Kent County maintains a 6" PVC FM connected to the 24" DIP via 6in. GV on US 13 at Sta. 208+68, R33' (Big Oak Sta. 521+07, L59') then crosses NB US 13 to a bend at Sta. 521+74, L51' (US 13 SB 208+75, R101')
2. Kent County maintains a 6" FM along north side of north side of Big Oak Road from bend at Sta. 521+74, L51' to a bend at Sta. 522+11, R16'.
3. Kent County maintains a 6" FM along north side of Big Oak Road from bend at Sta. 522+11, R16' to a bend at Sta. 522+69, R15'.
4. Kent County maintains a 6" FM along north side of Big Oak Road from bend at Sta. 522+69, R15' to a bend at Sta. 522+87, R24'.
5. Kent County maintains a 6" FM along the north side of Big Oak Road from bend at Sta. 522+87, R24' to continue east past the project limits.
6. Kent County maintains a 6" sewer force-main connected to the 16" Transite sewer main within US 13's median at Sta. 208+77, R37'. From the 6" valve, the 6" pipes connect to a 90 degree bend at Sta. 208+77, R46' then connects to the 6" FM at Sta. 208+70, R45'.
7. Kent County maintains an 8" PVC gravity sewer main along the north side of Big Oak Road beginning at MH-S4 at Sta. 523+39, L29' to continue east past the project limits.
8. Kent County maintains an 8" PVC gravity sewer main crossing Big Oak Rd. from MH-S3 at Sta. 526+37, L31' to exit the project limits at Sta. 526+33, R40'.

Anticipated Sanitary Sewer Relocation:

The State's contractor to perform the following construction in accordance with the plans and Kent County specifications.

Big Oak Road:

1. The State's contractor to replace the following sewer gravity mains:
    a. The State's contractor is to install an 8"PVC sewer main from Sta. 523+18, R21' to Sta. 526+34, R23'.
    b. The State's contractor is to install a new manhole (drop) at Sta. 526+34, R23'.
    c. The State's contractor is to install an 8" PVC stub from the proposed manhole at Sta. 526+34, R23' to the proposed end cap at Sta. 526+41, R23'.

   d. The State's contractor is to replace the existing clean-out, with a MH and connect the new 8" PVC to the existing service at Sta. 523+18, R21'.
   e. The State's contractor is to install a 6" sewer service and cleanout with a cast iron cover at Sta. 523+66, L56' of. the construction alignment.
   f. The State's contractor is to install a 6" sewer main from Sta. 523+66, L56 to connect to the existing 8" PVC sewer main with an 8" terminal cleanout with a cast iron cover at Sta. 523+95, L30'.
   g. The State's contractor is to remove MH-S4 at Sta. 523+40, L29' and retire the existing 8" PVC in place.
2. The State's contractor to install a new 6in. sewer lateral & CO from the 8" PVC sewer main at Sta. 524+94, L47' (to serve Parcel 25.00).
3. The State's contractor to adjust the following manholes:
   a. Sta. 204+86, R30'H (ARV/MH)
   b. Sta 204+93, R40' (ARV/MH)
   c. Sta. 526+37, L31' (MH S3)
   d. Sta. 528+64, L31' (MH not ID'ed)
4. The State's contractor to adjust the following Sewer Valve (SV) Boxes:
   a. Sta. 208+68, R33'
   b. Sta. 208+77, R37'
5. The State's contractor to disconnect and remove the existing sewer lateral at the sewer main and retire the services at the following locations:
   a. Sta. 522+40, L39'
   b. Sta. 523+20, L32'

The State's Contractor will complete all Kent County sanitary adjustments as needed during the construction phase.

Kent County's review is based upon information contained in DelDOT's Revised Final Plans for contract **T202104203**, received on **06/24/2025**, and all data available as of this date. Changes in the project scope or in the project's current construction phasing may revise the number of working days required.

All adjustments to Kent County's existing facilities will be done by the State's Contractor in accordance with the Standard Details and Standard Specifications of Kent County and as shown in the contract documents. The Contractor shall contact Kent Dept. Special Services at (302) 744-2430, five (5) calendar days prior to any relocation work beginning. The Contractor shall determine the number of days required and show that in the contract schedule. The work is not considered complete until accepted by Kent County.

Should any conflicts be encountered as a result of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility companies and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

No existing Kent County facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.

Verizon

Verizon of Delaware Inc. maintains the following aerial facilities within the project limits:

1. Verizon maintains aerial facilities along the North side of Brenford Road from Pole # 89849 at station 520+20 L32 extending West beyond the project limits. (CP-04, CP-03, CP-02, CP-01)
2. Verizon maintains aerial facilities crossing S Dupont Blvd. from Pole# 89849 at station 520+20 L32 extending Northeast along the Northwest side of Big Oak Road to Pole# 3 at station 526+68 L17. (CP-04, CP-05)
3. Verizon maintains aerial facilities crossing Big Oak Rd. from Pole# DST2-1\11807 at station 525+40 L15 extending Southeast to Pole# DEC 73455 at station 525+40 R15 continuing Northeast along the Southeast side of Big Oak Road and beyond the project limits. (CP-05)
4. Verizon maintains aerial facilities crossing Big Oak Rd. from Pole# HB85A 1 at station 521+92 L20 extending East to Pole# 73452 at station 522+55 R23 continuing Southeast to Pole# Unknown located in customer yard. CP-04)
5. Verizon maintains aerial facilities along the West side of S Dupont Blvd. from Pole# HB85 at station 208+40 L33 extending North and South and beyond the project limits. (CP-04, CP-08, CP-09, CP-07, CP-06)
6. Verizon maintains aerial facilities crossing S Dupont Blvd from Pole# Unknown at station 203+35 L34 extending East to Pole# 73448 at station 103+40 R32. (CP-07)

Verizon of Delaware Inc. maintains the following buried/underground facilities within the project limits:

1. Verizon maintains underground facilities along the North side of Brenford Rd. from Pole# 10 at station 501+25 L55 extending Southwest along Bluegrass Blvd. and beyond project limits. (CP-01)
2. Verizon maintains underground facilities along the North side of Brenford Rd. from a VZ Pad Mounted Fiber Hub at station 503+00 L60 extending West along Brenford Road then turning North along Bluegrass Blvd. and beyond project limits. (CP-01)
3. Verizon maintains underground facilities along the North side of Brenford Rd. from a VZ Pad Mounted Fiber Hub at station 503+00 L60 extending East to a VZ HH\Ped at station 507+95 L40. (CP-01, CP-02)
4. Verizon maintains buried\UG facilities crossing Brenford Rd from a VZ HH\Ped at station 507+95 L40 extending South to a VZ HH and Splice Box at approximate station 507+95 R45 continuing Southwest along the South side of Brenford Road and beyond the project limits. (CP-01, CP-02)
5. Verizon maintains buried\UG facilities along the South side of Brenford Road from a VZ HH at station 502+35 R45 extending South along the East side of Crabapple Dr. and beyond the project limits. (CP-01)
6. Verizon maintains buried\UG facilities along the North side of Brenford Road from VZ\HH Ped at station 507+95 L40 extending East along the North side of Brenford Road to a VZ Pedestal at station 520+25 L38 along the West side of S Dupont Blvd. (CP-02, CP-03, CP-04)
7. Verizon maintains buried\UG facilities along the South side of Branford Road from VZ Splice Box at station 507+95 L40 extending East along the South side of Brenford Road

then crossing Brenford Road to a VZ Pedestal at station 520+25 L38 along the West side of S Dupont Blvd. (CP-02, CP-03, CP-04)

8. Verizon maintains buried\UG facilities along the West side of S Dupont Blvd. from a VZ Pedestal at station 520+30 L35 extending North and South and beyond project limits. (CP-04, CP-08, CP-09, CP-04, CP-07, CP-06)
9. Verizon maintains buried\UG facilities along the West side of S Dupont Blvd. from Pole# 90 at station 198+80 L32 extending East and beyond project limits. (CP-06)
10. Verizon maintains buried\UG facilities along the East side of S Dupont Blvd. from Pole# 73488 at station 103+40 R32 extending East and beyond project limits. (CP07)
11. Verizon maintains buried\UG facilities along the South side center median of S Dupont Blvd. from MH 1B at station 206+55 L28 extending North along S Dupont Blvd. and beyond project limits. (CP-04, CP-08, CP-09)
12. Verizon maintains buried\UG facilities crossing S Dupont Blvd from MH 1B at station 206+55 L28 extending West to a VZ Pedestal at station 206+50 L30. (CP07)
13. Verizon maintains buried\UG facilities on the North side of Big Oak Rd. from MH 190A at station 525+65 L18 extending North to VZ Pad Mounted Electric Cabinet and Pad Mounted Cross Box at stations 525+90 L75. (CP-05)
14. Verizon maintains buried\UG facilities on the North side of Big Oak Rd. from MH 190A at station 525+65 L18 extending Northeast along Big Oak Rd. to a VZ HH at station 526+68 L15. (CP-05)
15. Verizon maintains buried\UG facilities from a VZ FDH at station 526+05 L70 extending East to a VZ HH at station 526+25 L20 continuing West crossing Big Oak Rd. to Pole# 73455 at station 525+40 R15. (CP-05)
16. Verizon maintains buried\UG facilities from VZ Pedestals at station 526+65 L17 along the North side of Big Oak Road extending Northeast and beyond the project limits. (CP-05)
17. Verizon maintains buried\UG facilities crossing Big Oak Road from a VZ HH at station 526+67 L19 extending Southeast and beyond the project limits. (CP-05)
18. Verizon maintains buried service wire crossing Big Oak Road from a VZ Pedestal at station 528+65 L15 extending Southeast to a Residential Home. (CP-05)

Anticipated Aerial Relocations:

1. 1. Verizon will remove aerial facilities from Pole# Unknown at station 516+20 L50 extending Northeast crossing S Dupont Blvd. continuing Northeast along the North side Big Oak Road to Pole# 3 at station 526+68 L15. (UT-03, UT-04, UT-05)
2. Verizon to place new aerial facilities from Pole# Unknown at station 516+20 L50 extending Northeast along Benford Road to new Pole location, Pole# Unknown at station 208+60 L35 S Dupont Blvd. (UT-03, UT-04)
3. Verizon to place new aerial facilities from the new proposed DEC Pole# Line at station 521+60 L58 extending Northeast along the North side of Big Oak Road to Pole# Unknown at station 526+45 L34. (UT-04, UT-05)
4. Verizon to transfer existing aerial facilities along the West side of US13 from existing Pole# 73096 at station 206+60 L33 to proposed Pole at station 206+80 L35.
5. Verizon to attach existing aerial facilities along the West side of US13 to proposed Pole at station 206+25 L35.
6. Verizon to remove aerial facilities crossing Big Oak Road from Pole# HB85A-1 at station 521+90 L15 extending Northeast and beyond the project limits. (UT-05)

7. Verizon will remove aerial facilities crossing Big Oak Road from Pole# DST 11807 at station 525+40 L15 extending South to Pole# DEC 73455 at station 525+40 R18 continuing Northeast to Pole# DEC 73456 at station 528+25 R18. (UT-05)
8. Verizon will remove any existing poles they are attached to after detaching facilities from them.

Anticipated Buried/Underground relocations:

1. 1. Verizon too adjust VZ HH\Ped to grade on the Northeast side of Bluegrass Blvd at station 502+32 L50. (UT-01)
2. 2. Verizon too adjust VZ HH\Ped to grade on the Northeast side of Bluegrass Blvd at station 508+00 L58. (UT-02)
3. Verizon will abandon 3 existing buried cables from VZ Pedestal at station 508+00 L58 extending South to a VZ Splice Box to be removed. (UT-02)
4. Verizon will abandon 1 existing buried cable along the South side of Brenford Road from a VZ Splice Box to be removed at station 508+00 R80 extending East along the South side of Bredford Road to a VZ Ped to be removed along the South side of S Dupont Blvd at station 208+30 R35. (UT-02, UT-03)
5. Verizon will abandon 1 existing buried cable along the North side of Brenford Road from a VZ Ped to be adjusted to grade at station 508+00 R80 extending East to a VZ Ped to be removed along the South side of S Dupont Blvd at station 208+30 R35. (UT-02, UT-03, UT-04)
6. Verizon proposes to directional bore crossing S. Dupont Blvd from Pole# HB 85 at station 208+60 L35 extending Northeast to new proposed DEC Pole# Line at station 521+60 L58 along the North side of Big Oak Rd. (UT-04)
7. Verizon will abandon 1 existing buried cable from a VZ Ped to be removed along the South side of S Dupont Blvd at station 208+30 R35 extending North along S Dupont Blvd and beyond the project limits. (UT-04, UT-07)
8. Verizon to adjust buried cable along S Dupont Blvd at station 107+55 L40 to make room for proposed DI/415.
9. Verizon will abandon 1 existing buried cable from a VZ Ped to be removed along the South side of S Dupont Blvd at station 208+30 R35 extending South to a VZ Ped along the West side of S Dupont Blvd. at station 206+50 L30. (UT-04, UT-06)
10. Verizon to remove existing Pedestals along the North side of Big Oak Road at station 526+65 L10 and abandon existing cables extending East to a VZ Ped at station 527+65 L15 and Northwest to MH 190A at station 525+65 L20 along the North side of Big Oak Road. (UT-05)
11. Verizon too abandon 1 existing buried cable from a Verizon Fiber Hub at station 526+00 L75 extending East to a VZ HH to be removed at station 526+30 L20 extending South to Pole# DEC 73455 at station 525+42 R35. (UT-05)
12. Verizon to place 1 buried cable from a Verizon Fiber Hub at station 526+00 L75 extending East to a proposed VZ HH at station 526+55 L30 continuing Southeast crossing Big Oak Road to a Proposed VZ HH at station 526+78 R30. (UT-05)
13. Verizon to place 1 buried cable from a Proposed VZ HH at station 526+78 R30 extending West to DEC Pole# Unknown at station 525+65 R30 along the South side of Big Oak Road. (UT-05)

14. Verizon to place 1 buried cable from Proposed VZ HH at station 526+78 R30 along the South side of Big Oak Road extending East to DEC Pole#73456 at station 528+26, R17. (UT-05)
15. Verizon to place 1 buried cable from MH 190A at station 525+65 L20 extending East to proposed VZ Ped at station 526+52 L64 along the North side of Big Oak Road continuing East to a proposed VZ Ped at station 526+80 L25 then turning Northeast to an existing VZ Ped at station 527+60 L20. (UT-05)
16. Verizon to place 1 buried cable crossing Big Oak Road from a proposed VZ Ped at station 526+80 L25 extending South to a proposed VZ Ped at station 526+75 R30. (UT-05)

The State's Contractor shall adjust the following Verizon Manhole Covers to match the final grade:

1. Verizon grants permission for the DelDOT contractor to adjust manhole covers as needed at the following locations:
    a. Sta. 106+54, L41'
    b. Sta 106+61, L41'
    c. Sta. 525+64. L18'
    d. Sta. 525+71, L19'
    e. Including any other VZ manhole covers that are not listed above.

The manhole listed above will need to be vertically adjusted to match the surface elevation and slope to accommodate the proposed construction. This work is identified in the contract documents with all necessary work to be performed by the State's Contractor as directed by State Engineer. In the event there are additional conflicts with existing manholes not listed above, State's contractor shall adjust each box according to the grade/surface change design requirements. The State's contractor shall contact the Verizon representative prior to any adjustment to existing communication utilities.

Verizon of Delaware will complete these changes. These relocations/adjustments are expected to take approximately **120 calendar days to complete** after the company has been given a **minimum of 45 calendar days'** notice and as shown in the bar chart that work shall begin and the right-of-way and proposed work has been laid out in the field by the state's contractor and required tree trimming and clearing has been performed. In addition, DEC, Crown Castle, and Comcast have performed the necessary work for Verizon to relocate including but not limited too relocating their aerial facilities. The contractor must use care when working in these underground areas as well as overhead conductor crossings.

Verizon's review is based upon information contained in DelDOT's **Final** Plans for contract **T202104203** received on **06/24/2025** and all data available as of this date. Changes in the project scope or in the construction phasing outlined in the previously referenced plan submission may alter the utility company's ability to perform the work. Changes in the project scope or construction phasing may also alter the ability for the company to perform the work in the duration outlined above. Changes in the design or construction means and methods after the contract award date shall be coordinated with the utility company by the State's Contractor to ensure any possible impact is reviewed and approved by the utility. The cost of utility coordination is incidental to the contract. See "general notes" below for additional information.

DelDOT has not planned for or coordinated with Verizon for any relocations or physical pole support for excavation nor arranged for the installation of insulation of any communication line during this contract other than as outlined in the above description. All costs associated with any temporary relocations, physical pole support for excavation or the installation of insulation of any communication line during this contract shall be incidental, including the cost of the coordination, to the work being performed.

Should the utility apertures be in conflict with the scope of work, the contractor shall coordinate directly with the utility company. Cost of any coordination with the utility companies shall be incidental to the contract.

Should any conflicts be encountered as a result of the contractor's means and methods during construction, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as described by the District Engineer. See General Utility Notes below.

The contractor must use care when working in these underground areas as well as in the vicinity of overhead cable. The time to complete any relocations/adjustments found to be necessary, as directed by the engineer, during the construction of the highway contract will depend on the nature of the work.

No existing Verizon facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.

General Utility Notes:

Outside of the utility companies and facilities discussed above, no additional utility involvement is anticipated. Should any conflicts be encountered as a result of the State Contractor's means and methods during construction requiring adjustment and/or relocation, the necessary relocation work shall be accomplished by the respective utility company and funded by the State's Contractor as directed by the District Engineer. Following contract award date, the State's Contractor shall coordinate any and all potential changes including, but not limited to, identification of potential field conflict; changes in project construction scope; changes in construction phasing; or changes in contractor means and methods of construction with required parties, including the District Engineer and Utility Companies, for approval prior to finalizing and performing work. The State's Contractor shall provide utility companies with adequate notice (not less than 30 calendar days) prior to performing work once approved.

Any utility conflicts that are not readily discernable shall be coordinated by the State Contractor once the conflict is recognized. The time to complete any relocations/adjustments found to be necessary during construction of the highway project will depend on the nature of the work.

Once the State's contractor has given the Utility the advance notice required above, it is the responsibility of the State's contractor to have the work area prepared and accessible for the Utility to perform the tasks listed above. If the site conditions are not ready and the state contractor has given notice to the utility on when the work is to be accomplished, the State's Contractor shall be responsible for any extra cost incurred by the utility company and the State Contractor shall also be responsible for any time delays. Between when the required notice is given to the Utility and when the work is performed and completed, the coordination and scheduling of the Utility is the

sole responsibility of the State's Contractor. All costs related to the coordination and scheduling of the utilities is incidental to the contract.

Any adjustments and/or relocations of municipally or county owned sewer or water facilities shall be performed by the State's Contractor in accordance with the respective agency's standard specifications as directed by the District Engineer. The State contractor shall coordinate any potential conflicts of municipally or county owned sewer or water facilities with facility owners and provide adequate notice to the municipally or county and to the District Engineer prior to performing work.

General Notes:

1. **The Contractor's attention is directed to Section 105.9 of the DelDOT Standard Specifications (see the contract documents for applicable date/version to reference). The Contractor shall contact Delmarva811 (previously known as Miss Utility of Delmarva) at 1-800-282-8555 at least two working days prior to any excavation. The Contractor is responsible for the support and protection of all utilities when excavating. The Contractor is also responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The Contractor is advised to check the site for access purposes for proposed equipment and, if necessary, make arrangements directly with the utility companies for field adjustments for adequate clearances.**

2. **The information shown in the Contract Documents, including the Utility Statement and the Utility Schedule contained herein, concerning the location, type and size of existing and proposed utilities, their locations, and construction timing has been compiled by the preparer based on information furnished by each of the involved Utility Companies. It shall be the responsibility of the State's Contractor to verify all information and coordinate with the Utility Companies prior to and during construction, as specified in Section 105.9 of the Standard Specifications.**

3. **It is understood and agreed that the Contractor has considered in his bid all permanent and temporary utility appurtenances in their present and relocated positions as shown on the plans or described in the Utility Statement or are readily discernible and that no additional compensation will be allowed for any delays, inconvenience, or damage due to any interference from the utility facilities and appurtenances or the operation of moving them, except that the Contractor may be granted an equitable extension of time. The Contractor's means and method of construction are not taken into account when known utility conflicts are identified. If the Contractor's means and method of construction create a utility conflict the Utility Statement will prevail in discussions with the utility and the Contractor.**

4. **The State's Contractor shall be responsible for any costs associated with any temporary outages; holding, bracing and shielding of utility facilities; temporary relocations; or permanent relocations that are not specifically identified in this Utility Statement or shown in the contract plan set.**

5. **The State's Contractor is responsible for rough grading as required by the roadway construction prior to the Utility Company's placing their proposed facilities, unless otherwise indicated on the plans and/or outlined elsewhere in the Contract Documents.**

6. **Coordination and cooperation among the Utility Companies and the State's Contractor are of prime importance. Therefore, the Contractor is directed to contact the following Utility Company representatives with any questions regarding this work prior to submitting bids and work schedules. Proposed work schedules should reflect the Utility Companies' proposed relocations. The Utility Companies and their contractors do not work on nights, weekends, or legal holidays.**

NAME	COMPANY	PHONE	EMAIL
Eric Zambrano	Artesian Water	(302) 453-5804	EZambrano@artesianwater.com
Mike Sullivan	Comcast	(302) 752-6025	Mike_Sullivan2@Comcast.com
Garth Jones, P.E.	Chesapeake Utilities	(302) 213-7455	gjones@chpk.com
Bruce Turner	Crown Castle	(302) 257-9459	Bruce.Turner@crowncastle.com
Ryan Shockley	Delaware Electric Cooperative	(302) 349-0723	rshockley@delaware.coop
Brian Hall	Kent County Dept of Public Works	(302) 744-2430	Brian.Hall@kentcountyde.gov
George Zang	Verizon	(302) 422-1238	George.w.Zang@verizon.com

7. **As outlined in Chapter 4 of the DelDOT Utilities Manual, individual utility companies are responsible for obtaining all required permits from municipal, State and federal government agencies and railroads prior to performing their work. This includes but is not limited to water quality permits/DNREC Water Quality Certification, DNREC Subaqueous Lands/Wetlands permits, DNREC Coastal Zone Consistency Certification, County Floodplain permits (New Castle County only), U.S. Coast Guard permits, US Army Corps 404 permits, sediment and erosion permits, and railroad crossing permits.**

8. **Individual utility companies are required to restore any areas disturbed in conjunction with their relocation work. If an area is disturbed by a utility company and is not properly restored, the Department may have the State's Contractor perform the necessary restoration. Any additional costs incurred as a result will be forwarded to the utility company.**

9. **16 Del. C., Chapter 74B, § 7405B requires notification to and mutually agreeable measures from the public utility operating the electric line for the any person intending to carry on any function, activity, work, or operation within dangerous proximity of any high voltage overhead electric lines. 16 Del. C., Chapter 74B, § 7402B defines "dangerous proximity" as "a distance up to and including 10 feet of high-voltage lines, or within such greater distances as may be set forth in the current editions and any subsequent revisions of the regulations of the United States Occupational Safety and Health Administration (29 C.F.R. § 1902.1 et seq.) and the National Electrical Safety Code." With that, all contractors/other utilities must maintain a minimum distance of 10 feet from all overhead energized lines unless otherwise required in OSHA or the NESC.**

10. **Any existing facilities that are comprised of hazardous materials will be removed by the Utility Company unless otherwise outlined in the contract documents or language above. Any existing facilities containing hazardous materials will be purged by the Utility Company unless otherwise outlined in the contract documents or language above.**

11. **In conjunction with bid preparation and prior to starting work, the State's Contractor shall confirm with all respective Utility Companies noted in this Utility Statement to have advance utility relocations that the advance relocations have in fact been accomplished as summarized herein.**

12. **Contractors are not permitted to draw water from any hydrant for any use, without the written permission of the municipality/water company having jurisdiction and proper metering and backflow prevention equipment in place.**

DIVISION OF TRANSPORTATION SOLUTIONS

PREPARED AND RECOMMENDED BY:

Joseph A Hofstee

February 3, 2026
DATE

AECOM
Joseph Hofstee, PE, Senior Project Manager
Joe.hofstee@aecom.com

APPROVED AS TO FORM BY:

Deborah L. Kukulich

February 3, 2026
DATE

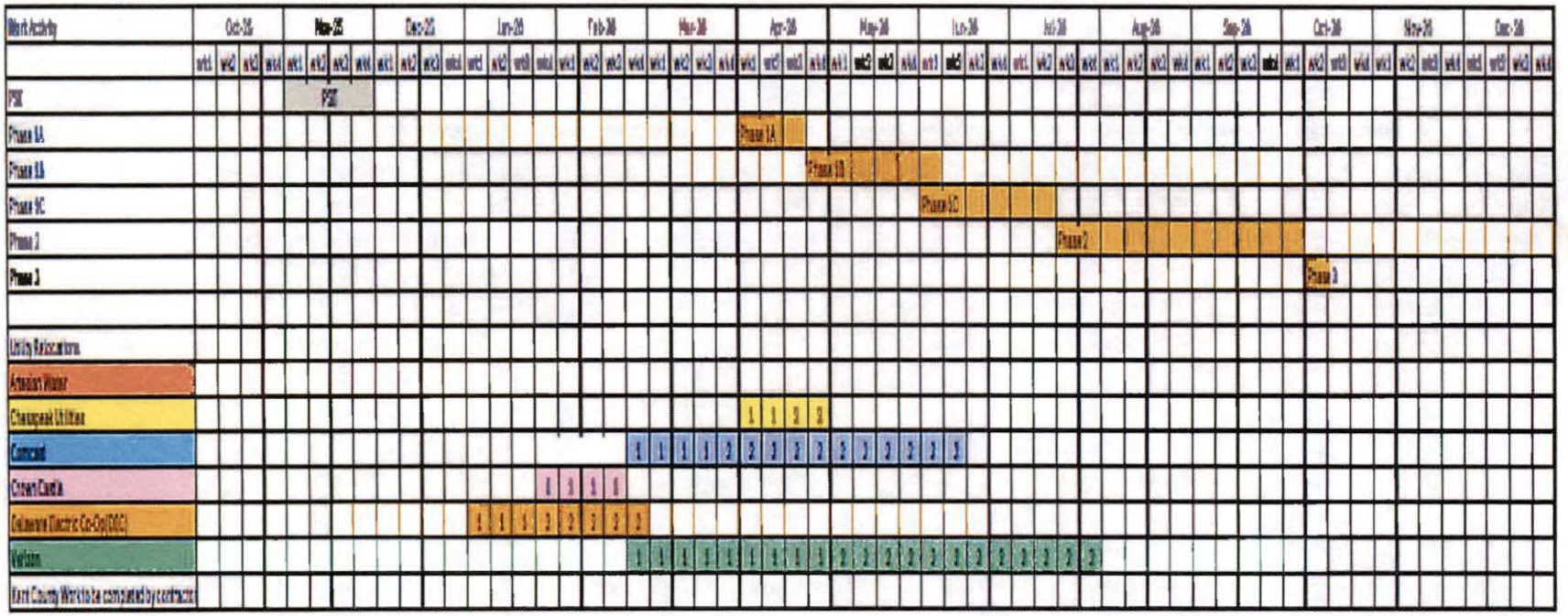
Deborah L. Kukulich
DelDOT Utility Coordination Program Manager II
Deborah.Kukulich@delaware.gov

Utility Bar Chart

State Contract No. T202104203

Project I.D. No.: 57402

MD 8 (C, US 13 & Newtown Big Oak Rd) Intersection Improvements Kent County, Delaware



Timing Requirements

Completion prior to Phase 1B 1 Relocate Gas Valve in curbs relocate, relocate 2" gas main and valve. Retire service in cc

Completion prior to Phase 2 2 Relocate remain at Sta 107+22L - 36L 2"

Completion prior to Phase 1B 1 Aerial Relocation Along northbound US and Big Oak Road

Completion prior to Phase 2 2 Aerial and underground relocations along Deerfield Road

Completion prior to Phase 2 1 Aerial relocations

Completion prior to Phase 1B 1 Aerial Relocation Along northbound US and Big Oak Road

Completion prior to Phase 2 2 Aerial relocations along Deerfield Road

Completion prior to Phase 1B 1 Underground and aerial relocations along Big Oak Road and US 13

Completion prior to Phase 1B 2 Underground and aerial relocations along Deerfield Road

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

SHANTÉ A. HASTINGS
SECRETARY

RIGHT OF WAY CERTIFICATE
STATE PROJECT NO. T202104203
F.A.P. NO. N/A for R/W

HEP KC, US13 & BRENFORD/BIG OAK ROAD,
INTERSECTION IMPROVEMENTS
KENT COUNTY

Certificate of Right-of-Way Status – 100%

Level 1

As required by 23 CFR, Part 635, and other pertinent Federal and State regulations or laws, the following certifications are hereby made in reference to this highway project:

All necessary real property interests have been acquired in accordance with current FHWA/State directives covering the acquisition of real property; and,

All necessary rights-of-way, including control of access rights when pertinent, have been acquired including legal and physical possession; and,

All project rights of way are currently available in accordance with the project right-of-way plans; and,

Any residential displaced individuals or families have been relocated to decent, safe and sanitary housing, or adequate replacement housing has been made available in accordance with the provisions of the current Federal Highway Administration (FHWA) directive(s) covering the administration of the Highway Relocation Assistance Program; and,

All occupants have vacated the lands and improvements; and,

The State has physical possession and the right to remove, salvage, or demolish any improvements acquired as part of this project, and enter on all land.

RIGHT OF WAY SECTION

Breanna Kovach, P.E.
Chief of Right-of-Way

February 2, 2026
Updated from December 8, 2025

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

SHANTÉ A. HASTINGS
SECRETARY

October 21, 2025

ENVIRONMENTAL REQUIREMENTS
FOR

Contract Title: **HEP KC, US13 & Brenford/Big Oak Rd Intersection Improvements**

State Contract No.: **T202104203**

Federal Aid No.: **N/A**

Due to the nature of the proposed construction activities, permits are not required for this project. However, the following construction requirements and special provisions have been developed to minimize and mitigate impact to the surrounding environs. These requirements by DelDOT, not specified within the contract, are listed below. These requirements are the responsibility of the contractor and are subject to risk of shut down at the contractor's expense if not followed.

GENERAL REQUIREMENTS:

1. As locations are identified they will be submitted to the Environmental Studies Office to determine if there is any historical significance associated with the location and what if any cultural compliance documentation and/or approvals are needed. Likewise, natural resource evaluations will be undertaken to determine permit requirements, RTE issues, time of year restrictions for bird and/or fisheries resources, etc. No work will take place until all permits and approvals have been acquired. Notes in the contract document will specify that no work could begin until written approval is received from the ESO.

2. All construction debris, excavated material, brush, rocks, and refuse incidental to such work shall be placed either on shore above the influence of flood waters or on some suitable dumping ground.

3. That effort shall be made to keep construction debris from entering adjacent waterways or wetlands. Any debris that enters those areas shall be removed immediately.

4. The disposal of trees, brush, and other debris in any stream corridor, wetland, surface water, or drainage area is prohibited.

5. DelDOT Environmental Studies Section must be notified if there are any changes to the project methods, footprint, materials, or designs, to allow the Department to coordinate with the appropriate resource agencies (COE, DNREC, and SHPO), for approval at (DOT_EnvironmentalStudies@delaware.gov.

Maia Lee

Environmental Specialist II

Environmental Stewardship

Delaware Department of Transportation

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

SHANTÉ A. HASTINGS
SECRETARY

RAILROAD STATEMENT
For

State Contract No.: T202104203

Federal Aid No.: N/A

Project Title: HEP KC, US13 & Brenford/Big Oak Rd Intersection Improvements

The following railroad companies maintain facilities within the contract limits:

- ☐ Amtrak
- ☐ CSX
- ☐ State of Delaware Delmarva Central
- ☐ East Penn
- ☐ Maryland & Delaware
- ☐ Norfolk Southern
- ☐ Wilmington & Western
- ☐ Delmarva Central
- ☑ None

DOT Inventory No.: N/A No. Trains/Day: N/A Passenger Trains (Y / N): N/A

In accordance with 23 CFR 635, herein is the railroad statement of coordination (check one):

☑ No Railroad involvement.

☐ Railroad Agreement unnecessary but railroad flagging required. The contractor shall follow requirements stated in the DelDOT Maintenance of Railroad Traffic Item in the Special Provisions. Contractor shall coordinate railroad flagging with the DelDOT Railroad Coordinator at (302) 659-4087.

☐ Railroad Agreement required. The Contractor cannot begin work until the Agreement is complete and fully executed. Railroad related work to be undertaken and completed as required for proper coordination with physical construction schedules. The Contractor shall follow requirements stated in the DelDOT Maintenance of Railroad Traffic Item in the Special Provisions. Contractor shall coordinate railroad flagging with the DelDOT Railroad Coordinator at (302) 659-4087.

Approved As To Form:

DelDOT Railroad Coordinator

2/26/2026
DATE

SAMPLE AFFIDAVIT OF CRAFT TRAINING COMPLIANCE

(Actual form for signature will be provided to the awarded contractor)

(PROJECT NAME)
(CONTRACT NUMBER)

AFFIDAVIT OF CRAFT TRAINING COMPLIANCE

We, the contractor, hereby certify that we and all applicable subcontractors will abide by the contractor and subcontractor craft training requirements outlined below for the duration of the contract. Craft training must be provided by a contractor and/or subcontractor for each craft on a project for which there are Delaware Department of Labor approved and registered training programs or, if the contractor and/or subcontractor meets the requirements under Title 29, Chapter 69, Section 6960A.(b)(1)c.1.-3., payment may be made in accordance with Title 29, Chapter 69, Section 6960A.(b)(1)d. A list of crafts for which there are approved and registered training programs is maintained by the Delaware Department of Labor and can be found at: https://laborfiles.delaware.gov/main/det/apprenticeship/DE%20Craft%20Training%20Occupation%20List%20Effective%20March%201%202022.pdf. If you have questions regarding craft training programs, please submit all questions in writing to the Delaware Department of Labor at: apprenticeship@delaware.gov. ***This Affidavit of Craft Training Compliance must be submitted prior to contract execution***.

In accordance with Title 29, Chapter 69, Section 6960A.(a)(1), a contract relating to a public works project under § 6962 of Title 29 must include a craft training program for each craft in the project if at the time the contractor executes a public works contract, all of the following apply:

a. A project meets the prevailing wage requirement under Section 6960 of Title 29.
b. The contractor employs 10 or more total employees.
c. The project is not a federal highway project, except for the project under Section 6962(c)(11) of Title 29.
d. There is an apprenticeship program for a craft in the project on the list of crafts under Section 204(b)(2) of Title 19.

Pursuant to Title 29, Chapter 69, Section 6960A.(a)(2), ***a contractor must commit that all subcontractors provide craft training*** if paragraph (a)(1) of this section applies to the subcontractor. Failure to provide required craft training or payment on the project may subject the successful contractor and/or subcontractor(s) to penalties as outlined in Title 29, Chapter 69, Section 6960A.(d)(1)-(3).

Craft(s): _____

Contractor Name: _____

Contractor Address: _____

_____

_____

Contractor Program Registration Number(s) _____
On this line also indicate whether DE, Other State (identify) or US Registration Number

REVISED 8/10/2022

SAMPLE

Or

☐ **A payment has been made in the amount established under Section 204(b)(2)b.2. of Title 19, for the craft into the Delaware Department of Labor's Apprenticeship and Training Fund.**

Or

☐ **Craft Training requirements are not applicable because:**

_____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

State of Delaware)
) ss:
County of _____)

Before me, a notary public, in and for said county and state, personally appeared, _____, who acknowledged to me that she/he did execute the foregoing instrument on behalf of _____.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this ____ day of _____ 20___.

_____
Notary Public

Commission Expires _____

SAMPLE

THIS PAGE MUST BE SIGNED AND NOTARIZED TO BE CONSIDERED.

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
401014	SUPERPAVE TYPE B, PG 64-22	TON	938
302005	DELAWARE NO. 57 STONE	TON	44
401037	SUPERPAVE TYPE B, PG 64-22, WEDGE	TON	187
601000	CLEANING DRAINAGE PIPE, 15"-24" DIAMETER	LF	866
601035	REINFORCED CONCRETE PIPE, 24", CLASS IV	LF	487
601115	REINFORCED CONCRETE ELLIPTICAL PIPE, 14" X 23", CLASS IV	LF	563
601116	REINFORCED CONCRETE ELLIPTICAL PIPE, 19" X 30", CLASS IV	LF	58
601142	REINFORCED CONCRETE FLARED END SECTION, 18"	EACH	7
601170	REINFORCED CONCRETE FLARED END SECTION, 14" X 23"	EACH	2
701023	I.PCC CURB AND GUTTER, TYPE 3-8	LF	152
701031	CURB OPENING, 2' OPENING	EACH	4
705005	PCC SIDEWALK, 8"	SF	1201
727000	CHAIN LINK FENCE	LF	151
760002	BIKE-FRIENDLY RUMBLE STRIPS, BITUMINOUS PAVEMENT	LF	880
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	SYIN	23333
301002	GABC, PATCHING	CY	97
401005	SUPERPAVE TYPE C, 9.5 mm, PG 64-22 (CARBONATE STONE)	TON	458

This page is for information only. Do not use this page to submit a Bid.

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
701014	PCC CURB, TYPE 2	LF	272
705001	PCC SIDEWALK, 4"	SF	2652
705013	TRUNCATED DOME DETECTABLE WARNING SURFACE	SF	225
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	5129
763598	FIELD OFFICE, SPECIAL I	EAMO	5
801000	MAINTENANCE OF TRAFFIC	LS	1
818001	SUPPLY OF ROADSIDE FLAT SHEET ALUMINUM SIGN PANEL, TYPE IV, RETROREFLECTIVE SHEETING	SF	254
401029	SUPERPAVE TYPE C, 9.5 mm, PG 64-22, PATCHING	TON	33
835002	CABINET BASE TYPE M	EACH	1
847004	LIGHTING CONTROL AND DISTRIBUTION ENCLOSURE (120/240;100 AMP)	EACH	1
707015	RIPRAP, R-4	TON	5
813001	TEMPORARY BARRICADES, TYPE III	LFDY	10512
862002	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 6"	LF	229
905001	SILT FENCE	LF	5297
910008	STORMWATER MANAGEMENT POND	CY	9726
602003	DRAINAGE INLET, 34" X 24"	EACH	14

This page is for information only. Do not use this page to submit a Bid.

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
602010	DRAINAGE INLET, 72" X 48"	EACH	4
808002	PROVIDE AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	EADY	374
602132	ADJUSTING AND REPAIRING EXISTING MANHOLE	EACH	3
613005	WATERPROOFING MEMBRANE, NON-TRAFFIC BEARING	SF	3092
207001	PIPE, CULVERT, AND STRUCTURE BACKFILLING	CY	1875
207002	PIPE, CULVERT, AND STRUCTURE EXCAVATION	CY	2048
701011	PCC CURB, TYPE 1-4	LF	163
209001	BORROW, TYPE A	CY	230
202000	EXCAVATION AND EMBANKMENT	CY	3371
204000	TEST HOLE	CY	15
401016	SUPERPAVE TYPE B, PG 76-22	TON	1186
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	TON	110
602030	MANHOLE, 48" X 30"	EACH	3
602101	DRAINAGE INLET FRAME(S)	EACH	30
601141	REINFORCED CONCRETE FLARED END SECTION, 15"	EACH	1
602103	MANHOLE FRAME(S)	EACH	3
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EACH	3

This page is for information only. Do not use this page to submit a Bid.

DelDOT

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
701016	I.PCC CURB AND GUTTER, TYPE 1-4	LF	1642
763003	BASELINE SCHEDULE TYPE 2	LS	1
763004	MONTHLY UPDATE SCHEDULE TYPE 2	EAMO	7
763501	CONSTRUCTION ENGINEERING	LS	1
803001	PROVIDE AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EADY	302
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	10
907017	COMPOST FILTER LOGS	LF	291
908004	TOPSOIL, 6" DEPTH	SY	18552
908010	TOPSOILING, 6" DEPTH	SY	1670
908021	TURF REINFORCEMENT MATTING, TYPE 1	SY	76
908023	STABILIZED CONSTRUCTION ENTRANCE	SY	91
804001	PROVIDE AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	EADY	77
805001	PLASTIC TRAFFIC CONTROL DRUMS	EADY	16570
401036	SUPERPAVE TYPE C, 9.5 mm, PG 64-22, WEDGE	TON	328
401046	SUPERPAVE TYPE C, 9.5 mm, PG 76-22 (NON-CARBONATE STONE)	TON	3118
601033	REINFORCED CONCRETE PIPE, 18", CLASS IV	LF	1292
602004	DRAINAGE INLET, 48" X 30"	EACH	4

This page is for information only. Do not use this page to submit a Bid.

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
701021	I.PCC CURB AND GUTTER, TYPE 3-4	LF	465
701507	CURB RETAINING WALL	LF	169
705008	PEDESTRIAN CONNECTION, TYPE 1	SF	468
705010	PEDESTRIAN CONNECTION, TYPE 5	SF	76
706002	RIGHT-OF-WAY MARKER, CAPPED REBAR	EACH	21
802003	ARROW PANELS TYPE C	EADY	158
862006	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, SYMBOL/LEGEND	SF	2805
868001	PAVEMENT MARKING, REMOVAL	SF	3272
910001	INFILTRATION STONE, NO. 3	TON	654
201000	CLEARING AND GRUBBING	LS	1
202003	UNDERCUT EXCAVATION	CY	172
601032	REINFORCED CONCRETE PIPE, 15", CLASS IV	LF	149
601171	REINFORCED CONCRETE FLARED END SECTION, 19" X 30"	EACH	1
602005	DRAINAGE INLET, 48" X 48"	EACH	8
602102	MANHOLE COVER(S)	EACH	3
701510	CURB/SIDEWALK OPENING	EACH	1
702000	TRIANGULAR CHANNELIZING ISLANDS	SF	650

This page is for information only. Do not use this page to submit a Bid.

DelDOT

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
705002	PCC SIDEWALK, 6"	SF	1444
709001	PERFORATED PIPE UNDERDRAINS, 6"	LF	15
710503	ADJUST GAS VALVE BOXES	EACH	2
711502	ADJUST AND REPAIR EXISTING SANITARY CLEANOUTS	EACH	2
760006	RUMBLE STRIPS, BITUMINOUS PAVEMENT	LF	1563
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	4986
905005	INLET SEDIMENT CONTROL, CURB INLET	EACH	29
830004	CONDUIT JUNCTION WELL, TYPE 7, 36" X 60" PRECAST POLYMER CONCRETE	EACH	1
831024	PROVIDE AND INSTALL 2-1/2" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	215
831026	PROVIDE AND INSTALL 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	2447
831068	PROVIDE AND INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" SCHEDULE 80 PVC CONDUIT IN TRENCH OR OPEN CUT	LF	15
831072	PROVIDE AND INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" HDPE SDR 13.5 CONDUIT IN DIRECTIONAL BORE	LF	683
846001	PROVIDE AND INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	LF	2255
850002	LUMINAIRE (LED), 250 WATTS HPS EQUIVALENT	EACH	12
830011	PROVIDE AND INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 1	EACH	6
832009	PROVIDE AND INSTALL 1-CONDUCTOR #8 STRANDED COPPER, TYPE USE-2	LF	2991

This page is for information only. Do not use this page to submit a Bid.

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
832008	PROVIDE AND INSTALL 1-CONDUCTOR #6 STRANDED COPPER, TYPE USE-2	LF	5706
601144	REINFORCED CONCRETE FLARED END SECTION, 24"	EACH	2
601190	PVC PIPE, 4"	LF	17
910009	INFILTRATION TRENCH	CY	3219
861008	TEMPORARY PAVEMENT STRIPING, EPOXY RESIN PAINT, 4"	LF	6207
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	12509
818003	SUPPLY OF ROADSIDE FLAT SHEET ALUMINUM SIGN PANEL, TYPE XI, RETROREFLECTIVE SHEETING	SF	86
819001	PROVIDE GALVANIZED TELESCOPING SIGN POST	EACH	44
819002	INSTALL OR REMOVE GALVANIZED TELESCOPING SIGN POST	EACH	95
843001	ELECTRICAL TESTING	LS	1
863002	PREFORMED RETROREFLECTIVE MARKINGS, ALKYD-THERMOPLASTIC, BIKE SYMBOL	EACH	13
908024	STABILIZED CONSTRUCTION ENTRANCE, TOPDRESSING	TON	3
908026	EROSION CONTROL MULCH	SY	12509
861001	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, 6"	LF	21157
819003	INSTALL OR REMOVE TRAFFIC SIGNS	EACH	127
908015	PERMANENT GRASS SEEDING, STORMWATER	SY	6114

This page is for information only. Do not use this page to submit a Bid.

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
908020	EROSION CONTROL BLANKET MULCH	SY	6114
910006	OUTLET STRUCTURE	EACH	1
830001	CONDUIT JUNCTION WELL, TYPE 1, 20" X 20" PRECAST CONCRETE	EACH	13
831023	PROVIDE AND INSTALL 2" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	45
831029	PROVIDE AND INSTALL 2-1/2" SCHEDULE 80 PVC CONDUIT (ON STRUCTURE)	LF	30
831033	PROVIDE AND INSTALL 2" GALVANIZED STEEL CONDUIT (TRENCH)	LF	75
834006	POLE BASE, TYPE 3A	EACH	2
834007	POLE BASE, TYPE 3B	EACH	2
834009	POLE BASE, TYPE 4A	EACH	5
835003	CABINET BASE TYPE P	EACH	1
846002	PROVIDE AND INSTALL A 1-1/2 INCH GALVANIZED RIGID METAL CONDUIT DETECTOR SLEEVE WITH LOOP WIRE	LF	45
830012	PROVIDE AND INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 4	EACH	7
910002	INFILTRATION STONE, NO. 8	TON	18
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	113
705009	PEDESTRIAN CONNECTION, TYPE 2, 3, AND/OR 4	SF	694
707001	RIPRAP, R-4	SY	75

This page is for information only. Do not use this page to submit a Bid.

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
708002	GEOTEXTILES, SEPARATION	SY	1395
708003	GEOTEXTILES, RIPRAP	SY	43
711500	ADJUST AND REPAIR EXISTING SANITARY MANHOLE	EACH	3
760012	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH	SYIN	21140
763000	INITIAL EXPENSE/DE-MOBILIZATION	LS	1
207021	STRUCTURAL BACKFILL, BORROW TYPE C, PROVIDING ONLY	CY	806
209006	BORROW, TYPE F	CY	181
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	110
830008	ADJUST OR REPAIR EXISTING CONDUIT JUNCTION WELL	EACH	6
602100	DRAINAGE INLET GRATE(S)	EACH	30
842007	PROVIDE AND INSTALL ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240	EACH	1
851003	ALUMINUM LIGHTING STANDARD WITH SINGLE DAVIT ARM, 40' POLE	EACH	23
810001	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	9638
831025	PROVIDE AND INSTALL 3" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	85
831048	PROVIDE AND INSTALL 2" GALVANIZED STEEL CONDUIT (ON STRUCTURE)	LF	30
831055	PROVIDE AND INSTALL 4" HDPE SDR 13.5 CONDUIT (BORE)	LF	815

This page is for information only. Do not use this page to submit a Bid.

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202104203

Project Descripton: HEP KC, US13 & Brenford/Big Oak Rd. Intersection Improvements

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
834011	POLE BASE, TYPE 6	EACH	14
834014	SHEETING FOR POLE BASE	EACH	4
834501	PARTIAL REMOVAL OF CONCRETE POLE BASES AND CABINET FOUNDATIONS	CY	7
601280	PERSONNEL SAFETY GRATE FOR PIPE INLET	EACH	3
211000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
301001	GABC	CY	2260
302002	DELAWARE NO. 3 STONE	TON	29
830002	CONDUIT JUNCTION WELL, TYPE 4, 20" X 42-1/2" PRECAST CONCRETE	EACH	4
830010	REMOVAL OF EXISTING JUNCTION WELL	EACH	10
806500	TRAFFIC OFFICERS	HOUR	80
811002	FLAGGER, KENT COUNTY	HOUR	2480
811014	FLAGGER, KENT COUNTY, OVERTIME	HOUR	496

This page is for information only. Do not use this page to submit a Bid.