

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION



BID PROPOSAL

CONTRACT T202230001

**GEORGETOWN TO LEWES TRAIL,
FISHER ROAD TO AIRPORT ROAD**

Federal Aid No. CMAQ-2022(26)
CFDA: 20.933

Advertisement Date: October 30, 2024

INCLUDED IN THIS DOCUMENT:

BID PROPOSAL:

*GENERAL DESCRIPTION
PROSPECTIVE BIDDERS NOTES
GENERAL NOTICES
PREVAILING WAGES
SPECIAL PROVISIONS
STATEMENTS
QUANTITY SHEET SUMMARY*

ADDITIONAL BID PROPOSAL ITEMS:

ATTACHED OR POSTED DOCUMENTS:

*PROJECT PLANS
QUESTIONS & ANSWERS (if posted)
DBE PROJECT PARTICPANT AFFIDAVIT
DBE UTILIZATION COMMITMENT STATEMENT
BIDDERS LIST*

**PAPER BIDDERS CONTACT DELDOT
FOR BID SUBMITTAL DOCUMENTS:**

*DRUG TESTING AFFIDAVIT
CERTIFICATION FORM
BID BOND FORM
CD FOR BID PRICE ENTRY & PRINTING
DBE PROJECT PARTICPANT AFFIDAVIT
DBE UTILIZATION COMMITMENT STATEMENT
BIDDERS LIST*

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

Internet Bids for Bidders with Bid Express® accounts can be submitted at [BIDX.com/de/](https://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, NOVEMBER 19, 2024

GENERAL DESCRIPTION

A. BIDS DUE: **NOVEMBER 19, 2024** **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 www.bidx.com/de/.

OR:

(b) **Paper Bid Delivered To:** Delaware Department of Transportation (DelDOT), 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.

Attendance is not required. DelDOT offers a call-in number to hear the Bid Opening telephonically. The telephone number to call is (408) 418-9388.

When prompted, enter Meeting number (access code): 173 970 0618#

It is anticipated the telephone access information will remain the same for all Bid Openings.

B. PRE-BID MEETING: No

C. DBE GOAL: 15% Disadvantaged Business Enterprise Goal

D. OJT TRAINEES: 2 See Prospective Bidder's Notes and posted OJT Manual for details.

E. LOCATION: Sussex County

These improvements are more specifically shown on the Location Map(s) of the attached Plans.

F. DESCRIPTION: The improvements consist of furnishing all labor and materials for the construction of the final phase of the Georgetown to Lewes Trail. The project limits are from Fisher Road to Airport Road along the active and decommissioned rail line. The project includes both rail with trail and rail to trail design. Work to include but not limited to are construction of a 10' wide asphalt trail, construction of an elevated boardwalk, installation of safety fencing, drainage improvements, installation of kiosks, site amenities and signage. Follow other incidental construction in accordance with the location, notes and details shown on the plans, and as directed by the Engineer.

G. BUY AMERICA REQUIREMENTS APPLY – Build America, Buy America Act, refer to 'GENERAL NOTICES'.

H. COMPLETION TIME: All work on this contract must be complete within 397 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 February 3, 2025.

I. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DELAWARE DEPARTMENT OF TRANSPORTATION, JANUARY 2024 apply to this Bid Proposal and Project. The Contractor shall make himself aware of any revisions and corrections (Supplemental Specifications, if any) and apply them to the applicable item(s) of this contract. The Standard and Supplemental Specifications can be viewed [here](#). Units of Measure can be found at 101.4.

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

K. 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.

L. 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.

M. 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.

N. PROSPECTIVE BIDDERS NOTES:

1. **BIDDERS MUST BE REGISTERED** with DelDOT in order to submit a bid. E-Mail dot-ask@delaware.gov or call (302) 760-2031 to request registration information.

2. **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.

3. **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.

4. **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:**

<https://regulations.delaware.gov/AdminCode/title19/4000/4100/4104.shtml#TopOfPage>

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.
5. **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.
6. **NO RETAINAGE** will be withheld on this contract unless through the Performance-Based Rating System.
7. **EXTERNAL COMPLAINT PROCEDURE** can be viewed on DelDOT's Website, <https://regulations.delaware.gov/AdminCode/title2/2000/2500/2501.shtml#TopOfPage> or you may request a copy by calling (302) 760-2035

REVISED



8. **DBE PROGRAM REQUIREMENTS** (49CFR §26.53(b)(3)(i)(B) requires **ALL BIDDERS** to submit a DelDOT DBE Project Participation Affidavit for each DBE proposed for their team no later than five (5) calendars after bid opening. Affidavits shall be submitted electronically to the DelDOT DBE Program Office at DOT.BidDocs@delaware.gov or via US Mail to DelDOT DBE Program Office ATTN: DBE Program Manager 800 Bay Road, Dover, DE 19901. Bidders must fully comply with the requirements of the Disadvantaged Business Enterprises (DBE) Specification shown below in order for their submitted bid to be deemed responsive and therefore eligible for award. Please note that the Bidder's DBE Project Participation Affidavit is different than what is required to be included in the Bidder's List submitted at the time of bid discussed below.

NEW



9. **DelDOT CERTIFIED DBE UTILIZATION COMMITMENT STATEMENT** In accordance with 49 CFR Part 26 all bidders must make good faith efforts toward meeting assigned DBE goals on federally assisted projects. Bidders are required to complete and submit this document at the time of bid to provide DelDOT with their anticipated goal attainment and/or any good faith efforts documentation for the project on which they are bidding. Failure to include the DBE Utilization Commitment Statement with your bid will result in your Bid being deemed irregular.

10. **FLATWORK CONCRETE TECHNICIAN CERTIFICATION TRAINING:**

Section 501.3, 503.3, 505.3, 610.3, 701.3 and 702.3 of the 2024 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. **On-The-Job Trainee(s).** The On-the-Job (OJT) Program Plan and all required documents must be submitted online as soon as possible by the apparent low bidder at deldot.delawareojt.gov. Award of the Contract will not take place until acceptable OJT program plans are received and approved by the Department's Office of Civil Rights. Failure of the apparent low bidder to submit acceptable OJT required documents within ten (10) calendar days of bid opening shall create a rebuttable presumption that the bid is not responsive.

12. NOTE that FHWA Form 1273 (attached) has been modified effective October 23, 2023. Changes are [reviewed here](#).

13. 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.

NEW



14. Bidders List Requirement:

Under [49 CFR 26.11](#) DeIDOT must collect bidders list information from **ALL** contractors and subcontractors who seek to work on federally assisted contracts. The submitted information must be complete and must include the required information for the prime and all (DBE and non-DBE) subcontractors, service providers, manufacturers, distributors, and suppliers.

ALL bidders must complete the [Bidders List Form](#) (attached as an exhibit) and submit it at the time of bid. Late submission of this information will not be accepted. Submitted information must include the following for those being proposed to work on the contract if awarded:

- Firm name;
- Firm address including ZIP code;
- Firm's status as a DBE or non-DBE;
- Race and gender information for the firm's majority owner;
- NAICS code applicable to each scope of work the firm sought to perform in its bid;
- Age of the firm; and
- The annual gross receipts of the firm shown as an approximate range (i.e., \$1-3 million)

This information will be maintained as confidential to the extent allowable by federal and state law.

Failure to submit the required bidders list documentation at the time bid will result in the bidder being deemed non-responsive and therefore ineligible for award of the contract.

15. Please note the **additional Railroad Insurance Requirements** in Special Provision 801501

16. Contractor cannot begin work until the Railroad Agreement is complete and fully executed.

17. Contractor shall coordinate railroad flagging with DeIDOT's Railroad Program Coordinator at (302) 659-4664.

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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/>.

BUY AMERICA REQUIREMENT

The Build America, Buy America Act (BABA), enacted as part of the Bipartisan Infrastructure Law (BIL) requires iron, steel, manufactured products, and construction materials used in infrastructure projects funded by Federal financial assistance to be produced in the United States.

In accordance with 23 U.S.C. 313, and 23 CFR 635.410, all iron and steel materials permanently incorporated into this project will be produced in the United States and that all manufacturing processes involving these materials will occur in the U.S., except that a minimal amount of foreign steel or iron materials may be used, provided the cost of the foreign materials does not exceed 0.1 percent of the total Contract cost or \$2,500.00, whichever is greater. If such minimal amount of foreign steel is used, the Contractor shall maintain a record of the costs to ensure that the allowable limit is not exceeded.

Manufactured products are currently exempt from the Buy America requirements included in BABA in accordance with a waiver issued for such products by the FHWA in 1983. The 1983 waiver does not supersede 23 CFR 635.410 which requires all manufacturing processes involving the steel or iron used occur in the U.S., except that a minimal amount of foreign steel or iron materials may be used, provided the cost of the foreign materials does not exceed 0.1 percent of the total Contract cost or \$2,500.00, whichever is greater. If such minimal amount of foreign steel is used, the Contractor shall maintain a record of the costs to ensure that the allowable limit is not exceeded.

All construction materials permanently incorporated into this project are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States. Construction materials which are exempt from BABA requirements include cement and cementitious materials, aggregates such as stone, sand, or gravel, and aggregate binding agents or additives.

DelDOT maintains a list of all pay items, the applicable BABA category designation, and additional guidance at the following address: <https://deldot.gov/Business/prodlists/index.shtml?dc=buyAmerica>.

By signing and submitting this proposal, the bidder certifies that:

“All materials that will be permanently incorporated into this project will meet the Buy America material requirements. At the Department's request, I/we will provide manufacturer's/supplier's documentation verifying domestic origin as defined in the Contract. All Materials accepted on the basis of such Certificate of Compliance may be sampled by the Department and tested at any time. Use of Material on the basis of Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating Material in the Project conforming to the requirements of the Contract. Any Material not conforming to such requirements will be subject to rejection whether in place or not. The Department reserves the right to refuse to permit the use of Material on the basis of Certificate of Compliance.”

SPECIFICATIONS :

The Delaware specifications entitled "*Standard Specifications for Road and Bridge Construction*, with the applicable version defined in the 'GENERAL DESCRIPTION' and hereinafter referred to as the *Standard Specifications*; 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.

DelDOT 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 :

DelDOT 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. DelDOT 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 DelDOT project, excluding a 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 DelDOT. Successful bidders awarded DelDOT 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. DelDOT shall post publicly the Performance Rating for all Contractors on DelDOT's [website](#). DelDOT will complete performance-based evaluations on the construction company contracted by DelDOT 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](#).

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 on a project designated to include federal funds, shall obtain a Delaware business license upon making application to the Division of Revenue. Proof of said license compliance to be made prior to, or in conjunction with, the execution of a contract to which he has been named.

SUBCONTRACTOR LICENSE: 29 DEL. C. §6967:

- (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 or 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.

CONFLICT WITH FEDERAL STATUTES OR REGULATIONS:

Delaware Code, Title 29, Chapter 69, Section 6904, Paragraph (a):

"If any provision of this subchapter conflicts or is inconsistent with any statute, rule or regulation of the federal government applicable to a project or activity, the cost of which is to be paid or reimbursed in whole or in part by the federal government, and due to such conflict or inconsistency the availability of federal funds may be jeopardized, such provision shall not apply to such project or activity."

FEDERAL LABOR AND EMPLOYMENT REQUIREMENTS

Federal Regulation 23 CFR § 635.117(b) Labor and employment, states:

"No procedures or requirement shall be imposed by any State which will operate to discriminate against the employment of labor from any other State, possession or territory of the United States, in the construction of a Federal-aid project."

CONVICT PRODUCED MATERIALS:

(a) Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:

- (1) Produced by convicts who are on parole, supervised release, or probation from a prison or

(2) Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.

(b) Qualified prison facility means any prison facility in which convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-aid highway construction projects.

RIGHT TO AUDIT

DelDOT 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)

TO REPORT BID RIGGING ACTIVITIES:

The U. S. Department of Transportation (DOT) operates the below toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

TO REPORT BID RIGGING ACTIVITIES
CALL 1-800-424-9071

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals for Minority Participation In
Each Trade

Goals for Female Participation In
Each Trade

12.3% (New Castle County)

6.9% (Entire State)

14.5% (Kent & Sussex Counties)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the County specified in the General Description section.

REV. 11-3-80

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - i. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - ii. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - iii. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - iv. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Program Office or from the Federal procurement contracting offices. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participating, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).
 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Order of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
 14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours

worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

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TRAINING SPECIAL PROVISIONS

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities", (Attachment 1), and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved.

The number of trainees to be trained under the special provision will be as set forth in the General Description section of this document. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also ensure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year apprenticeship or training.

The number of trainees shall be distributed among the work classification on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Department of Highways and Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Department of Highways and Transportation and the Federal Highway Administration. The Department of Highways and Transportation and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid

highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work the classification covered by the program. It is the intention of these provisions that the training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other sources does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for off-site training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training; provides the instruction of the trainee; or pays the trainee's wages during the off-site training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainees as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid a least 60 percent of the appropriate minimum journeymen's rate specified in the contract for the first half of the of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees is an approved existing program are enrolled as trainees on this project. In fact case, the appropriate rates approved by the Department of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provisions.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training.

The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

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INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT
& TRANSPORTATION EQUITY ACT

Recipients of Federal-aid highway funds authorized under Titles I (other than Part B) and V of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), or Titles I, III, and V of the Transportation Equity Act for the 21st Century (TEA-21) are required to comply with the regulations of 49 Code of Federal Regulations (CFR) Part 26 - Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

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REVISED**DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM
SPECIFICATION**

DelDOT has established a Disadvantaged Business Enterprise (DBE) program in accordance with the regulations of the United States Department of Transportation (USDOT), 49 CFR Part 26. The Department has received Federal financial assistance from the USDOT and as a condition of receiving this assistance, the Department has signed an assurance that it will comply with 49 CFR Part 26.

It is the policy of DelDOT to ensure that DBEs, as defined in 49 CFR Part 26, have an equal opportunity to receive and participate in USDOT-assisted contracts. It is also the policy of the DelDOT:

1. To ensure nondiscrimination in the award and administration of USDOT-assisted contracts;
2. To create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts;
3. To ensure that the DBE program is narrowly tailored in accordance with applicable law;
4. To ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are counted as DBEs;
5. To help remove barriers to the participation of DBEs in USDOT-assisted contracts;
6. To assist in the development of firms that can compete successfully in the marketplace outside the DBE program and;
7. To promote the use of DBEs in all types of federally assisted contracts and procurement activities.

The following definitions apply to this subpart:

Commercially Useful Function (CUF) means a Commercially Useful Function as defined fully in 49 CFR §26.55 which definition is incorporated herein by reference. CUF is discussed further in the next section.

Committed DBE means a DBE that was identified by the contractor, typically on a DBE Project Participation Affidavit, to assist in making a good faith effort to meet an assigned DBE goal. This also includes any substitute DBE that has subsequently been committed work to meet the assigned contract goal.

Days mean calendar days. In computing any period of time described in this part, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal holiday. Similarly, in circumstances where the DelDOT's offices are closed for all or part of the last day, the period extends to the next day on which the agency is open.

Disadvantaged Business Enterprise or DBE means a for-profit small business concern (1) that is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and, (2) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

DOT-assisted contract means any contract between a recipient and a contractor (at any tier) funded in whole or in part with DOT financial assistance, including letters of credit or loan guarantees, except a contract solely for the purchase of land.

Good Faith Efforts means efforts to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.

Joint Venture means an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

NAICS Code means the North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.

Non-DBE means any firm that is not a DBE or any entity which has not been certified by DeIDOT as a DBE prior to bid closing.

Race-conscious measure or program is one that is focused specifically on assisting only DBEs, including women-owned DBEs.

Race-neutral measure or program is one that is, or can be, used to assist all small businesses. For the purposes of this part, race-neutral includes gender neutrality.

Small Business concern means, with respect to firms seeking to participate as DBEs in DOT-assisted contracts, a small business concern as defined pursuant to section 3 of the Small Business Act and Small Business Administration regulations implementing it (13 CFR part 121) that also does not exceed the cap on average annual gross receipts specified in 49 CFR §26.65(b).

Socially and Economically Disadvantaged Owner (SEDO) means any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is - (1) any individual who a recipient finds to be a socially and economically disadvantaged individual on a case-by-case basis; (2) any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged according to 49 CFR §26.5:

- (i) Black Americans which includes persons having origins in any of the Black racial groups of Africa;
- (ii) Hispanic Americans which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- (iii) Native Americans which includes persons who are enrolled members of a federally or State recognized Indian tribe, Alaska Natives, or Native Hawaiians;
- (iv) Asian-Pacific Americans which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia,

the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Republic of the Northern Mariana Islands, Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong;

(v) Subcontinent Asian Americans which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives, Nepal or Sri Lanka;

(vi) Women;

(vii) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

DBE Participation Goals

DelDOT has established an overall annual goal for DBE participation on Federal-aid contracts. DelDOT intends that the goal be met with a combination of race conscious and race neutral efforts. Race-conscious participation occurs when the contractor uses a percentage of DBEs, as defined herein, to meet the contract-specified goal. Race-neutral efforts are those that are, or can be, used to assist all small businesses or increase opportunities for all small businesses.

The regulation, 49 CFR, Part 26, also describes race neutral participation as when a DBE wins a prime contract through customary competitive procurement procedures or is awarded a subcontract on a prime contract that does not carry a DBE contract goal.

DelDOT will establish specific goals for each particular DOT-assisted project which will be expressed as a percentage of the total dollar amount of contract bid. The specific contract goal for this contract is listed in the General Description section of this document.

The contractor shall make Good Faith Efforts to meet the goal specified herein with DBEs or establish that it was unable to meet the goal despite making good faith efforts to do so. Prime contractors are encouraged to obtain DBE participation above and beyond any goals that may be set for this project.

DBE Project Participation Affidavit

In order to be eligible for award, ALL Bidders shall submit **no later than five (5) calendar days after bid opening** the completed DelDOT DBE Project Participation Affidavit for each Committed DBE that it intends to use to meet the project DBE goal if the contract is awarded to their firm. This affirms that the Bidder intends to utilize those listed on the form to make a good faith effort toward attaining the DBE goal assigned to this project. Information that will be included shall be as outlined in 49 CFR §26.53(b)(2). This information shall be submitted electronically to the DelDOT DBE Program Office at DOT.BidDocs@delaware.gov or via US Mail to DelDOT DBE Program Office ATTN: DBE Program Manager 800 Bay Road, Dover, DE 19901.

All Bidders will be required to complete the form and provide the following information regarding the DBE participation on their teams:

1. The names and addresses of DBE firms that will participate in the contract;
2. A description of the work that each DBE will perform. To count toward meeting a goal, each DBE firm must be certified in a NAICS code applicable to the kind of work the firm will perform on the contract;
3. The dollar amount of the participation of each DBE firm participating;

4. Written documentation of the Bidders commitment to use a DBE subcontractor whose participation it submits to meet a contract goal; and
5. Written confirmation from each listed DBE firm that it is participating in the contract in the kind and amount of work provided in the prime contractor's commitment.

Only those DBE firms certified by DelDOT's DBE Program Office as a DBE as of the deadline for bid submittal will be considered for DBE credit. It shall be the Bidders responsibility to ascertain the certification status of designated DBEs prior to submitting a bid which seeks to rely upon an entity as a DBE to satisfy DBE participation requirements. A list of certified DBEs with their respective NAICS codes can be located in the [DelDOT DBE Directory](https://deldotcivilrights.dbesystem.com) which is located on DelDOT's website at: <https://deldotcivilrights.dbesystem.com>.

If the apparent low bidder fails to submit the required information in the manner herein specified, or if the submitted information reveals a failure to meet the requirements of the specifications shown herein, the apparent low bidder shall be ineligible to receive award of the contract and their bid will be rejected.

Reduction of DBE commitments after affidavit submittal and prior to execution of the contract without written consent of DelDOT, which consent will only be given for good cause, will result in the bid being rejected or DelDOT rescinding any award. Scheduling conflicts are not necessarily evidence of good cause as this should have been considered during pre-bid negotiations. The contractor is responsible for ensuring the DBE is available to meet the requirements of the contract at all relevant times.

In an instance where a Bidder indicates that it is unable to meet the assigned DBE goal for a contract, the bidder shall **AT THE TIME OF BID SUBMISSION**, provide all documentation to verify that the Bidder has made Good Faith Efforts (GFE) toward meeting the assigned DBE Goal. Guidance for submitting Good Faith Efforts documentation is identified in the next section of this document and in the [DBE Program Plan](https://deldot.gov/Business/dbe/contentFolder/pdfs/dbeProgram.pdf?cache=1726767277676). <https://deldot.gov/Business/dbe/contentFolder/pdfs/dbeProgram.pdf?cache=1726767277676>

DBE Subcontract Provisions

DelDOT continues to reserve the right to approve ALL DBE subcontractors and all substitutions of DBE subcontractors prior to award, and during the of completion of the contract. **ALL DBEs subcontracted (whether submitted for participation credit or not) must be submitted to DelDOT's DBE Program Office for approval.** No contract work shall be performed by a DBE subcontractor until the executed DBE subcontract is approved in writing by DelDOT and DelDOT has issued the required Notice to Proceed. Any DBE subcontract relating to work to be performed pursuant to this contract, which is submitted to DelDOT for approval, must contain all DBE subcontractor information, the requirements contained in this contract, and must be fully executed by the contractor and DBE subcontractor.

Each contract between the prime contractor and each DBE subcontractor shall at the minimum include the following:

1. All pertinent provisions and requirements of the prime contract.
2. Assurance that the contractor and subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract.
3. Description of the work to be performed by the DBE subcontractor.
4. The dollar value of each item of work to be completed by the DBE subcontractor and the bid price of each item of work to be completed by the DBE subcontractor.
5. An attached copy of the most current FHWA 1273- Required Contract Provisions Federal-Aid Construction Contracts.

6. Language indicating that retainage will not be withheld unless the prime contract with DelDOT allows for the withholding of retainage.
7. Language requiring the payment of all funds received from DelDOT for work satisfactorily performed within the time frame contemplated by 49 CFR §26.29.

DelDOT reserves the right to conduct periodic reviews of DBE and non-DBE subcontract documentation to ensure compliance with federal requirements.

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CRITICAL DBE REQUIREMENTS

A bid may be held to be non-responsive and not considered if the required DBE information is not provided. In addition, the Bidder may lose its bidding capability on DelDOT projects and such other sanctions as the DelDOT may impose. It is critical that the bidder understands:

1. In the event that the Bidder is unable to meet the DBE goal as set forth in this specification, in accordance with 49 CFR §26.53 (b)(2)(vi), the Bidder **shall at the time of bid submittal** provide all evidence upon which Bidder intends to rely as evidence of Good Faith Efforts (GFE) to DelDOT which shall include the percentage of the DBE Goal that will be met, if any, on the completed DelDOT DBE Utilization Commitment form made a part of this contract. All Bidders shall review [Appendix A to Part 26 – Guidance Concerning Good Faith Efforts](#) as that provides guidance on what DelDOT will look for and evaluate as GFE by a Bidder to obtain DBE participation. <https://www.ecfr.gov/current/title-49/subtitle-A/part-26/appendix-Appendix%20A%20to%20Part%2026>
2. The contractor shall also at the time of bid submit all documentation that the contractor wishes to have DelDOT consider in determining that the contractor made a Good Faith Effort to meet the assigned contract DBE Goal. DelDOT will not accept Good Faith Efforts documentation other than on the scheduled date and time of the bid opening. However, DelDOT may ask for clarification of information submitted should the need arise.
3. A bid which does not contain either a completely executed DelDOT DBE Utilization Commitment and/or Good Faith Efforts documentation, where appropriate, shall be declared non-responsive and shall not be considered by DelDOT.
4. Failure of the apparent low bidder to present originals of all DBE subcontracts to substantiate the volume of work to be performed by DBE's as indicated in the bid within fifteen (15) calendar days after the bid opening shall create a rebuttable presumption that the bid is not responsive.
5. Bidders are advised that failure to make a Good Faith Effort to meet the assigned and agreed upon DBE goals during the term of the contract may subject them to DelDOT sanctions as identified in the DelDOT DBE Program Plan.
6. In the execution of this contract, the successful bidder agrees to comply with the following contract clauses:

Prompt Payment: The prime contractor/consultant receiving payments shall, within 30 days of receipt of any payment, file a statement with DelDOT on a form to be determined by DelDOT that all subcontractors furnishing labor or material have been paid the full sum due them at the stage of the contract, except any funds withheld under the terms of the contract as required by Chapter 8, Title 17 of the Delaware Code, annotated and as amended. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of DelDOT. This clause applies to both DBE and non-DBE subcontractors.

Retainage: The prime contractor agrees to return retainage to each subcontractor within 15 calendar days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of DelDOT. This clause covers both DBE and non-DBE subcontractors. As guidance, once a subcontractor has satisfactorily completed the physical work, and has given to the prime contractor a certified statement that all laborers, lower tier contractors, and materialmen who have furnished labor and materials to the subcontractor have been paid all monies due them, the prime contractor shall return retainage to the subcontractor within 15 calendar days.

7. In the execution of this contract, the successful bidder agrees to comply with the following contract assurance and will include this same language in each subcontractor contract:

"The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such remedy as the recipient deems appropriate." 49 CFR Section 26.13

8. A prime contractor can receive participation credit toward DBE goals only if the DBE performs a Commercially Useful Function (CUF). According to 49 CFR §26.55 (c)(1) a DBE performs a CUF when it is responsible for execution of the work of a contract and carries out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself that it uses on the project.

In order to determine whether a DBE is performing a commercially useful function, DelDOT will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing, and the DBE credit claimed for its performance of the work, and other relevant factors.

In addition to this specification, bidders must comply with all provisions of the rules and regulations adopted by the United States Department of Transportation for DBE participation in USDOT and DelDOT Programs (49 CFR Part 26) and the DelDOT Disadvantaged Business Enterprise Program Plan; each of which is hereby incorporated and made part of this specification. Bidders are also reminded that they must be responsive and responsible bidders in all other aspects aside from the DBE Program in order to be awarded the contract.

9. In accordance with 49 CFR §26.53(f)(1), DelDOT requires that a prime contractor not terminate a DBE subcontractor without prior written consent from the DelDOT's Office of Civil Rights, which consent will only be provided if the Bidder demonstrates good cause for the termination. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. The contractor shall make all reasonable efforts to avoid terminating or substituting a DBE listed on the DBE Project Participation Affidavit.

* * * * *

GUIDANCE FOR GOOD FAITH
EFFORT

If the apparent low bidder has stated in its bid proposal that it has been unable to meet the DBE goal, that Bidder must demonstrate, through detailed and comprehensive documentation, that good faith efforts have been made to solicit, assist, and use DBE firms to meet the DBE goal prior to the bid. If the Bidder certifies that it has been unable to meet the goal and has made a good faith effort, the Bidder cannot change its position after submission of the bid and claim to have met the established goal. (See 49 CFR §26.53 and Appendix A to Part 26 of 49 CFR- Guidance Concerning Good Faith Efforts).

The contractor shall demonstrate that the efforts made were those that a contractor actively and aggressively seeking to meet the goals established by DelDOT would make, given all relevant circumstances. Evidence of this good faith effort will be submitted with the bid at the time of the bid opening.

In order to be awarded a contract on the basis of good faith efforts, a Bidder must show that it took all necessary and reasonable steps to achieve the DBE goal which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful. Simply faxing and emailing DBEs requesting bids is not sufficient to constitute good faith efforts. DelDOT will consider the quality, quantity, and intensity of the different kinds of efforts the Bidder has made. Mere pro forma efforts are not sufficient good faith efforts to meet the DBE contract requirements.

The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the Bidder when a non-DBE subcontractor was selected over a DBE for work on the contract. A generalized assertion that the contractor received multiple quotes is not sufficient unless copies of those quotes are provided. Bidders are encouraged to review 49 CFR Part 26 Appendix A- Guidance Concerning Good Faith Efforts.

Failure to demonstrate good faith efforts to the satisfaction of the DelDOT will result in the rejection of the bid. In the event that the low bid is rejected, DelDOT will consider award of the contract to the next responsive and responsible bidder.

The following are the types of efforts that *may* be considered as Good Faith Efforts to meet DBE participation requirements. This list is not an exclusive or exhaustive, and DelDOT may consider other factors and types of efforts that may be relevant:

1. Contacting DelDOT's DBE Program Office prior to the submission of bids, either by email or by telephone, to inform them of the Bidder's difficulty in meeting the DBE goals on a given project and requesting assistance. The Bidder must document its contact with the DBE Program Office and indicate the type of contact, the date and time of the contact, the name of the person(s) contacted, and any details related to the communication. The contact must be made in sufficient time before bid submission to allow the DBE Program Office a meaningful opportunity to offer effective assistance. The Bidder will **not** be considered to have made good faith efforts if the Bidder failed to contact the DBE Program Office in advance of bid closing or if the Bidder fails to contact the DBE Program Office sufficiently in advance of bid submission for the DBE's that bidder intends to solicit to have a meaningful opportunity to respond to the solicitation.
2. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goal will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units (for example smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. Selection of portions of work are required to at least equal the goal for DBE utilization specified in this contract.

3. Soliciting interest as early in the process as practicable to allow DBEs a meaningful opportunity to respond to the solicitation and submit a timely offer for the subcontract. Bidders should provide written notification at least ten (10) calendar days prior to the opening of a bid, soliciting DBE interest in participating on the contract as a subcontractor, supplier, manufacturer, or distributor for specific items of work.
4. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist DBEs in responding to solicitation.
5. Negotiating in good faith with interested DBEs. It is the Bidders responsibility to make a portion of the work available to the DBE subcontractors, and to select those portions of work or material needs consistent with the available DBE subcontractors, suppliers, manufacturers, or distributors so as to facilitate DBE participation. Evidence of such negotiation includes:
 - a. Description of the means by which firms were solicited (i.e. by telephone, e-mail, written notice, advertisement).
 - b. The names, addresses, telephone numbers of DBE's contacted, the dates of initial contact; and whether initial solicitations of interest were followed-up by contacting the DBEs to determine with certainty whether the DBEs were interested.
 - c. A description of the information provided to DBE firms regarding the plans, specifications, and estimated quantities for portions of the work to be performed.
 - d. A statement of why additional agreements with DBE's were not reached in order to meet the projected goal.
 - e. Listing of each DBE contacted but not contracted and the reasons for not entering a contract.
6. Making efforts to assist DBEs that need assistance in obtaining bonding, insurance, or lines of credit required by the contractor.
7. Detailing the reasons why certified DBEs are not available or not interested.
8. Effectively using the services of available minority/women community organizations; minority/women contractor's groups; local, state and federal business assistance offices; and other organizations that provide assistance in recruitment and placement of DBEs.

The following are examples of actions that may not be used as justification by the contractor for failure to meet DBE contract goals:

1. Failure to contract with a DBE solely because the DBE was unable to provide performance and/or payment bonds.
2. Rejection of a DBE bid or quotation based on price alone.
3. Rejection of a DBE because of its union or non-union status.
4. Failure to contract with a DBE because the contractor normally would perform all or most of the work in the contract.

DelDOT may contact rejected DBEs as part of its investigation. However, nothing listed here shall be construed to require the Bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.

In determining whether a Bidder has made good faith efforts, DelDOT will review the documented efforts of the contractor and will review the performance, taking into account the ability of other Bidders in meeting the contract DBE goal.

DelDOT will evaluate the submittal to determine whether in fact good faith efforts have been demonstrated consistent with the specifications and the Federal regulations, 49 CFR 26, Appendix A.

Administrative Reconsideration Procedures (49 CFR §26.53(d)):

Within five (5) calendar days of being informed by DelDOT that it has not documented sufficient good faith efforts, a Bidder may request an administrative reconsideration. The Bidder should make this request in writing to the attention of DelDOT's Director of Finance, 800 Bay Road, Dover, Delaware 19901, and email a copy to dot-ask@delaware.gov. The Reconsideration Official will not have played any role in the original determination that the Bidder did not document sufficient good faith efforts.

As part of this reconsideration, the Bidder will have the opportunity to provide written documentation or argument concerning the issue of whether it made adequate good faith efforts toward meeting the assigned DBE goal. The Bidder will have the opportunity to meet in person with the Reconsideration Official, to discuss the issue of whether it met the goal or made adequate good faith efforts to do so. The final decision made by the Reconsideration Official will be communicated to the Bidder in writing. In accordance with 49 CFR §26.53(d)(5) the result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

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**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) Use of Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention*. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents*. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers*. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements*. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures*. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits*. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio*. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates*. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity*. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. **Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

CARGO PREFERENCE ACT

Requirements in the Federal-aid Highway Program

(a) Agreement Clauses. “Use of United States-flag vessels:

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(b) Contractor and Subcontractor Clauses. “Use of United States-flag vessels: The contractor agrees—

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

NOTE:

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

* * * * *

APPENDICES TO THE TITLE VI ASSURANCE

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, (Federal Highway Administration (FHWA), or Federal Transit Authority (FTA)), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts and the Regulations, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA), as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) may determine to be appropriate, including, but not limited to:
 - withholding payments to the contractor under the contract until the contractor complies;
 - and/or cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through five in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts and the Regulations. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration (FHWA), or Federal Transit Authority (FTA) may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX E

During the performance of this contract, the contractor or consultant, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970,(42 U.S.C. § 460 I), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);

Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part27;

The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);

Airport and Airway Improvement Act of 1982,(49 USC §471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);

The Civil Rights Restoration Act of 1987,(PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964,The Age Discrimination Act of 1975and Section 504 of the Rehabilitation Act of 1973,by expanding the defrnition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 - 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;

The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. S 41123) (prohibits discrimination on the basis of race, color, national origin, and sex);

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs; policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

* * * * *

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 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 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."

PREVAILING WAGE REQUIREMENTS

It is DelDOT's understanding that the Davis-Bacon Act is not a preemptive statute in the broad sense, and does not preempt or displace State of Delaware prevailing wage requirements.

When a contract for a project contains both Federal Davis-Bacon and State of Delaware prevailing wage standards because of concurrent Federal and State coverage, the employer's minimum wage obligations are determined by whichever standards are higher.

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 15, 2024

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

CERTIFIED: 8/12/2024

BY: [Signature] 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: T202230001 Georgetown To Lewes Trail, Fisher Road To Airport Road, Sussex County



IRONWORKER, REINFORCING.....	\$ 49.64	0.00
LABORER: Common or General.....	\$ 34.94	5.91
LABORER: Mason Tender - Cement/Concrete.....	\$ 43.30	2.06
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 30.52	13.47
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 34.34	14.93
OPERATOR: Bulldozer.....	\$ 35.18	14.27
OPERATOR: Loader.....	\$ 38.36	4.31
OPERATOR: Mechanic.....	\$ 28.11	11.18
OPERATOR: Milling Machine.....	\$ 34.01	12.25
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 35.07	17.17
TRAFFIC CONTROL: Flagger.....	\$ 40.33	0.00
TRUCK DRIVER: Dump Truck.....	\$ 28.07	7.38

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.
=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at ww.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number,

005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination.

5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
 - * a survey underlying a wage determination
 - * a Wage and Hour Division letter setting forth a position on a wage determination matter
 - * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board).

Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

SPECIAL PROVISIONS

S.P. Code	SPECIAL PROVISION DESCRIPTION
202560-20	CONTAMINATED MATERIAL
401502-20	ASPHALT CEMENT COST ADJUSTMENT
401580-20	RIDE QUALITY OF BITUMINOUS PAVEMENT
401699-20	QUALITY CONTROL/QUALITY ASSURANCE OF BITUMINOUS CONCRETE
602505-20	PERSONNEL SAFETY GRATE
605503-20	HELICAL PILES
621500-20	TEMPORARY TIMBER MAT
701510-20	CURB/SIDEWALK OPENING
705511-20	BIKE RACKS
711500-20	ADJUST AND REPAIR EXISTING SANITARY MANHOLE
720556-20	BOLLARD
727508-20	DECORATIVE CANTILEVER SLIDE GATE
763501-20	CONSTRUCTION ENGINEERING
763502-20	SITE FURNISHING
763503-20	TRAINEE
763520-20	ELECTRONIC TICKETING
763598-20	FIELD OFFICE, SPECIAL I
801501-20	MAINTENANCE OF RAILROAD TRAFFIC
911508-20	PRE-EMERGENT HERBICIDE APPLICATION

202560 - CONTAMINATED MATERIAL

Description.

Contaminated Material is defined as solids or liquids (including soil) potentially contaminated with a hazardous substance, requiring special handling and/or disposal per state or federal regulation.

Overview of Costs.

A. Potential contaminated solids may affect Contractor's costs as follows:

1. Additional cost to normal excavation requirements:

- a. Cost of 8-mil plastic for placement under and over solid contaminated material.
- b. Maintaining the segregated contaminated solids staging area.

2. Reduced cost to normal excavation requirements:

- a. Not required to, or charged for, transport of contaminated material from site.
- b. Not required to, or charged for, disposal of contaminated soil.

B. Potential contaminated liquids will affect Contractor's cost as follows:

1. Additional cost to normal excavation requirements:

- a. None.

2. Reduced cost to normal excavation requirements:

- a. Not required to, or charged for, transport of contaminated material from site.
- b. Not required to, or charged for, disposal of contaminated liquids.

Construction Methods and Responsibilities.

A. Contractor's responsibilities for potential contaminated solids:

B. The Contractor shall provide the appropriate equipment and personnel necessary to excavate, stage, and load contaminated material for off-site disposal. If required for the site, the work will be performed in accordance with the procedures described in the site specific "Contaminated Materials Management Plan".

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- C. The Contractor shall immediately be responsible for notifying the Department's HAZMAT Program Manager's office (302-894-6308) for scheduling coordination with the environmental representative. Submit a proposed schedule of work for review and approval prior to any commencement of work on this site. Coordinate with all utility companies prior to excavation. The Department's environmental representative shall be present during all phases of work associated with the excavation and removal of potentially contaminated material.
- D. The Contractor shall excavate material in accordance with the project specifications. Separate the contaminated soil from the clean soil as designated by the Department. The contaminated soil shall be placed in the designated staging area. The staging area shall be lined with 8-mil plastic and a berm constructed to minimize storm water run-off. Cover the staging area with 8-mil plastic at the end of each work day. Ensure the cover is secured so the contaminated soil remains entirely under the plastic. The Contractor shall load contaminated soil onto trucks arranged by the Department's environmental representative when the contaminated soil is shipped off-site to a licensed disposal/treatment facility. Backfill and compact the excavated area(s) in accordance with the contract.

Department's Responsibilities:

- A. The Department is responsible for providing:
1. the environmental representative;
 2. the transportation of contaminated material for disposal; and
 3. the disposal of contaminated material.
- B. When issued, the "Contaminated Materials Management Plan" will identify;
1. the procedures to be used to excavate and stage the contaminated material;
 2. the licensed treatment/disposal facility where the Department will ship the contaminated material;
 3. the method the material will be transported to the treatment/disposal facility; and
 4. any additional health and safety requirements for site personnel.
- C. The Department's environmental representative will be responsible to:
1. conduct a health and safety briefing prior to commencement of activities on the sites to ensure an understanding of all applicable standards, guidelines, laws, procedures, etc. consistent with successful completion of this type of activity;

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2. potentially conduct air monitoring during any excavation activities at the site to identify and mitigate fire, explosion and vapor hazards;
3. coordinate the excavation activities with all applicable local, state and federal environmental regulatory agencies;
4. oversee the excavation, removal and treatment/disposal of the material in the designated area(s) and perform such tests as field screening for soil contamination utilizing vapor monitoring techniques and collect soil samples for laboratory analysis to meet the requirements of the treatment/disposal facility, DNREC and/or the USEPA;
5. subcontract with the disposal/treatment facility to provide transportation and disposal/treatment of all contaminated materials to be removed as part of the project;
6. measure the quantity of the contaminated material removed, via certified scale weights, for the Department's records.

Method of Measurement:

The Department will not measure contaminated material. It will be included in the excavation quantity.

Basis of Payment:

- A. The Department will make no additional payment for the handling of contaminated material. Price and payment will be included in the excavation items and will constitute full compensation for:
 1. excavation and backfilling;
 2. constructing and maintaining soil staging area;
 3. placement of contaminated soil;
 4. providing plastic and daily covering; and
 5. loading of contaminated soil for removing;
- B. The Department reserves the right to delete this contingency item from the contract. The Contractor shall make no claims for additional compensation because of deletion of the item.
- C. No payment will be made for any work done without a Department approved Inspector or environmental representative present to provide environmental oversight.

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D. The Department will pay for the following:

1. the environmental representative;
2. the transportation of contaminated material for disposal; and
3. the disposal of contaminated material.

4/28/2021

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:

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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

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.

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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.

$$\text{Estimated Tonnage} = [L * W * T] * \text{Rice} * 62.4 \text{ (lb/ft}^3\text{)} * (0.0005 \text{ tons} / 12 \text{ in.})$$

Where: L = Length Segment (ft.)

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W = Lane Width (ft.)

T = Plan Thickness (in.)

$$IRI \text{ Incentive / Disincentive} = \text{Estimated Tonnage} * UP * (PA-100)/100$$

Where: UP = Contract Unit Price (Dollars)

PA = Pay Adjustment (Table A)

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

$$(\sum IRI \text{ adj for each section}) - \text{Total Deviations} * 200$$

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%

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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 – 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

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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 subplot basis. The size for each subplot shall be 100 to 500 tons and testing for the sub lots will be completed on a daily basis. For each subplot, 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 Gyrotory 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

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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

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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):

$$QU = ((JMF \text{ target}) + (\text{single test tolerance}) - (\text{mean value})) / (\text{standard deviation}).$$
3. For each parameter, calculate the Lower Quality Index (QL):

$$QL = ((\text{mean value}) - (JMF \text{ target}) + (\text{single test tolerance})) / (\text{standard deviation}).$$
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 "n" 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

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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

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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							
PU or PL	QU and QL for An@ Samples						
	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 subplot tests values, to the nearest 0.001 unit. Obtain the Theoretical maximum Specific Gravity values from the corresponding laboratory subplot tests.
2. Calculate the Degree of Compaction:
Degree of Compaction =
 $((\text{Core Bulk Specific Gravity}) / (\text{Theoretical Maximum Specific Gravity})) \times 100\%$ 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 – 96.74	-5
96.0	95.75 – 96.25	-3
95.5	95.26 – 95.74	-2
95.0	94.75 – 95.25	0
94.5	94.26 – 94.74	0
94.0	93.75 – 94.25	1
93.5	93.26 – 93.74	3
93.0	92.75 – 93.25	5
92.5	92.26 – 92.74	3
92.0	91.75 – 92.25	0
91.5	91.26 – 91.74	0
91.0	90.75 – 91.25	-5
90.5	90.26 – 90.74	-15
90.0	89.75 – 90.25	-20
89.5	89.26 – 89.74	-25
89.0	88.75 – 89.25	-30
88.5	88.26 – 88.74	-50
=<88.0	=<88.25	-100*

* or remove and replace it at Engineer's discretion

Table 5A: Compaction Price Adjustment Other¹ Locations		
Degree of Compaction	Range	Pay Adjustment Factor (%)
>= 97.0	>= 96.75	-100*
96.5	96.26 – 96.74	-5
96.0	95.75 – 96.25	-3
95.5	95.26 – 95.74	-2
95.0	94.75 – 95.25	0
94.5	94.26 – 94.74	0
94.0	93.75 – 94.25	0

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93.5	93.26 – 93.74	1
93.0	92.75 – 93.25	3
92.5	92.26 – 92.74	1
92.0	91.75 – 92.25	0
91.5	91.26 – 91.74	0
91.0	90.75 – 91.25	0
90.5	90.26 – 90.74	0
90.0	89.75 – 90.25	0
89.5	89.26 – 89.74	0
89.0	88.75 – 89.25	-1
88.5	88.26 – 88.74	-3
88.0	87.75 – 88.25	-5
87.5	87.26 – 87.74	-10
87.0	86.75 – 87.25	-15
86.5	86.26 – 86.74	-20
86.0	85.75 – 86.25	-25
85.5	85.26 – 85.74	-30
85.0	84.75 – 85.25	-40
84.5	84.26 – 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

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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:

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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
			<u>1.62</u>

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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
			<u>2.52</u>

11/3/20

602505 - PERSONNEL SAFETY GRATE

DESCRIPTION:

This work consists of providing all materials, fabricating, delivering and constructing personnel safety grates for pipe inlets.

MATERIALS:

- | | |
|---------------------------|--------------------------------|
| A. Grout | Section 1047 |
| B. Welding | AASHTO / AWS D1.1 Welding Code |
| C. Castings | Section 1039.7 |
| D. Hardware and fasteners | Section 1039.10 |

CONSTRUCTION METHODS:

- A. Prepare and submit working drawing in accordance with section 105.4.
- B. Construct personnel safety grates for pipe inlets in accordance with the Standard Construction Details and as shown on the plans.

METHOD OF MEASUREMENT:

The Department will measure as each the number of personnel safety grates installed and accepted.

BASIS OF PAYMENT:

- A. The Department will pay for personnel safety grates at the contract unit price per each placed and accepted. Price and payment will constitute full compensation for:
 - 1. preparing submittals and working drawings;
 - 2. providing and placing all materials;
 - 3. fabricating;
 - 4. disposal;
 - 5. pad lock;
 - 6. bar reinforcement;
 - 7. coating; and
 - 8. all labor, equipment, and other incidentals.

10/25/22

605503 - HELICAL PILES

Description:

Provide all materials, install, and load test helical piles. Include geotechnical analysis and a complete design of the helical piles.

Design:

- A. Design the helical piles using a Professional Engineer licensed in the State of Delaware with experience in the design of at least 3 successfully completed helical pile foundation projects over the past 5 years. The helical pile design engineer may be an employee of the Contractor or a separate Consultant designer.
- B. Select the helical pile type, size, installation means and methods, and means and methods of connecting the helical pile caps to the supported structure. Perform all geotechnical and structural design. Design the helical screw piles for bearing and uplift capacities per the service and factored loads provided in the contract documents. Determine lateral capacities of the helical piles based on the tolerable differential movements between adjacent piers producing stresses on the structural timber or selected equivalent structural component below the allowable material structural strength indicated on the Plans. Anchorage details of the helical piles into the abutment footing and stems shall be determined based on the loads specified on the plans.
- C. Submit any changes to the pile layout as a result of unexpected outcomes from the load tests to the engineer for review. No additional time or compensation will be allowed.
- D. Additional soil borings, additional test piles, or other in-situ tests may be conducted as part of the construction, if the Contractor deems that more soil information is required.

Submittals:

At least 7 calendar days prior to the contract preconstruction meeting, submit verification of the requirements and documents listed in Section A below to the engineer for review and approval:

- A. Qualifications:
 - 1. Submit the completed project reference list and personnel. Include in the project reference list a brief project description with the owner's name and current phone number. Identify the helical pile design engineer, supervising geotechnical project engineer, personnel who will install the

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helical piles and the on-site foremen to be assigned to the project as part of the personnel list. The personnel list shall also contain a summary of each individual's experience and be complete for the engineer to determine whether each individual satisfies the following required qualifications:

- a. Experience in the installation of helical piles and having successfully constructed at least 3 projects involving the installation of helical piles in the last 5 years. The projects should involve the installation and load testing of helical piles of similar scope, foundation loads, access, and subsurface conditions to this project.
- b. Provide a geotechnical project engineer to supervise the work with experience on at least 3 projects of similar scope to this project completed over the past 5 years. Do not use a manufacturer's representative to satisfy the supervising engineer requirement of this Section.
- c. A manufacturer's representative is required to be on-site during installation of at least the first helical pile. The on-site foreman, who will be in charge full-time of all operations, shall also have experience on at least 3 projects over the past 5 years installing helical pile foundations.

2. Acquire the services of an Independent Testing Agency (ITA) to manage the load testing of helical piles. The ITA shall provide a full-time field engineer to install instrumentation onto the pile foundation, record all load test data, and submit a summary report signed and sealed by an engineer approved in accordance with these specifications for each load test of the obtained load test results. The ITA's field engineer or supervisor shall be a Professional Engineer licensed in the State of Delaware, with demonstrated record of experience in foundation load testing with at least 3 successfully completed helical pile foundation load tests in the past 5 years. Submit a copy of the ITA engineers' resumes to the engineer for review and approval.

3. The engineer will determine the Contractor's acceptability within 15 calendar days after receipt of a complete submission. Additional time required due to incomplete or unacceptable submittals will not be cause for a time extension or impact or delay claims.

B. Submit to the engineer the following documents for review and acceptance within 30 days of the commencement of helical pile construction:

1. Design/Working Drawing Submittals

- a. Submit complete design calculations and Working Drawings for review and approval. Have the drawings and calculations signed and sealed by the Contractor's helical pile designer, who shall be a Professional Engineer licensed in the State of Delaware.
- b. The design calculations shall include, but not be limited to, the following:
 - i. Written summary describing the overall helical pile design;
 - ii. Applicable code requirements and design references;
 - iii. Helical pile critical design cross section including the provision for corrosion, soil strata, installation/construction loads and torque, and magnitude and direction of design applied loadings;

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- iv. Design criteria including soil shear strength, unit weight, and helical pile strength;
 - v. Design calculation sheets with the project number, helical pile structural location, designation, date of preparation, initials of designer and checker and page number at the top of each page;
 - vi. Design notes including an explanation of any symbols and computer programs used in the design. If a computer program is used for design, provide a hand calculation of at least one computer-based calculation for verification;
 - vii. Clear identification of the estimated installation torque and available options to revise pile configuration if this installation torque is not achieved;
 - viii. All required structural calculations including critical design of typical sections, abutment anchorage details and pile to cap connections. Details currently shown on the Plans are considered conceptual and shall be evaluated by the Contractor based on their pile system and modified accordingly. Submit all details for approval. No additional compensation shall be given to modify the current details.
- c. Provide shop drawings indicating product components and accessories and indicating the following:
- i. Helical pile number;
 - ii. Location and pattern by assigned identification number;
 - iii. Helical pile design load;
 - iv. Type and size of central steel shaft;
 - v. Helix configuration (number, vertical spacing and diameter of helix plates);
 - vi. Required minimum effective installation torque;
 - vii. Displacement plates/centralizers and their location;
 - viii. Minimum overall length;
 - ix. Inclination of helical piles;
 - x. Grout column length;
 - xi. Minimum cased length;
 - xii. Grout column diameter(s);
 - xiii. Cutoff elevation;
 - xiv. Detail showing the helical screw pile attachment;

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- d. Plan showing pile layout per foundation and identifying the planned pile proof load test sites per specified load testing frequency;
- e. General notes for constructing and installing the helical pile foundation including construction sequencing;
- f. Contingency plans (or plan of action) should shallow refusal be encountered.

2. Construction Submittal

Prepare and submit for review and approval a detailed step-by-step description of the proposed helical pile installation and load testing procedure, including personnel and equipment to assure quality control. Indicate on the working drawings a step-by-step procedure in sufficient detail to allow the Engineer to monitor construction quality. Also include signed and sealed design calculations by a Professional Engineer licensed in the State of Delaware for the pile and reaction frame system.

3. Quality Assurance/Control Submittals

- a. Certified test reports shown in compliance with specified characteristics and physical properties;
- b. Manufacturer's certificate that products meet or exceed specified requirements;
- c. Mill test reports;
- d. Accurately record the type, size and actual locations of helical piles, torque installation records on all helical piles and torque monitoring calibration data;
- e. Grout mix design and minimum compressive strength;
- f. Pile load testing procedures;
- g. Calibration reports for load test cell jack;
- h. Proposed construction QA/QC methods;
- i. Durability data for review;

C. During construction, provide copies of all inspection logs of each installed helical pile within 24 hours of completion. Records should include the following as a minimum:

- 1. Pile designation number and date of installation;
- 2. Top of pile elevation immediately after installation;
- 3. Tip elevation as installed;

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4. Spacing between helixes;
5. Deviation from specified working drawing location in inches to the nearest ½ inch;
6. Pile length immediately after installation to the nearest 0.1 foot;
7. Description of any deviations from the design location and batter or from the approved pile design and installation procedures, and description of any unusual occurrences during installation and grouting after notifying the engineer;
8. Grout volumes;
9. Inclinations of the battered pile installed;

D. Within 30 calendar days after completion of all required work for installing the proposed helical piles, submit the following documents:

1. Signed and sealed as-built drawings showing the locations and top and bottom elevations of all installed helical piles. Plans shall be signed and sealed by the helical pile design engineer and supervising project engineer, and shall be accompanied with a certification letter, also signed and sealed by the 2 engineers indicated herein, that all helical piles were installed in accordance with the approved working drawing and design calculations. The installation record of each helical pile shall be appended to the certification letter.
2. Signed and sealed load test reports.
3. Revised design calculations signed by the approved licensed Professional Engineer for all design changes made during the construction, installation, and load testing of the helical piles.

Materials:

A. All materials for this work shall be new and without defect. Remove defective materials from the jobsite. Hot dip galvanize all helical piles for corrosion protection.

1. Central Steel Shaft – consists of lead sections, helical extensions, and plain extensions. Hot rolled round or round cornered-square pipe meeting dimensional and workmanship requirements of ASTM A29. The bar shall either be modified medium carbon steel grade with torsional strength rating of 5,500 ft-lb and a minimum yield strength of 70 ksi or high-strength low-alloy, low to medium carbon steel grade with a minimum torsional strength rating of 15,000 ft-lb and minimum yield strength of 90 ksi.

2. Helix Bearing Plate - Hot rolled carbon steel sheet, strip or plate formed on matching metal dies to true helical shape and uniform pitch. Bearing plate material shall conform to the following ASTM specifications:

- a. ASTM A572 or ASTM A1018 or ASTM A656 with minimum yield strength of 50 ksi. Plate thickness 3/8 inch;
- b. ASTM A656 or ASTM A1018 with minimum yield strength of 80 ksi. Plate thickness 3/8 inch;

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- c. ASTM S656 or ASTM A1018 with minimum yield strength of 80 ksi. Plate thickness $\frac{1}{2}$ inch;
 - d. ASTM A36 or ASTM A572, ASTM A1018, or ASTM A656 depending on helix diameter, per the minimum yield strength requirement cited above. Plate thickness $\frac{3}{8}$ inch;
3. Bolts - The size and shape of bolts used to connect the central steel shaft section together shall conform to the following ASTM specification.
- a. $\frac{3}{4}$ inch diameter bolt per ASTM A320, Grade L7;
 - b. $\frac{7}{8}$ inch diameter bolt per ASTM A193, Grade B7;
 - c. 1 $\frac{1}{8}$ inch diameter bolt per ASTM A193, Grade B7;
 - d. 1 $\frac{1}{4}$ inch diameter bolt per ASTM A 193, Grade B7;
 - e. $\frac{3}{4}$ inch diameter bolts (3 per coupling) per SAE J429, Grade 5;
4. Form couplings as an integral part of the plain and helical extension material.
5. Fabricate displacement plates from steel or other material that will not affect the structural integrity of the central steel shaft of grout column. Wood may not be used.
6. Structural steel plates and shafts for helical pile top attachments - conform to ASTM A36 or ASTM A572, Grade 50 (Grade 345).
7. Steel casing - conform to requirements of ASTM A53 Type E or S Grade B, ASTM A252 Grade 2, ASTM A500 Grade B or ASTM A618.
8. For PVC casing relied upon for grout containment, fissured or void filled solid, or as a bond breaker, the pipe - conform to ASTM D 1784, ASTM D 1785, and ASTM D3034.
9. Accessories:
- a. Cement for helical pile grout - Portland cement conforming to ASTM C150 Type I or Type II.
 - b. Admixtures and Chemical Admixtures - conform to the requirements of ASTM C494. Do not use accelerators. Chemical admixtures - compatible with the central steel and mixed in accordance with the grout manufacturer's recommendations.
 - c. Mineral Admixtures - conform to the requirements of ASTM C618 (coal fly ash) or C 1240 (silica fume).
 - d. Mineral Admixtures - compatible with the central steel shaft and mixed in accordance with the grout manufacturer's recommendations.
 - e. Mixes - the grout mix shall be designed by the Contractor and submitted for approval. The grout mix shall be proportioned to produce a hardened grout which will achieve the design compressive strength of 4,000 psi within 28 calendar days.

Construction:

Perform the following minimum procedures:

A. Work shall not start, nor materials ordered, until the engineer's approval of the Contractor's experience qualifications is given. The engineer may suspend work if the Contractor uses non-approved personnel. If work is suspended, the Contractor shall be fully liable for all resulting costs and no adjustment in contract time or cost will result from the suspension.

B. Visit the site to assess the site geometry, equipment access conditions, and location of existing structures and utilities. The Contractor is responsible for field location and verifying the locations of all utilities shown on the plans prior to starting work.

C. Handle and carefully transport all helical pile materials to prevent any deformation or damage. Care should be taken to prevent the accumulation of dirt, mud, or other foreign matter on the steel materials. Completely remove such accumulation prior to installation.

D. General:

1. Comply with the instructions and recommendations of the helical pile manufacturer.
2. Verify that site conditions are acceptable and installation of helical piles are in accordance with all pertinent codes and regulations regarding such items and underground obstructions, right-of-way limitations, utilities, etc.
3. The helical pile installation techniques shall be consistent with the geotechnical, logistical, environmental and load carrying conditions of the project.
4. Provide rotary type, hydraulic power-driven installation equipment having a torque motor with clockwise and counterclockwise rotation capabilities.
5. Utilize a torque motor capable of continuous adjustment to number of revolutions per minute (RPM) during installation and with a torque capacity 15 percent greater than the torsional strength rating of the central steel shaft to be installed. Do not use percussion drilling equipment.
6. Utilize equipment capable of applying adequate downward pressure and torque simultaneously to suit project soil conditions and load requirements and capable of continuous position adjustment to maintain proper helical pile adjustment.
7. Use a calibrated torque indicator during helical pile installation. The torque indicator may be an integral part of the installation equipment or mounted in-line with the installation tooling.

E. Installation:

1. Install all necessary mechanisms to connect helical piles to the supported structure. Install each helical pile at the location and to the elevation, minimum length, and installation torque indicative of the design allowable capacities shown on the Plans or as established by the Contractor and approved by the engineer.
2. Engage and advance helical piles into soil in a smooth, continuous manner at a rate of 5 – 20 RPM. Provide extension sections to obtain the required minimum overall length and installation torque as shown on the shop drawings. Connect sections together using coupling bolt and nut tightened to torque of at least 40 ft-lb or as specified in approved shop drawings.
3. Apply sufficient down pressure to uniformly advance the helical pile sections approximately 3 inches per revolution. Adjust rate of rotation and magnitude of down pressure for different soil conditions and depths.
4. Position a lead displacement plate of appropriate diameter on the central steel shaft at the location necessary to install the grout column as shown on the shop drawings. Do not position the lead displacement plate closer than 12 inches above the top helix plate. Position additional lead displacement plates or extension displacement plates no more than 7 feet apart. Displacement plates shall permit the free flow of grout without misalignment of the central steel shaft.
5. Place grout to achieve minimum grout column length as shown on the approved shop drawings. Allow grout to attain the minimum design strength prior to loading pile.
6. If required, install casing in segments corresponding to the section of the central steel shaft. Advance casing into the soil by direct connection with lead and extension displacement plates. Fill each casing segment with grout immediately after placement.
7. Satisfy the minimum installation torque and minimum overall length criteria as shown on the shop drawings prior to terminating the helical piles. The torque, as measured during the installation, shall not exceed the torsional strength rating of the central steel shaft.
8. Install the uppermost helix at least three diameters into competent load bearing soil and below the corresponding elevation shown on the Plans.
9. Center-to-center spacing of adjacent piles shall be greater than or equal to five diameters of largest helix. When only a shorter spacing can be achieved, the helical pile designer shall evaluate the group effects. Submit the calculations to the engineer for review.
10. If a helical pile is refused or deflected by a subsurface obstruction, terminate the installation, immediately notify the engineer, and indicate the contingency plan that will be implemented prior to proceeding with construction. A letter or email of concurrence for the implementation of the contingency by both the design engineer and supervising project engineer shall accompany the contingency plan. Install the helical piles to the following allowable tolerances:
 - a. Centerline of pile - not more than 3 inches from the indicated plan location;

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- b. Pile plumbness - within 2 degrees of design alignment;
- c. Top elevation of pile - within 2 inches of design vertical elevation.

F. Load Testing:

1. Perform helical pile load test for representative helical piles with design loads greater than or equal to 40 kips. Load test at least one helical anchor in each structure and each area of uniform subsoil conditions.
2. Perform the compression test in accordance with ASTM D-1143 and the tension test per ASTM D3689. Conduct each load test, evaluate the results, review the results with the engineer and receive acceptance by the engineer prior to installing additional production piles.
3. Submit to the engineer the details of the proposed load test set-up and all equipment and measurement systems to be used for the test; and obtain approval from the engineer before any load test is conducted. All load tests shall be observed by the engineer or authorized representative.
4. Apply the load to the pile core by means of a single hydraulic jack. Construct the apparatus for applying the loads to the test pile so that the loads are applied axially to the pile. Calibrate the test load jacking system including the hydraulic jack and pressure gauge prior to the test so that the load applied is controlled to within 5 percent of the total applied load. Submit calibration reports to the engineer prior to the start of the pile load test. Perform calibration tests within 90 calendar days of the date of the load test.
5. Provide all necessary materials and labor for construction of a settlement measuring system for each test, as follows:
 - a. Provide an independent reference beam for load test measurement apparatus support. The reference beam must be independently supported with supports firmly embedded in the ground at a distance at least 8 feet from the test pile and reaction piles. One end of the reference beam must be free to move as the length of the beam changes with temperature variations.
 - b. Mount a minimum of three dial gauges equidistant from the center of the test pile and at 120-degree intervals around the pile. Attach the dial gauges rigidly to the reference beam. Align gauge stems vertically and provide smooth horizontal bearing surfaces for the gauge stems. Dial gauges shall have at least 2-inch travel and shall read to 0.001 inch.
 - c. Establish a reference point on the test pile and at each end or the center of the reference beam. The reference points shall consist of graduated scales machine-divided into 0.02-inch and attached securely to the pile and reference beam. The reference points shall be monitored using survey equipment during the pile load test.
 - d. Protect the settlement measuring system against rain, wind, frost, and any other disturbances that could affect the reliability of the settlement observations. Provide sun shading for the measuring system for the duration of the test and for a minimum of 1-hour prior to the start of the test.

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6. Submit a detailed load test site report including pile location, type, diameter, length, settlement readings, and all other pertinent data as indicated in ASTM D-1143 for compression load tests or ASTM D3689 for tensile load tests. Accompany each load test report with a signed and sealed certification letter by the supervising geotechnical project engineer or ITA's engineer responsible for the load tests (when requested by the Department). Include the following information as a minimum:

- a. Name of project and Contractor;
- b. Name of Contractor's supervisor during installation;
- c. Name of third-party test agency, if applicable;
- d. Date, time, and duration of test;
- e. Location of helical piles assigned identification number;
- f. Type of test (tension or compression);
- g. Description of calibrated testing equipment and test setup;
- h. Actual helical pile type and configuration, including lead section, number and type of extension sections;
- i. Steps and duration of each load increment;
- j. Cumulative pile-head movement at each load step;
- k. Comments pertaining to interruptions, obstructions or other relevant information;

Method of Measurement:

The Department will measure helical piles as the number of each pile acceptably installed.

Basis of Payment:

A. The Department will pay for helical piles at the contract unit price per Each. Price and payment constitute full compensation for:

1. Designing and fabricating,
2. furnishing and installing,
3. load testing with measuring system,

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4. performing additional borings, additional test piles, and/or other in-situ tests,
5. providing a Professional Design Engineer, Independent Testing Agency, Geotechnical Project Engineer, and helical pile manufacturer's representative
6. removing any defective materials from the jobsite,
7. providing all submittals and reports and,
8. for all materials, labor, tools, equipment, and incidentals necessary to complete the installation in conformance with the plans and Specifications.

B. The Department will make no separate payment for salvaging, abandoning, or removing and disposing of obstructions. Costs for this work shall be incidental to the installation of the item.

2/27/2024

621500- TEMPORARY TIMBER MAT

Description.

The work consists of placing temporary timber mats for heavy equipment to access areas with wetlands, high water table and poor soils.

Materials.

- A. Wood Section 1041
 - 1. Temporary timber mats must have a strength and grade adequate to support anticipated vehicular or equipment loads. Environmentally safe preservative treatments for wet conditions must be applied to the matting and be preapproved by the Department.
- B. Hardware Section 1041.5

Construction.

- A. Submit Shop Drawings and design calculations to the Department for approval.
 - 1. Indicate the layout, size of members, arrangement of members and the construction methods at least 2-weeks prior to initiating construction.
 - 2. A temporary timber mat system shown on the plans will be used for conceptual purposes only.
 - 3. Design the temporary timber mat system utilized for the construction for the anticipated construction loads, anchorage, resistance to high water flows, and compatibility with the environment.
 - 4. Placement of stone within the wetland area is not permitted.
- B. Inspect the temporary timber matting periodically and replace any damaged or deteriorated components as directed by the engineer.
- C. Retrieve any lost mats and repair any damage caused by naturally occurring weather events.

Method of Measurement.

The Department will not measure temporary timber mats.

Basis of Payment.

- A. The Department will pay for temporary timber mat system as a lump sum item. Payment will constitute full compensation for:

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1. Providing and placing all materials;
 2. submittals and Shop Drawings;
 3. installation and removal; and
 4. incidentals required to complete the Work.
- B. The Department will grant no additional compensation for repairing any portion of the system damaged during naturally occurring weather events or usage.

10/18/23

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

705511 - BIKE RACKS

Description.

This work consists of providing and installing bike racks of the type indicated on the contract plans.

Materials.

- A. Bike Racks
 - 1. Stainless Steel.
 - 2. Imbedded or surface mounted anchorage.
 - 3. Inverted U-Shape, meeting the requirements of the Contract, or equal.

Construction.

- A. Submittals.
 - 1. Product Data
 - a. Submit manufacturer's product data, storage and handling requirements and recommendations, installation methods, and available colors.
 - 2. Shop Drawings
 - a. Submit manufacturer's shop drawings, including plans and elevations, indicating overall dimensions.
 - 3. Samples
 - a. Submit manufacturer's samples of materials, finishes, and colors.
 - 4. Warranty
 - a. Manufacturer's standard warranty.
- B. Install bike rack in accordance with the manufacturer's specifications and as shown in the Contract.

Method of Measurement.

- A. The Department will measure the quantity of bike racks as the number of bike racks installed and accepted.

Basis of Payment.

- A. The Department will pay for bike racks at the contract unit price per each. Price and payment will constitute full compensation for providing and placing all materials and any incidentals required to complete the Work.

- B. The Department will pay for:
 - 1. PCC Sidewalk in accordance with Section 705.

10/18/23

711500 - ADJUST AND REPAIR EXISTING SANITARY MANHOLE

DESCRIPTION:

Adjust and repair existing sanitary manholes.

MATERIALS:

A. Manhole frames, lids, and castings	Section 711
B. PCC, Class B	Section 1022
C. Bar Reinforcement	Section 611

CONSTRUCTION METHODS:

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 sanitary manholes on a per each basis.

BASIS OF PAYMENT:

The Department will pay for each sanitary manhole acceptably adjusted and repaired. Price and payment will constitute full compensation for all materials, labor, tools, equipment, and incidentals.

5/19/21

720556 - BOLLARD

Description:

This work consists of providing and installing a bollard with removable shell.

Materials:

- A. Bollard.
 - 1. Shell
 - a. 4 3/4-inch O.D. polyethylene thermoplastic bollard cover.
 - b. Yellow in color.
 - 2. PVC Pipe
 - a. 4-inch, Schedule 40
 - 3. In-ground hardware
 - a. 5-inch, schedule 40 galvanized steel pipe.
 - b. 3/4-inchx13-inch rebar, welded horizontally to the base of the steel pipe.
- B. PCC, Class B Section 1022
- C. Stone, Delaware No. 57 Section 1004

Construction:

- A. Submit bollard cover's manufacturer's information to the engineer for approval prior to ordering materials.
- B. Weld rebar to the 5-inch steel pipe as shown in the Plans.
- C. Excavate a minimum 18-inch diameter hole, to the depth required to construct the footer, and in accordance with Section 202.
- D. Place 6-inch bed of Delaware No. 57 stone. Tamp stone to provide a suitable foundation.
- E. Place steel pipe with welded rebar vertically in the excavation and pour PCC, ensuring it is maintained plum and is fully encased by PCC.
- F. Finish and cure the PCC.
- G. Install PCV bollard in accordance with the Plans.
- H. Backfill the area around the bollard if necessary.
- I. Install the bollard shell.

Method of Measurement:

- A. The Department will measure bollards as the number of Each bollard installed and accepted.

Basis of Payment:

- A. The Department will pay the quantity of bollards at the contract unit price per each. Price and payment constitute full compensation for:
 - 1. Providing and placing all materials;
 - 2. providing and placing the sonotube, housing, and hardware;
 - 3. supplying, placing, finishing, and curing PCC;
 - 4. backfill and backfilling;
 - 5. disposal of excess excavation and materials; and
 - 6. all incidentals required to complete the Work.

2/27/2024

727508 – DECORATIVE CANTILEVER SLIDE GATE

Description:

This work consists of providing, transporting, installing, Cantilever Slide Gate, Motors, Electronics, and other accessories required to install the gate.

Materials:

A. HORIZONTAL-SLIDE GATES

1. General: Comply with ASTM F 1184 for gate posts and single sliding gate types. Provide automated vehicular gates that comply with ASTM F 2200.
 - a. Classification: Type II Cantilever Slide, Class I with external roller assemblies.
 - i. Gate Frame Width and Height: As indicated.
2. Pipe and Tubing:
 - a. Aluminum: Comply with ASTM B 429.
 - b. Gate Posts: Comply with ASTM F 1184. Provide round tubular aluminum or rectangular tubular aluminum posts.
 - c. Gate Frames and Bracing: Round tubular aluminum or Rectangular tubular aluminum.
3. Frame Corner Construction: Welded.
4. Finish:
 - a. Per Section 1061.7 of Standard Specifications
5. Hardware:
 - a. Latches permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.
 - b. Hangers, roller assemblies, and stops fabricated from mill-finished Grade 319 aluminum-alloy casting with stainless-steel fasteners.

B. FITTINGS

1. General: Comply with ASTM F 626.
2. Finish:
 - a. Per Section 1061.7 of Standard Specifications

C. GATE OPERATORS

1. General: Provide factory-assembled automatic operating system designed for gate size, type, weight, and operation frequency. Provide operation control system with characteristics suitable for Project conditions, with remote-control stations, safety devices, and weatherproof enclosures; coordinate electrical requirements as required.
 - a. Provide operator designed so motor may be removed without disturbing limit-switch adjustment and without affecting auxiliary emergency operator.
 - b. Provide operator with UL -approved components.
 - c. Provide electronic components with built-in troubleshooting diagnostic feature.
 - d. Provide unit designed and wired for both right-hand/left-hand opening, permitting universal installation.
2. Comply with NFPA '70.
3. UL Standard: Fabricate and label gate operators to comply with UL 325, Class IV.
4. Motor Characteristics: Sufficient to start, accelerate, and operate connected loads at designated speeds, within installed environment, with indicated operating sequence, and without exceeding nameplate rating or considering service factor. Comply with NEMA MG 1 and the following:
 - a. Voltage: 115 VAC, single phase, 60 Hz.
 - b. Horsepower: 1/2 HP, continuous duty.
 - c. Enclosure: Totally enclosed, weatherproof, lockable.
 - d. Duty: Continuous duty at ambient temperature of 105 deg F and at altitude of 3300 feet above sea level.
 - e. Service Factor: 1.0 for totally enclosed motors.
5. Gate Operators: Equipment base/pad mounted and as follows:
 - a. Mechanical Slide Gate Operators:
 - i. Duty: Heavy duty, commercial/industrial.
 - ii. Gate Speed: Minimum 55 feet per minute (11 inches per second).
 - iii. Maximum Gate Weight: 1000 lb.
 - iv. Frequency of Use: 20 cycles per hour.
 - v. Operating Type: Roller chain with manual release.
 - vi. Drive Type: V-belt and chain-and-sprocket reducers, roller-chain drive.
 - vii. Inherent Obstruction Sensing: Force adjustments for both open and closed directions.

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- viii. External Obstruction Sensing: Input connections provided for external contact and non-contact sensors, such as photo eyes and edge devices.
6. Controls: Electric controls separated from gate and motor and drive mechanism. Provide the following control device(s):
- a. Heavy-Duty, surface mountable, momentary contact, 3-Button (“Open”/”Close”/”Stop”) controllers compatible with gate operators. One such controller shall be provided for each gate operator. “Stop” button shall be red in color and different from the colors of the “Open” and “Close” buttons. Buttons shall be labeled “Open”, “Close”, “Stop”.
7. Limit Switches: Adjustable switches, interlocked with motor controls and set to automatically stop gate at fully retracted and fully extended positions.
- a. Type: Integral fail-safe release, allowing gate to be pushed open without mechanical devices, keys, cranks, or special knowledge.
8. Operating Features:
- a. LED Indicators for operator input, status and diagnostics.
 - b. Control Inputs: Allow the connection of optional external devices like loop detectors, access control systems and radio receivers.
 - c. Digital Logic Control: Supports long-distance control wiring runs of over 1,000 feet.
 - d. Surge and Spike Protection: Circuitry designed to provide protection from external spikes and surges.
 - e. Warning Device: UL 325 compliant entrapment warning alarm with the ability to be set for pre-operation warning; provides 3-second warning prior to and during gate movement.
 - f. External Manual Disconnect: Allows gate to be opened in the event of a power loss without removing the operator cover.
 - g. Limit Settings
 - h. Lockable Access Door: Weather-resistant
 - i. System Integration: With controlling circuit board capable of accepting any type of input from external keypad devices for complete working system.
 - j. Open Override Circuit: Designed to override closing commands.
 - k. Reversal Time Delay: Designed to protect gate system from shock load on reversal in both directions.
 - l. Maximum Run Timer: Designed to prevent damage to gate system by shutting down system if normal time to open gate is exceeded.

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9. Accessories:

- a. Warning Module: Audio and light alarm sounding three to five seconds in advance of gate operation and continuing until gate stops moving; compliant with the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines.
- b. Instructional, Safety, and Warning Labels and Signs: According to UL 325, Class IV.
- c. Equipment Bases/Pads: Cast-in-place concrete, Class B, 3500 psi. Drawings, dimensioned and reinforced according to gate-operator component manufacturer's written instructions and as indicated on Drawings.

D. GROUT AND ANCHORING CEMENT

1. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout, recommended in writing by manufacturer, for exterior applications.
2. Erosion-Resistant Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with potable water at project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended in writing by manufacturer, for exterior applications.

E. FENCE GROUNDING

1. Conductors: Bare solid wire for No 6 AWG and smaller; stranded wire for No. 4 AWG and larger.
 - a. Material above Finished Grade: Copper
 - b. Material on or below Finished Grade: Copper
 - c. Bonding Jumpers: Braided copper tape, 1 inch wide, woven of No, 30 AWG bare copper wire, terminated with copper ferrules.
2. Connectors and Grounding Rods: Comply with UL 467.
 - a. Connectors for Below-Grade Use: Exothermic welded type.
 - b. Grounding Rods: Copper-clad steel, 3/4 by 96 inches

Action Submittals:

- A. Product Data: For each type of product indicated. Include construction details material descriptions, dimensions of individual components and profiles, and finishes gates.
1. Gate posts, rails, and fittings.
 2. Gates and hardware.
 3. Gate operator controls, Entrapment Protection, and Gate Operating instructions.

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4. Motors: Show nameplate data, ratings, characteristics, and mounting arrangements.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work, show accessories, hardware, gate operation, and operational clearances.
1. Gate Operator: Show locations and details for installing operator components, motor starter disconnect switch, limit switches and controls. Indicate motor size, electrical characteristics, drive arrangement, mounting, and grounding provisions. All electrical equipment shall be in NEMA 3R enclosure.
 2. Wiring Diagrams: For power and control wiring.

Information Submittals:

- A. Qualification Data: For qualified factory-authorized service representative.
- B. Product Certificates: For each type of operator and gate, from manufacturer. Provide independent certification as to the use of a documented welding procedure specification and procedure qualification record to insure conformance to the AWS D1.2 Welding Code.
- C. Product Test Reports: For framing strength according to ASTM F 1043.
- D. Field quality-control reports.
- E. Warranty: Sample of warranty.

Closeout Submittals:

- A. Operation and Maintenance Data: For the following to include in emergency, operation, and maintenance manuals:
 1. Gate hardware.
 2. Gate operator.

Project Conditions:

- A. Field Measurements: Verify layout information for chain-link gates shown on drawings in relation to property survey and existing structures, Verify dimensions by field measurements.

Warranty:

- A. Special Warranty: Manufacturer's standard form in which installer agrees to repair or replace, components of gates that fail in materials or workmanship within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Faulty operation of gate operators and controls.
 - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 2. Warranty Period: Minimum Two years (cantilevered slide gate and operator) and Five (truck bracket and roller assembly) from date of Substantial Completion.

Construction:

A. EXAMINATION

1. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance of the work.
 - a. Do not begin installation before final grading is completed unless otherwise permitted by the engineer.
2. Proceed with installation only after unsatisfactory conditions have been corrected.

B. PREPARATION

1. Stake locations of gates and terminal posts. Do not exceed intervals of 50 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

C. GATE INSTALLATION

1. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach hardware using tamper-resistant or concealed means, Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

D. GATE OPERATOR INSTALLATION

1. General: Install gate operators according to manufacturer's written instructions, aligned and true to fence line and grade.
2. Excavation for Support Posts and Equipment Bases/Pads: Hand-excavate holes for bases/pads, in firm, undisturbed soil to dimensions and depths and at locations as required by gate-operator component manufacturer's written instructions and as indicated.
3. Comply with NFPA 70 and manufacturer's written instructions for grounding of electric-powered motors, controls, and other devices.

E. GATE CONTROLS

1. Install conduits to the panel as shown on the plans.

F. FIELD QUALITY CONTROL

1. Grounding-Resistance Testing: Engage a qualified testing agency to perform tests and inspections.
2. Acceptance Terms: Test each system function, supply all equipment necessary for system adjustment and testing.

G. ADJUSTING

1. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.
2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
3. Lubricate hardware, gate operator, and other moving parts.

H. DEMONSTRATION

1. Engage a factory-authorized service representative to train the Department personnel to adjust, operate, and maintain chain-link fences and gates.

Method of Measurement:

The Department will measure cantilever slide gate as the actual number installed and accepted.

Basis of Payment:

- A. The Department will pay for cantilever slide gate at the contract unit price per each. Price and payment will constitute full compensation for:
1. Providing and installing all materials;
 2. providing all submittals;
 3. testing;
 4. following all applicable requirements and regulations; and
 5. all incidentals required to complete the work.

02/2/2024

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.

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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.

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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.

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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

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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.

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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. DeIDOT 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

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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 work day 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

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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.

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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.

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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;

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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

763502 - SITE FURNISHINGS

PEDESTRIAN/BICYCLE TRAFFIC COUNTER

Description:

This work consists of providing and installing the site furnishings as indicated on the plans and as directed by the engineer.

The Pedestrian/Bicycle Traffic Counter Station consists of the installation of a counter for collecting and storing bicycle volume counts at locations as shown on the plans.

Materials:

A. Submittals.

1. Submit manufacturer's shop drawings and specifications for approval prior to manufacture and/or ordering.

B. The counter shall be:

1. Weatherproof and shall operate in a temperature range of -40 degrees F to 140 degrees F.
2. Operated with batteries that can operate continuously for 5-years. If such extended life batteries are not available, then batteries that have a life of no less than 1-year shall be used. The detection range of the counter shall be a minimum of 15-feet in length.
3. Capable of recording at varying speeds, including those exceeding 20 miles per hour.
4. Approximately 6 ½" in diameter x 2 ½" tall and weighing approximately 2 pounds.

C. Counter data collection requirements:

1. Collect and store bicycle volume counts by direction for a minimum of 1-year to an accuracy of plus or minus 5 percent.
2. Reported in a minimum of 15-minute increments on a 24-hour clock and also be capable of storing hourly and daily volumes.
3. Display the volume count data and the location of the retrieval device.

D. The data shall be stored in a format such that is compatible with the Chaparral TRADAS data collecting and operating system and can be directly exported to Microsoft Excel. The field collection device shall provide a way to download data (such as a direct modem link between the counter and a networked personal computer) such that data can be accessed at any time from multiple computers without having to visit the site location.

E. The counter shall be installed in the ground in a weathertight handhole with minimum dimensions of 12" x 8" x 8".

F. Loop sealant in accordance with the manufacturer's recommendations and curing temperatures.

Construction:

- A. Contact the engineer a minimum of 2-weeks prior to the installation of the traffic counter, to coordinate the date and location that the counter will be installed. Unless directed otherwise by the engineer, in writing, ensure a manufacturer representative is on site to ensure proper installation.
- B. Loop sealant shall not coagulate prior to installation and shall be spread out across the loop installation area with a sealant spreader tool such that the sealant is flush with the roadway or trail surface.
- C. Locate and test for all buried and overhead utilities, which may interfere with the planned location of the counter. Contact "Miss Utility" for location of member utilities at least 3 working days prior to any excavation, not including the day of actual notice.
- D. Locate nonmember utilities, such as storm drains and swales. Bring all utility conflicts encountered with the proposed installation to the attention of the engineer.
- E. Loops shall be sealed with a two-part self-curing, self-bonding weatherproof epoxy approved for sealing loops. Loops shall be 6-feet by 6-feet. Once the installation is complete, the contractor is required to test the loops to determine if the loop devices are detecting properly. This may require the contractor have a bicycle onsite for testing purposes.
- F. The location of the counters shall be as close to the locations shown on the plans. However, actual locations may vary such that the counters are not located near bodies of water, near overhead power lines, or are pointing towards vehicular traffic. Exact locations shall be as approved by the engineer. Once the placement is determined, the loop cutting lines will be drawn on the roadway or trail surface with chalk or a visible marker so that the contractor can then follow the saw cutting lines during installation. The saw cut for the loops shall be made 3/8-inch wide and 3 1/2-inches deep. The saw slot shall be as straight as possible and shall not vary more than 1/2-inch when checked with a straightedge. No more than one set of loop lead wires shall be placed in one saw slot. The number of turns of paired loop wire shall be in accordance with manufacturer's recommendations. Saw cuts shall be hydro-blasted with a mixture of water and air and then blown free of water and debris with compressed air, using a large capacity air compressor of at least 150-CFM. The cuts shall be dry prior to placement of loop wire.
- G. The piezo lead wire shall be placed in the saw slot with a blunt nonmetallic object. 1/2-inch backer rod shall be installed to ensure the wire does not float to the surface during grouting. Backer rod shall be installed in 4 to 6-inch pieces with 1 to 2-foot gaps in-between, to ensure the sealant will come in contact with the piezo lead wire. One continuous piece of backer rod will not be allowed.
- H. Loop lead wires from pavement edge to handhole shall be enclosed in 3/4-inch PVC conduit or 3/4-inch rubber hose to protect wire from abrasion. Loop lead in pairs from pavement edge to handhole, shall be symmetrically twisted 5 turns per 1-foot (or what the counter manufacturer recommends).

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Handholes shall contain a minimum of 3-feet of loop lead wire for splicing. All loop and loop leads shall be clearly labeled in all handholes.

- I. Follow all environmental regulations and best management practices during the saw cutting and installation of the loops.
- J. Perform a complete test of the counter to ensure that it is functioning correctly and is fully operational. Nonfunctioning systems will be repaired or replaced as directed by the engineer.

Methods of Measurement:

The Department will not measure site furnishings.

Basis of Payment:

- A. The Department will pay for site furnishings at the contract lump sum price. Price and payment will constitute full compensation for:
 - 1. providing and installing all materials;
 - 2. testing of the system;
 - 3. repair or replacement of non-functioning system
 - 4. all incidentals required to complete the Work.
- B. The Department will make no extra payment for any damages or penalties associated with failing to meet environmental requirements.

02/23/2024

763503 - TRAINEE

DESCRIPTION:

The work will consist of providing training in the construction crafts in accordance with the requirements stated in the General Notices of this proposal under the Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246).

METHOD OF MEASUREMENT:

The quantity of trainee hours will be measured as the actual number of hours the trainee is actively engaged in construction activities.

BASIS OF PAYMENT:

The Department will pay for trainee at a fixed rate of \$0.80 per hour toward the hourly rate.

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:

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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

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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

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.

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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

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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.

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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

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	<p>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.</p>
Keys	<p>Minimum of 2 complete sets; give to the engineer's representative.</p>
Lighting	<p>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.</p>
Microwave	<p>New; minimum 900 watts.</p>
Other Material Requirements	<p>Free of asbestos and all other hazardous materials.</p>
Parking Spaces	<p>12 functional spaces, each measuring 9'-0" x 20'-0".</p>
Refrigerator	<p>New; minimum 2.6 cubic ft.</p>
Smoke Detector	<p>New; minimum 1 working combination smoke and carbon dioxide detector per room.</p>
Water Cooler	<p>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.</p>

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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. installation and maintenance of stabilized construction entrance;
 3. submittals and all drawings;
 4. removal and restoration of each field office area, entrance, and adjacent parking area to original conditions;
 5. removing hazardous material and/or underground tanks;
 6. obtaining licenses and permits; and
 7. all incidentals required for the Work.

01/31/2024

801501 - MAINTENANCE OF RAILROAD TRAFFIC

Delmarva Central Railroad (DCR)

AUTHORITY OF DCR ENGINEER

- A. The Delmarva Central Railroad, hereinafter referred to as “DCR”, Representative shall have final authority in all matters affecting the safe maintenance of DCR operations and DCR property, and their approval shall be obtained by the Agency or its Contractor for methods of construction to avoid interference with DCR operations and DCR property and all other matters contemplated by the Agreement and these Special Provisions.

DEFINITIONS

- A. For the purpose of this Contract, the following terms, names, titles, and/or abbreviations refer to the following:
1. The terms Railroad and DCR shall mean Delmarva Central Railroad.
 2. The terms DelDOT, State, Department, Agency, Owner of Contract shall mean the Delaware Department of Transportation.
 3. The term Contractor shall mean the successful awarded Contractor which the Delaware Department of Transportation has entered into an agreement and/or contract with to improve, add to, or otherwise use property(s), facilities, or improvements of the Railroad.
 4. The terms Agreement or Construction Agreement shall mean the fully executed and signed “Construction Agreement” between DCR and DelDOT. The Agreement shall list the explanations of the approval process, conduct of work, cost and reimbursement procedures, payment terms, etc. relative to this Contract. The Agreement may contain attached “Exhibits,” as necessary, to fully explain all requirements relating to this work.

INTERFERENCE WITH DCR OPERATIONS

- A. Agency or its Contractor shall arrange and conduct their work so that there will be no interference with DCR operations, including train, signal, telephone and telegraphic services, or damage to DCR’s property, or to poles, wires, and other facilities of tenants on DCR’s Property or right-of-way. Agency or its Contractor shall store materials so as to prevent trespassers from causing damage to trains, or DCR Property. Whenever work is likely to affect the operations or safety of trains, Contractor shall first submit the method of doing such Work to the DCR Representative for approval, but such approval shall not relieve Contractor from liability in connection with such Work.
- B. If conditions arising from or in connection with the Project require that immediate and unusual provisions be made to protect train operation or DCR’s property, Agency or its Contractor shall make such provision. If the DCR Representative determines that such provision is insufficient, DCR may, at the expense of Contractor, require or provide such provision as may be deemed necessary, or cause the Work to cease immediately.

NOTICE OF STARTING WORK

- A. Agency or its Contractor shall not commence any work on DCR Property or rights-of-way until they have complied with the following conditions:
1. Agency or Contractor shall notify DCR in writing of the date that they intend to commence Work on the Project. DCR must receive such notice at least 10 business days in advance of the date Agency or its Contractor proposes to begin Work on DCR property. The notice must refer to fully executed and signed "Construction Agreement" (see A.4 under Definitions) by date. If flagging service is required, such notice shall be submitted at least 30 business days in advance of the date scheduled to commence the Work.
 2. Agency or Contractor shall obtain authorization from DCR Representative to begin Work on DCR property, such authorization to include an outline of specific conditions with which they must comply.
 3. Agency or Contractor shall obtain from DCR the names, addresses, and telephone numbers of DCR's personnel who must receive notice under provisions in the Agreement. Where more than one individual is designated, Agency or Contractor shall specify the area of responsibility of each individual.

WORK FOR THE BENEFIT OF THE CONTRACTOR

- A. Agency does not anticipate or show on the Plans any temporary or permanent changes to wire lines or other facilities (other than third party fiber optic cable transmission systems) on DCR property that are considered necessary to the Work. If any such changes are, or become, necessary in the opinion of DCR or Agency, such changes will be covered by appropriate revisions to the Plans and by preparation of a force account estimate. Either DCR or Agency may initiate such force account estimate, but both DCR and Agency must approve estimate. Agency or Contractor shall be responsible for arranging for the relocation of the third-party fiber optic cable transmission systems, at no cost or expense to DCR.
- B. Should Agency or Contractor desire any changes in addition to the above, they shall make separate arrangements with DCR for such changes to be accomplished at the Agency or Contractor's expense.

HAUL ACROSS RAILROAD

- A. If Agency or Contractor desires access across DCR property or tracks at other than an existing and open public road crossing in or adjacent to construction of the Project, the Agency or Contractor must first obtain the permission of DCR and shall execute a license agreement or right of entry satisfactory to DCR, wherein Agency or Contractor agrees to bear all cost and liabilities related to such access.
- B. Agency and Contractor shall not cross DCR's property and tracks with their vehicles or equipment of any kind or character, except at such crossings as may be permitted pursuant to this section.

COOPERATION AND DELAYS

- A. Agency or Contractor shall arrange a schedule with DCR for accomplishing stage construction involving work by DCR. In arranging their schedule, Agency or Contractor shall ascertain, from DCR, the lead time required for assembling crews and materials and shall make due allowance therefore.
- B. Agency or Contractor may not charge any costs or submit any claims against DCR for hindrance or delay caused by railroad traffic; work done by DCR or other delay incident to or necessary for safe maintenance of railroad traffic; or for any delays due to compliance with these Special Provisions.
- C. Agency and Contractor shall cooperate with others participating in the construction of the Project to the end that all work may be carried on to the best advantage.
- D. Agency and Contractor understand and agree that DCR does not assume any responsibility for work performed by others in connection of the Project. Agency and Contractor further understand and agree that they shall have no claim whatsoever against DCR for any inconvenience, delay or additional cost incurred by Agency or Contractor on account of operations by others.

STORAGE OF MATERIALS EQUIPMENT

- A. Agency and Contractor shall not store their materials or equipment on DCR's property or where they may potentially interfere with DCR's operations, unless Agency or Contractor has received DCR Representative's prior written permission. Agency and Contractor understand and agree that DCR will not be liable for any damage to such materials and equipment from any cause and that DCR may move, or require Agency or Contractor to move, such material and equipment at Agency's or Contractor's sole expense. To minimize the possibility of damage to the railroad tracks resulting from the unauthorized use of equipment, Contractor shall immobilize all grading or other construction equipment that is left parked near the tracks unattended by watchmen to the extent feasible so that it cannot be moved by unauthorized persons.

CONSTRUCTION PROCEDURES

- A. General
 - 1. DCR will inspect and approve all construction work on DCR property.
 - 2. Contractor shall ensure all construction work on DCR property is in accord with DCR's written outline of specific conditions and with these Special Provisions.
 - 3. Contractor shall observe the terms and rules and in accord with any other instruction furnished by DCR or DCR's Representative.
- B. Blasting
 - 1. Agency or Contractor shall obtain DCR Representative's and Agency Representative's prior written approval for use of explosives on or adjacent to DCR property. If permission for use of explosives is granted, Agency or Contractor must comply with the following:

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- a. Contractor shall perform blasting with light charges under the direct supervision of a responsible officer or employee of Agency or Contractor.
 - b. Contractor shall not use electric donating because of the possibility of premature explosion resulting from operation of two-way train radios.
 - c. Contractor shall not perform blasting without the presence of an authorized representative of DCR. Contractor shall give at least 30 days' advance notice to the DCR Representative and for any flagging that DCR may require.
 - d. Agency or Contractor must have at the Project site adequate equipment, labor, and materials, and allow sufficient time, to
 - i. Clean up (at Contractor's expense) debris resulting from blasting without any delay to trains; and
 - ii. Correct (at Contractor's expense) any track misalignment or other damage to DCR's property resulting from the blasting; as directed by DCR Representative, without delay to trains. If Contractor's actions result in delay of any trains the Contractor shall bear the entire cost thereof.
 - e. Contractor shall not store explosives on DCR property.
2. DCR Representative will
- a. Determine the approximate location of trains and advise Agency and Contractor of the appropriate amount of time available for the blasting operation and clean-up.
 - b. Have the authority to order discontinuance of blasting if, in their opinion, blasting is too hazardous or is not in accord with these Special Provisions.

MAINTENANCE OF DITCHES ADJACENT TO DCR TRACKS

- A. Contractor shall maintain all ditches and drainage structures free of silt or other obstruction that may result from their operations. Contractor shall provide erosion control measures during construction and use methods that accord with applicable state standard specifications for road and bridge construction, including either:
- 1. Silt Fence;
 - 2. Hay or straw barrier;
 - 3. Berm or temporary ditches;
 - 4. Sediment basin;
 - 5. Aggregate checks; and
 - 6. Channel lining.

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Contractor shall perform all such maintenance and repair of damages due to Contractor's operations at Contractor's expense.

FLAGGING/INSPECTION SERVICE

- A. DCR has sole authority to determine the need for flagging required to protect its operations and property. In general, DCR will require flagging protection whenever Agency or Contractor or their equipment are, or are likely to be, working within 30 feet of live track or other track clearances specified by DCR, or over tracks.
- B. Agency shall reimburse DCR directly for all costs of flagging that is required on account of construction within DCR property shown in the Plans, or that is covered by an approved plan revision, supplemental agreement or change order.
- C. Agency or Contractor shall give a minimum of 30 days' advance notice to DCR Representative for anticipated need for flagging service. Contractor shall undertake no work until the flag person(s) is/are at the job site. If it is necessary for DCR to advertise a flagging job for bid, it may take up to 90 days to obtain this service and DCR shall not be liable for the cost of delays attributable to obtaining such service.
- D. DCR shall have the right to assign an individual to the site of the Project to perform inspection service whenever, in the opinion of DCR Representative, such inspection may be necessary. Agency shall reimburse DCR for the costs incurred by DCR for such inspection service. Inspection service shall not relieve Contractor from liability for their Work.
- E. DCR shall render invoices for, and Agency shall pay for, the actual pay rate of the flag persons and inspectors used, plus standard additives, whether that amount is above or below the rate provided in the Estimate. If the rate of pay that is to be used for inspector or flagging service is changed before the work is started or during the progress of the work, whether by law or agreement between DCR and its employees, or if the tax rates on labor are changed, DCR will render and Agency will pay bills using the new rates. Agency and Contractor shall perform their operations that require flagging protection or inspection service in such a manner and sequence that the cost of such will be as economical as possible.

UTILITY FACILITIES ON DCR PROPERTY

- A. Agency shall arrange, upon approval from DCR, to have any utility facilities on or over DCR Property changed as may be necessary to provide clearances for the proposed trackage.

CLEAN-UP

- A. Contractor, upon completion of the Project, shall remove from DCR's Property any temporary grade crossings, any temporary erosion control measures used to control drainage, all machinery, equipment, surplus materials, falsework, rubbish, or temporary buildings belonging to Agency or Contractor. Contractor, upon completion of the Project, shall leave DCR Property in neat condition, satisfactory to DCR Representative.

FAILURE TO COMPLY

- A. If Agency or Contractor violate or fail to comply with any of the requirement of the Special Provisions, (a) DCR may require Agency and/or Contractor to vacate DCR Property; and (b) DCR may withhold monies due Agency and/or Contractor; and (c) DCR may require Agency to withhold monies due Contractor; and (d) DCR may cure such failure and the Agency and/or Contractor shall reimburse DCR for the cost of curing such failure.

INSURANCE REQUIREMENTS

A. Insurance Policies:

1. Contractor, if and to the extent that they are performing work on or about DCR's property, shall procure and maintain the following insurance policies:
 - a. Commercial General Liability coverage at their sole cost and expense with limits of not less than \$5,000,000 in combined single limits for bodily injury and/or property damage per occurrence, and such policies shall name DCR and Carload Express, Inc. as an additional named insured.
 - b. Statutory Worker's Compensation and Employers Liability Insurance with limits of not less than \$1,000,000 which insurance must contain a waiver of subrogation against DCR and its affiliates.
 - c. Commercial Automobile Liability Insurance with limits of not less than \$500,000 combined single limit for bodily injury and/or property damage per occurrence. Such policies shall name DCR as an additional insured.
 - d. Railroad Protective Liability Insurance with limits of not less than \$5,000,000 combined single limits for bodily injury and/or property damage per occurrence and an aggregate annual limit of \$10,000,000. The insurance shall satisfy the following additional requirements:
 - i. The insurer must be financially stable and rated B+ or better in the Best's Insurance Reports.
 - ii. The Railroad Protective Liability Insurance Policy must be on the ISO/RIMA Form of Railroad Protective Liability Insurance – Insurance Services Office (ISO) Form CG 00 35.
 - iii. DCR and Carload Express, Inc. must be named as the insured on the Railroad Protective Liability Insurance Policy.
 - iv. Name and Address of Contractor and Agency must be shown on the Declarations page.

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- v. Description of operations must appear on the Declarations page and must match the Project description, including project or contract identification numbers.
- vi. Authorized endorsements must include the Pollution Exclusion Amendment – CG 28 31, unless using form CG 00 35 version 96 and later.
- vii. Authorized endorsements may include:
 - 1) Broad Form Nuclear Exclusion – IL 00 21.
 - 2) 30-day Advance Notice of Non-renewal or Cancellation.
 - 3) Required State Cancellation Endorsement.
 - 4) Quick Reference or Index – CL/IL 240.
- viii. Authorized endorsements may not include:
 - 1) A Pollution Exclusion Endorsement except CG 28 31.
 - 2) A Punitive or Exemplary Damages Exclusion.
 - 3) A “Common Policy Conditions” Endorsement.
 - 4) Any endorsement that is not named in this Section under A.d.6 or A.d.7 above.
 - 5) Policies that contain any type of deductible.
- ix. Such additional or different insurance as DCR may require.

ADDITIONAL TERMS

- A. Contractor must submit their original insurance policies and 2 copies and all notices and correspondence regarding the insurance policies to:

**Carload Express, Inc.
Bldg. 1, Suite 100
519 Cedar Way
Oakmont, PA 15139
Phone: 412-426-2800
Fax: 412-426-4000**

- B. Neither Contractor and/or Agency may begin work on the Project until they have received DCR’s written approval of the required insurance policies.

REQUIRED INSURANCE FOR OTHER ACTIVITIES

- A. DCR requires different insurance requirements for other activities along its Right-of-Way, including, but not limited to, passenger train operations. Contractor shall obtain any information in response to other required insurance directly from DCR if any additional insurance shall be required including, but not limited to, type, endorsements, limits, additional named insured, etc.

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BASIS OF PAYMENT

- A. Agency will pay for the item at the contract unit price per Lump Sum bid for "Maintenance of Railroad Traffic", which price and payment shall constitute full compensation for submission of drawings and procedures to DCR; for all incidental costs imposed by DCR on Contractor in accordance with the terms and condition set in these Specifications; and meeting Railroad Protective Liability Insurance requirements as described herein.
- B. Agency will pay for the Railroad Protective Liability Insurance requirements and all other required Insurance not normally held in force by Contractor under this Item. Agency considers all other Insurances (such as, but not limited to, auto, etc.) required for this Contract to be incidental to the Contract.

NOTES:

- A. As stated above in this specification, Agency will pay DCR directly for protective services required for this project. Should deviation from the sequence of construction plan by Contractor result in additional costs for protective services than the method and sequence of construction originally shown in the Plans, then Agency will deduct that additional cost from monies due Contractor unless prior permission was obtained from Agency to revise the original method.
- B. Should DCR find Contractor is or has been working within distances that violate existing restrictions or instructions given by DCR's authorized representative or performs work that has not been scheduled with DCR's authorized representative, additional flagging services may be required until that phase or stage of the project has been completed or until such time as Contractor follows accepted and approved prior instructions. If DCR imposes such additional flagging requirements because of Contractor's negligence or willful disregard of Railroad requirements, Contractor will be held responsible for the extra cost involved.
- C. Agency will record time charges for flagging services provided, but not needed for legitimate pursuit of construction and other flagging charges due to the willful disregard of Railroad requirements or restrictions and deduct these charges from monies due Contractor.

5/25/2022

911508 - PRE-EMERGENT HERBICIDE APPLICATION

Description:

This work consists of providing and applying a pre-emergent herbicide to soil surfaces.

Materials:

Submit herbicide to be used for treatment, including product labels and materials safety data sheets, to be approved by the engineer at least 2 working days prior to application.

Construction Methods:

Apply the pre-emergent herbicide to the soil surface in accordance with the Manufacturer's recommendations.

Method of Measurement:

The Department will not measure the quantity of pre-emergent herbicide application.

Basis of Payment:

The Department will pay for pre-emergent herbicide application at the contract lump sum price. Price and payment will constitute full compensation for providing all materials, applying the herbicide, and for all incidentals required to complete the Work.

2/22/2024

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

NICOLE MAJESKI
SECRETARY

UTILITY STATEMENT
July 1, 2024
STATE CONTRACT # T202230001
Project ID #22-45678
F.A.P # CMAQ-2022(26)
Georgetown to Lewes Trail,
Fisher Road to Airport Road
Sussex County

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

ARTESIAN WATER COMPANY, INC. (WATER & SEWER)
CHESAPEAKE UTILITIES CORPORATION
COMCAST CABLE COMMUNICATIONS, INC
CROWN CASTLE (FIBERTECH)
DELMARVA POWER SOUTH - DISTRIBUTION
DELMARVA POWER - TELECOM
DELMARVA POWER - TRANSMISSION
EASTERN SHORE NATURAL GAS CO.
SPORTS AT THE BEACH – PRIVATE SANITARY SEWER
SUSSEX COUNTY ENGINEERING - SANITARY SEWER
TOWN OF GEORGETOWN – SANITARY SEWER
VERIZON DELAWARE, LLC - COMMUNICATIONS

The following is a breakdown of existing utilities, adjustments, and proposed utility relocations to be performed by the respective owners, but shall not be limited to narrative described as warranted:

ARTESIAN WATER COMPANY, INC.

Water:

Artesian owns and maintains a 12” water main along the west side of **Fisher Road** throughout the project limits. It crosses under the proposed path near Station 1645+40 +/-.

Artesian does not anticipate any conflicts with their water main.

Sewer:

Artesian owns and maintains a 12" force main that runs parallel but outside of the right of way, in a 15' wide utility easement, from Station 1397+10 +/- RT to 1418+10 RT where it crosses **Stiener Road** near Station 33+95 and then turns to the north and crosses the proposed path under the railroad near Station 1418+45 +/- and travels north along the east side of Stiener Road to outside the project limits.

Artesian owns and maintains a 12" PVC force main along the west side of **Harbeson Road** throughout the project limits. The main crosses, in a casing, under the proposed path near Station 1567+81 +/-.

Artesian owns and maintains a 6" force main along the west side of **Fisher Road** throughout the project limits. It crosses under the proposed path near Station 1645+50 +/-.

Artesian does not anticipate any conflicts with their mains but a sewer manhole at the following location will be adjusted vertically by the State's Contractor to meet the final paving grade.

Sewer MH **Harbeson Road** Station 14+25 RT

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

CHESAPEAKE UTILITIES CORPORATION

Chesapeake Utilities maintains 4" and 8" underground facilities along the west side of **Harbeson Road** and a gas valve near Station 14+53 RT +/- . The existing facilities include a main along the west side of Harbeson Road coming from north of the project limits and stubbing north of the proposed trail.

Chesapeake Utilities does not anticipate any conflicts with this project.

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

CHPK Standard Utility Statement Notes for DelDOT:

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.

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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.

CROWN CASTLE (FIBERTECH)

Crown castle maintains aerial facilities on the existing poles along the west side of **Airport Road**, throughout the project limits. Crown Castle maintains aerial facilities on the existing poles along the east side of **Harbeson Road**, throughout the project limits.

Crown Castle maintains and owns underground communication facilities along the west side of **Fisher Road** throughout the project limits.

Crown Castle does not anticipate any conflicts with this project.

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.

COMCAST CABLE COMMUNICATIONS:

Comcast owns and maintains underground coaxial, aerial and fiber optic facilities at various locations within these project limits.

COMCAST AERIAL:

Comcast has aerial facilities along the east side of **Gravel Hill Road** from utility pole #98/9 to utility pole #6742 69/55053 to utility pole #55051/05690 and continuous running along the east side of Gravel Hill Road through the project limits.

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Comcast has aerial coaxial and fiber facilities along the east side of **Harbeson Road** from Pole # 55918/06022 at Station 16+98 +/- RT and extends to pole # 55913/06036 to pole # 55911/06043 and extends north to beyond the project limits and crosses over Harbeson Road at Station 14+58 +/- and extends underground and extends west along the north side of the proposed path outside of the project limits. Comcast has a service line from pole # 55918/06022 that extends over Habron Road near Station 16+80 +/-.

COMCAST UNDERGROUND:

Comcast owns and maintains an underground coaxial along the east side of **Airport Road** and crosses under the proposed path at Station 100+90 +/- and extends to pole #55913/.

Comcast has underground coaxial along the west side of **Gravel Hill Road** from the north and travels down the west side to a crossing under Gravel Hill Road at Station 13+15 +/- where it travels along the south side of the proposed path to pedestals. Comcast has underground coaxial that extends along the east side of Gravel Hill Road to beyond the project limits.

Comcast has existing underground coaxial that extends under the railroad near Station 1474+87 +/- to an existing pedestal and extends to pole #55051/05690.

Comcast has existing underground service and fiber from pole # 55911/66043. It extends along the east side of **Harbeson Road** and then turns to run east near Station 15+00 +/- Rt and extends along the north side outside of the LOC to the cell tower near Station 1574+40 +/- LT.

COMCAST RELOCATION WORK:

On **Gravel Hill Road**, Comcast proposes to remove their existing underground and place a new pedestal at Station 1474+95 +/- RT and underground facilities to pole #6742 69/55053.

Comcast Cable will complete the work during Phase 1 of construction. They will require an estimated two (2) calendar days to complete the proposed relocation work following a minimum of thirty (30) calendar days advance notice by the contractor, staking of rights of way, back of curb and trail is completed.

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.

DELMARVA POWER SOUTH – ELECTRIC DISTRIBUTION:

Delmarva owns and maintains aerial and underground service throughout the project limits.

Underground Facilities:

Delmarva maintains underground facilities from pole # 55606/06031, pole # 55913/06036, and pole # 55911/06043 along **Harbeson Road**. Delmarva maintains underground facilities along the west side of **Fisher Road** from Station 52+00 to the north.

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Delmarva Power provides service to the Railroad, at the following locations:

The Railroad owns and maintains underground service from the pole at Station 1324+47 LT under the path and extends under **Airport Road** to the Railroad signal and cabinet at Station 1325+10 RT and 1325+40 RT. The Railroad will adjust the electric service as required for the crossing signals. No new permits will be required, and the service points will be from the same location.

The Railroad owns and maintains underground services from Pole 54230/05363 and the railroad signal at Station 1386+77 on the west side of **Park Avenue** and extends under the road near Station 27+35 and extends north under Station 1387+65 to the Railroad signal at Station 1387+05 RT and extending north to the existing pole #54238/05368. The Railroad will adjust the electric service as required for the crossing signals. No new permits will be required, and the service points will be from the same location.

The Railroad owns and maintains underground service on the west side of **Gravel Hill Road** from the Railroad signal at Station 1474+43 RT to a junction well and then traveling under the road at Station 12+28 to a junction well and then extends under the path at Station 1475+04 to a junction well and the signal house. The Railroad will adjust the electric service as required for the crossing signals. No new permits will be required, and the service points will be from the same location.

DELMARVA POWER ELECTRIC DISTRIBUTION RELOCATION WORK:

Delmarva Power has an existing a transformer approximately 1800' away, on US9, from the proposed service location on **Stiener Road**.

The following will be completed by others (**Delmarva Central Railroad**):

*The Railroad company will install conduit and a service connection along **Steiner Road** to provide power to the railroad warning devices and the RRFB. Service applications will be completed and submitted by the Railroad The service shall be metered at the pole location where the service originates. The Railroad should apply for service 90 days prior to the need, with all costs from Delmarva Power to be assumed by the Railroad where applicable.*

Any adjustments required in the field by the state or private owners are not included. Delmarva Power can begin the ordering of materials and scheduling of work once written authorization to begin construction has been received and all reimbursable work for Delmarva Power is approved. The contractor must use care when working in these areas as well as around any overhead conductor crossings or overhead guys. Any adjustments to Delmarva facilities shall be performed by the utility with (28) twenty-eight calendar days' notice from the contractor.

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

Delmarva Power has a written requirement regarding working near overhead power lines.

Customer/Contractor Acknowledgement

Performing Work within Dangerous Proximity of High Voltage Lines

"You are hereby notified by Delmarva Power that NO work can be performed at this location within dangerous proximity to Delmarva's overhead lines and that you are required by law to comply with applicable OSHA regulations and the applicable state High Voltage Safety Act. Performance of any activity or causing any person, equipment, or things to come within dangerous proximity of Delmarva's overhead lines creates an extreme risk of severe injury or death. You are further notified that no activities may be conducted within dangerous proximity of Delmarva's overhead lines until mutually agreeable measures to prevent contact with overhead lines have been reached with Delmarva and Delmarva has provided you with written authorization to perform the activities. Additionally, any work involving the use of a crane with intentions to remain outside of dangerous proximity, but within 20 feet of the Company's overhead lines, requires an Encroachment Prevention Plan to satisfy OSHA."

DELMARVA POWER SOUTH – TELECOMMUNICATION:

DELMARVA POWER SOUTH – ELECTRIC TRANSMISSION:

Delmarva owns and maintains aerial transmission on the north side of the proposed path from Station 1386+77 to Station 1455+33 LT where it crosses over to the south side of the path and extends from Station 1459+32 RT to Station 1471+83 RT. Delmarva has aerial facilities along the east side of **Gravel Hill Road** that extend north to south beyond the project limits. The aerial facilities extend east on the south side of the trail from Station 1475+00 RT to Station 1574+ 88 RT. Delmarva has aerial facilities on the north side of the trail from Station 1554+75 LT to Station 1562+90 LT.

Delmarva Power own communication facilities along sections of the aerial transmission lines within the project limits with no conflicts.

Due to the access being reduced along the railroad corridor, gates will be installed within the proposed fence as shown on the construction plans, near the following two (2) locations. This will allow Delmarva access to the following poles:

- Delmarva's four (4) existing poles west of **Gravel Hill Road** on the south side of the railroad track from Station 1459+33 RT to Station 1471+83 RT.
- Delmarva's three (3) existing poles west of **Harbeson Road** on the south side of the railroad track from Station 1553+62 RT to Station 1561+44 RT.

The contractor must use care when working in these areas as well as around any overhead conductor crossings or overhead guys. Delmarva Power Telecommunications and Transmission do not anticipate any conflicts on this project. **No working/existing Delmarva facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.**

Delmarva Power has a written requirement regarding working near overhead power lines.

Customer/Contractor Acknowledgement

Performing Work within Dangerous Proximity of High Voltage Lines

"You are hereby notified by Delmarva Power that NO work can be performed at this location within dangerous proximity to Delmarva's overhead lines and that you are required by law to comply with applicable OSHA regulations and the applicable state High Voltage Safety Act. Performance of any activity or causing any person, equipment, or things to come within dangerous proximity of Delmarva's overhead lines creates an extreme risk of severe injury or death. You are further notified that no activities may be conducted within dangerous proximity of Delmarva's overhead lines until mutually agreeable measures to prevent contact with overhead lines have been reached with Delmarva and Delmarva has provided you with written authorization to perform the activities. Additionally, any work involving the use of a crane with intentions to remain outside of dangerous proximity, but within 20 feet of the Company's overhead lines, requires an Encroachment Prevention Plan to satisfy OSHA."

EASTERN SHORE NATURAL GAS

Eastern Shore Natural Gas owns and maintains an existing facility along the west side of **Park Avenue**. The existing facility will be relocated to the east side of Park Avenue.

The proposed relocation work will be installed under the DelDOT Contract T201904301 Park Avenue Relocation, Phase 2 and all work coordinated under that contract.

No ESNG impacts or involvement is anticipated during the contract duration.

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

The contractor shall be aware that ESNG has requirements while working near ESNG 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 ESNG 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 ESNG's 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 ESNG before starting any construction above or near the pipeline. ESNG 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 ESNG before moving heavy equipment above or near the pipeline. ESNG may require extra cover, berm or ramp, timber mats, etc. These measures are to be determined by ESNG depending on field conditions.
4. If the pipeline is exposed and suspended, it shall be the responsibility of the contractor to coordinate with ESNG the appropriate supporting measures. These measures are to be determined by ESNG depending on field conditions.

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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 vertical clearance of 12" and horizontal clearance of 36" shall be maintained between ESNG's pipeline and other underground utilities and structures. If this cannot be maintained, ESNG shall determine an appropriate means of protection to the pipeline.

IN EVENT OF PIPELINE EMERGENCY, CALL ESNG 24 HOUR GAS CONTROL CENTER AT 1-302-734-6720 OR TOLL FREE 1-877-650-1257.

SPORTS AT THE BEACH – PRIVATE SANITARY SEWER

Sports at the Beach owns a 3" PVC force main that extends from Station 14+00 LT from the west side of **Airport Road** and crosses under near Station 13+60 to the east side of Airport Road and extends along the north side of the proposed path to a manhole at Station 1347+70 LT. The 3" PVC force main also turns north near Station 1339+55 LT and extends north beyond the project limits. This system provides service to Sports At The Beach. The main is on easement within the railroad right of way.

SPORTS AT THE BEACH RELOCATION WORK:

The State's contractor will install a new underground facility that will tie in to the existing 3" PVC force main with a new 3" force main from Station 1339+68 LT to Station 1347+60 LT. The existing 3" force main between these limits shall be removed, unless otherwise noted on the plans. The following manholes shall be adjusted:

- Station 1331+40 LT
- Station 1331+65 LT

The State's Contractor will complete the proposed sanitary sewer work during Phase 1 of construction. The Contractor shall coordinate with the Town of Georgetown and Sports At The Beach to minimize service impacts during construction.

TOWN OF GEORGETOWN SEWER

The Town of Georgetown owns an existing 12" force main along the west side of **Airport Road** from the project limits to Station 13+13 where it crosses under the road and extends along the east side of Airport Road to sewer valves and a manhole at Station 13+ 60 RT.

The Town of Georgetown owns an existing 8" force main from the sewer valves and manhole at Station 13+60 RT that extends along the west side of **Airport Road** to the north beyond the project limits.

There are no anticipated conflicts with the Town's facilities.

The private sewer will tie into the existing force main at Station 1339+67. The contractor must contact the Town at least one week prior to the connection to coordinate the work and confirm all testing and other notes in the plans have been completed.

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

SUSSEX COUNTY DEPARTMENT OF PUBLIC WORKS (SANITARY SEWER)

Sussex County owns and maintains an existing 10" force main that extends from the west under **Park Avenue** near Station 27+10 +/- and continues to the east running parallel with the path, but outside of the right of way, from Station 1388+00 +/- RT to Station 1397+00 +/- RT. The force main is located within a 10' Sussex County Utility easement. This main ties into Artesian's force main near Station 1397+00.

Sussex county owns and maintains an existing 10" main that extends from the north project limits to the south project limits along the west side of **Airport Road**.

Sussex County does not anticipate any conflicts with this project. **No working/existing County facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.**

Should any conflicts be realized, or adjustments be needed, they shall be performed by the highway contractor as part of the project as directed by the Engineer and in coordination with the County.

Sussex County Standard Notes

1. All proposed relocations and/or adjustments shall be performed in accordance with Sussex County Standard Details and Specifications, and/or DeIDOT Standard Specifications/Special Provisions. In the event of a conflict, Sussex County Standards shall govern the proposed work to be performed.
2. Sussex County Engineering shall be notified a minimum of one (1) week prior to the planned start of relocation activities. Sussex County will supply the appropriate inspection personnel during work involving Sussex County utility facilities.
3. Horizontal and vertical location(s) for any relocated sewer facilities shall be in accordance with the approved Construction Plans, Utility Statement, and/or as directed by Sussex County Inspection personnel.
4. Relocation of any gravity or force main sanitary sewer and related sewer appurtenances shall be accomplished in strict conformance to the approved Plans, and/or as directed by the Sussex County Engineer or Project Inspector. Deviations from the approved Plans are only permissible if approved in advance by Sussex County.
5. Sewer Clean Outs that are designated for relocation shall be done in accordance with Sussex County Standard Details including necessary lateral extensions and tie-in to existing house-side lateral. Slope of new sections of sewer laterals shall match existing if possible; minimum slopes shall conform to Sussex County Design Standards. It is the Contractor's responsibility to confirm location of existing sewer laterals prior to beginning relocation work. **Flexible couplings and adaptors are not permitted to be used as part of any relocation work.**

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6. Minimum horizontal and vertical cover and clearances for all new sewer piping shall be in accordance with Sussex County Design Standards.
7. The Contractor shall be responsible for coordinating with impacted property owners during planned times of service disruption. Every effort shall be made to minimize number and duration of service disruptions.
8. The Contractor shall coordinate with Sussex County for any testing requirements for new and/or relocated sewer facilities, if applicable, prior to final acceptance. Sussex County reserves the right to perform camera inspections to confirm suitability of sewer relocations prior to acceptance.
9. As-Built Drawings shall be submitted to Sussex County for any new or relocated primary sewer conveyance facility (i.e., gravity or force main pipe) installed by the Contractor. Information included on As-Built Drawings shall conform to Sussex County requirements, but at a minimum shall indicate horizontal location (e.g., station & offset) and depth of burial (elevation or depth of cover from finished ground) of sewer piping at periodic locations along pipe alignment. All new surface sewer appurtenances shall also be shown on As-Built Drawings including manholes, valves, vaults, etc. As-Built Drawings shall be signed by the company responsible for preparation are subject to review and approval by Sussex County.
10. The Contractor shall be responsible for any temporary supporting measures needed for exposed Sussex County sewer facilities. Such measures will be determined by the Sussex County Inspector based on field conditions. The Contractor is responsible for protection of any exposed Sussex County sewer facility from adjacent construction activities and the traveling public.

VERIZON DELAWARE, LLC

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

1. Verizon maintains aerial facilities on the east side of **Park Ave** from Pole# 6742\48\54238\05368 at Station 163+40 RT 19' extending North and South beyond the project limits.
2. Verizon maintains aerial facilities on the east side of **Harbeson Road** from Pole# 55913\06036 at Station 345+60 RT 18' extending north and south beyond the project limits.
3. Verizon maintains aerial facilities on the south side of **Fisher Road** from Pole# 56625\06327 at Station 422+44 LT 40' extending east and beyond the project limits.

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

4. Verizon maintains UG\buried facilities on the east side of **Airport Road** extending north and south and beyond the project limits.
5. Verizon maintains UG\buried facilities on the east side of **Park Avenue** from a VZ Pedestal at Station 29+34 RT 28' extending north and beyond the project limits.
6. Verizon maintains UG\buried facilities on the south side of **Saulsbury Lane Circle** extending north and beyond the project limits.

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7. Verizon maintains UG\buried facilities on the west side of **Gravel Hill Road** from a VZ Pedestal at Station 250+88 RT 38' extending south and beyond the project limits.
8. Verizon maintains UG\buried facilities on the west side of **Gravel Hill Road** from a VZ Pedestal at Station 250+88 RT 38' extending north along Gravel Hill Road then turning east to a VZ Pedestal at Station 10+50 RT 35' and continuing north beyond the project limits.
9. Verizon maintains UG\buried facilities on the west side of **Breakwater Acres Lane** extending north and south and beyond the project limits.
10. Verizon maintains UG\buried facilities crossing **Fisher Road** from Pole# 56625\06327 at Station 422+44 LT 40' extending north then turning east and west along Fisher Road and beyond the project limits.

VERIZON RELOCATION WORK:

1. Verizon to relocate existing Hand Hole on the east side of **Airport Road** at station 13+69 RT 16' back 6 to 8 feet at approximate Station 13+74 RT 23 and relocate applicable cables. (UT-01)
2. Verizon to adjust existing Pedestal on the east side of **Airport Road** at Station 13+65 R2T 1 as needed. (UT-01)
3. Verizon to relocate existing Pedestal on the north side of **Fisher Road** at Station 51+17 RT 19' to approximate station 51+70 RT 36' and relocate applicable cables. (UT-16)
4. Verizon to abandon existing buried cable along the north side of **Fisher Road** from existing pedestal at Station 51+17 RT 19' extending east and place new cable from proposed new Pedestal at Station 51+70 RT 36' extending east beyond the project limits.

NOTE – items 3 and 4 are in conjunction with the Monarch Glen Development and not directly associated with this project.

Verizon Delaware will complete the work during Phase 1 of construction. These relocations/adjustments are expected to take approximately **20** calendar days to complete after the company has been given a minimum of 30 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.

No working/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 companies and facilities discussed above, no additional utility involvement is anticipated. Should any conflicts be encountered as a result of the 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. The State Contractor shall coordinate any potential conflicts with utility companies and provide adequate notice prior to performing work.

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 municipality or county and to the District Engineer prior to performing work.

General Notes

1. The Contractor's attention is directed to Section 105.9 Utilities within the Project Limits; Miss Utility One-Calls, Delaware Standard Specifications, August 2023. The Contractor shall contact Miss Utility (1-800-282-8555) two working days prior to any excavation. The Contractor is responsible for the support and protection of all utilities when excavating. The Contractor is responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The Contractor is advised to check the site for access and operating purposes for his equipment and, if necessary, make arrangements directly with the utility companies for field adjustments for adequate clearances.
2. 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 unless the delay is caused by the Contractor's delay in having the site conditions ready for the utility relocation work after the Contractor has provided the advance notice that the site conditions would be ready for the utility relocation work. 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. 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.

4. 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. Utility Companies do not work on weekends, nights, or legal holidays.

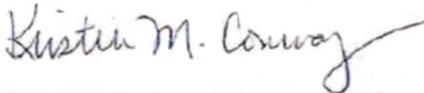
<u>Name</u>	<u>Utility</u>	<u>Email</u>	<u>Phone #</u>
Eric Zambrano	Artesian	EZambrano@artesianwater.com	302-453-5804
Garth Jones	Chesapeake Utilities	gjones@chpk.com	302-213-7455
Mike Sullivan	Comcast Cable Communications, Inc	mike_sullivan2@comcast.com	302-752-6025
Bruce Turner	Crown Castle	Bruce.Turner@crowncastle.com	302-257-9459
Bill McBane	Delmarva Power South, Distribution	Bill.mcbane@delmarva.com	302-381-0388
John Mason	Delmarva Power Communications	John.Mason@pepcoholdings.com	609-412-0649
Chris Potter	Delmarva Power Transmission	Chris.Potter@exeloncorp.com	864-310-5397
Mark C. Parker	Eastern Shore Natural Gas	maparker@esng.com	302-373-4715
Pete Townsend	Private Sewer Sports at the Beach		302-245-6676
Mark Parker	Sussex County Dept of Public Works	mparker@sussexcountyde.gov	302-855-7382
Jeff Ward	Town of Georgetown	jward@georgetowndel.com	302-448-0542
George Zang	Verizon Delaware LLC	Geroge.w.zang@verizon.com	302-422-1238

5. As outlined in Chapter 4 of the DeIDOT Utilities Manual, individual utility companies are responsible for obtaining all required permits from municipal, State, and federal government agencies and railroads. 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.
6. 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.
7. 16 Del. C. § 7405B requires notification to and mutually agreeable measures from the public utility operating the electric line for any person intending to carry on any function, activity, work, or operation within dangerous proximity of any high voltage overhead electric lines. All contractors/other utilities must also maintain a minimum distance of 10’- 0” from all overhead energized lines. Additional clearance may be required from high voltage transmission lines.

- 8. 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.
- 9. The State's Contractor is not permitted to draw water from any hydrant for any use, without the written permission of the utility owner and proper metering and backflow prevention equipment in place.

DIVISION OF TRANSPORTATION SOLUTIONS

PREPARED AND RECOMMENDED BY:



7/1/2024

Century Engineering
Kristin M. Conway
kconway@kleinfelder.com

DATE

APPROVED AS TO FORM BY:



7/3/24

Utilities Section, DelDOT
Eric C. Cimo, Utility Engineer, DelDOT

DATE

**T202230001, Georgetown to Lewes Trail, Fisher Road to Airport Road
DRAFT UTILITY BAR CHART
3-Jul-24**

Work Activity	Jul-24				Aug-24				Sep-24				Oct-24				Nov-24				Dec-24				Jan-25				Feb-25				Mar-25			
	wk 1	wk 2	wk 3	wk 4	wk 1	wk 2	wk 3	wk 4	wk 1	wk 2	wk 3	wk 4	wk 1	wk 2	wk 3	wk 4	wk 1	wk 2	wk 3	wk 4	wk 1	wk 2	wk 3	wk 4	wk 1	wk 2	wk 3	wk 4	wk 1	wk 2	wk 3	wk 4	wk 1	wk 2	wk 3	wk 4
T202230002			PSE				ADV					AWD				NTF																				
Phase 1												ProPhase																								
Phase 1 Stage 1																Phase 1 Stage 1																				
Phase 1 Stage 2																				Phase 1 Stage 2																
Phase 1 Stage 3																								Phase 1 Stage 3												
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Phase 3 Stage 1																																				
Phase 3 Stage 2																																				
Phase 4																																				
Phase 4 Stage 1																																				
Phase 4 Stage 2																																				
Utility Companies																																				
Artesian (By State Contractor)																																				
*Chesapeake																																				
Comcast																																				
*Crown Castle																																				
Delmarva Power Electric																																				
**Delmarva Central Railroad (schedule to be coordinated with DPL and State Contractor)																																				
*Sussex County Sewer																																				
***Town of Georgetown/Sports at the Beach (schedule to be confirmed by State Contractor)																																				
Verizon																																				

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
PO BOX 778
DOVER, DELAWARE 19903

CERTIFICATE OF RIGHT-OF-WAY STATUS

STATE PROJECT NO. T202230001

F.A.P. NO. CMAQ-2022 (26)

GEORGETOWN TO LEWES TRAIL, FISHER TO AIRPORT ROAD

SUSSEX COUNTY

Certificate of Right-of-Way Status - Conditional

Status - Level 3

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

The acquisition or right of occupancy and use of some remaining parcels is not complete, but all occupants of the residences on such parcels has had replacement housing made available to them in accordance with 49 CFR 24.04. The State shall ensure that any occupants of residences, businesses, farms, or non-profit organizations and who have not yet moved from the right-of-way are protected against unnecessary inconvenience and disproportionate injury or any action coercive in nature.

In order to maintain our construction schedule that has been communicated to the public, we need to move forward with advertisement, which will allow the Notice to Proceed (NTP) for physical construction to be issued on or about **October 1, 2024**. This is a conditional certification, and we will have either full possession or a right of entry prior to issuance of the NTP. The contractor awarded the contract will be restricted from all work on the parcels listed below until such time they are notified by the State.

Pursuant to 23 CFR 635.309(c)(3)(iv) When the State requests authorization under a conditional certification to advertise for bids or to proceed with physical construction where acquisition or right of occupancy and use of a few parcels has not been obtained, full explanation and reasons therefor, including identification of each such parcel, will be set forth in the State's request along with a realistic date when physical occupancy and use is anticipated as well as substantiation that such date is realistic.

The parcels which are **not** available are:

List parcels:

Parcel - 1047

Owner – Carol S. Smarr, Iva L. Legg, Jason B. Hill, and John H. Legg

Availability date – September 1, 2024

State reason/explanation for exception - Continued negotiations with multiple owners.

Parcel - 1069

Owner - Allen Harim Foods, LLC

Availability date – September 1, 2024

State reason/explanation for exception - Continued negotiations.

Parcel - 1210

Owner – Judy A. Vincent, Artesian Water Company, Inc. and Artesian Wastewater Management, Inc.

Availability date – October 1, 2024

State reason/explanation for exception - Continued negotiations with out of State owner, and negotiation of prior rights with Artesian Wastewater Inc. due to installed infrastructure.

Parcel - 1213

Owner – Guy E. Philips and Nancy S. Phillips

Availability date – September 1, 2024

State reason/explanation for exception - Continued negotiations.

Parcel - 1069

Owner - Allen Harim Foods, LLC

Availability date – September 1, 2024

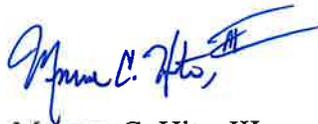
State reason/explanation for exception - Continued negotiations.

All necessary real property interests have been or shall be acquired in accordance with current FHWA/State directives covering the acquisition of real property.

No occupants were permanently displaced for this project and the State has physical possession and the right to remove, salvage, or demolish any personal property acquired as part of this project.

Anticipated full possession and clearance of all parcels is October 1, 2024.

RIGHT OF WAY SECTION



Monroe C. Hite, III
Chief of Right of Way



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

NICOLE MAJESKI
SECRETARY

May 23, 2024

ENVIRONMENTAL REQUIREMENTS

FOR

State Contract No. T202230001

Federal Aid No.: CMAQ-2022 (26)

Contract Title: Georgetown to Lewes Trail, Fisher Road to Airport Road

In accordance with the procedural provisions for implementing the National Environmental Policy Act of 1969, as amended, the referenced project has been processed through the Department's Environmental Review Procedures and has been classified as a Level C/ Class II Action.

Class II Action / Level C
CE action: **23 CFR 771.117 (c)(3)**

Environmental (NEPA) Approval Date: 2/16/2024

PERMIT REQUIREMENTS:

The proposed construction work for this project requires permit approval from the agencies listed below. It is the responsibility of the contracting agency -- the Delaware Department of Transportation, Division of Transportation Solutions -- to obtain the necessary permits to ensure that the contractor complies with the requirements and conditions established by the regulatory agencies. Written authorization from the permitting agencies is required and paperwork for on-site posting is anticipated. The proposed work for this project will be authorized under the permits listed below:

REQUIRED PERMITS AND APPROVAL STATUS:

- U.S. Army Corps of Engineers (USACE) – Nationwide Permit #23 NAP-2021-00234-103
EXPIRES MARCH 24, 2026
- Delaware Department of Natural Resources and Environmental Control (DNREC) Wetlands & Subaqueous Lands Section (WLSL) – Special Exemption (a)
- Delaware Coastal Zone Management (CZM) – Issued
- DNREC Water Quality Certification (WQC) - Issued – Project is not located in a Critical Resource Water

SPECIFIC REQUIREMENTS:

Compliance with all requirements of the permits is the responsibility of the contractor, who will follow all special conditions or requirements as stated within those permits. The contractor will be subject to penalties, fines, and the risk of shut down as mandated by laws governing permitting agencies if such conditions and requirements are violated or ignored. Therefore, all special conditions, general requirements, and/or other required provisions specified within the permits must be followed. Those obligations are indicated or listed within the permit package, which can be obtained from the DelDOT Contract Administration Office.

Additional requirements by DelDOT not specified within the permits, but listed below, are also the responsibility of the contractor. Noncompliance with these requirements may result in shut down of the project at the contractor's expense.

1. The contractor shall employ measures during construction to prevent spills of fuels or lubricants. If a spill should occur, efforts shall be undertaken to prevent its entry into wetlands, aquatic, or drainage areas. Any spills entering wetlands, aquatic, or drainage areas shall be removed immediately. The Division of Water Resources (DNREC), Wetlands & Aquatic Protection Branch, 302-739-4691, shall be notified of any spill(s) within six (6) hours of their occurrence. That office will determine the effectiveness of spill and contamination removal and specify remediation efforts as necessary.

2. All construction debris, excavated material, brush, rocks, and refuse incidental to the work shall be placed either on shore above the influence of flood waters or on some suitable disposal site approved by the department.

3. The disposal of trees, brush, and other debris in any stream corridor, wetland surface water or any drainage ditch is prohibited.
4. There shall be no stockpiling of construction materials or temporary fills in wetlands or subaqueous lands unless otherwise specified on project plans and approved by permitting agencies that govern them. It is the contractor's responsibility to coordinate and secure those additional permits/amendments in deviating from the plan.
5. Construction debris shall be kept from entering adjacent waterways, wetlands, ground cover, or drainage areas. Any debris that enters these areas shall be removed immediately. Netting, mats, or establishing confined work areas in stages may be necessary to address these issues.
6. Refuse material resulting from routine maintenance of worker equipment and heavy machinery is prohibited from being disposed or deposited onto or into the ground. All used oils and filters must be recycled or disposed of properly.
7. Use of harmful chemical wash water to clean equipment or machinery is discouraged. If undertaken, the residue water and/or material must be collected or contained such that it will be disposed of properly. It shall not be deposited or disposed of in waterways, streams, wetlands, or drainage areas.
8. The contractor shall follow all requirements as indicated in the Environmental Compliance Sheet. It is the contractor's responsibility to ensure that workers also follow this requirement. As part of the restrictions, please note the timetables reflected in the contract for the in-stream/water work for endangered species protection.
9. Fill material shall be free of oil and grease, debris, wood, general refuse, plaster and other pollutants, and shall contain no broken asphalt.

ENVIRONMENTAL COMPLIANCE SHEET:

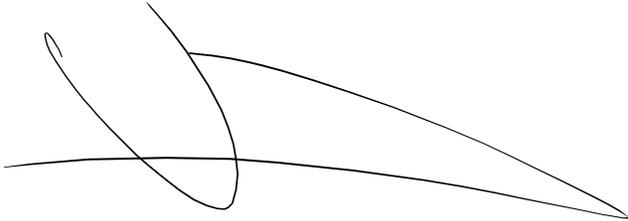
Note 2B—Construction Restrictions

Note 3—Cultural Resources

Note 4—Protection of Resources

The contractor shall pay special attention to specific construction requirements as indicated in the US Army Corps of Engineer Permit as well as the Environmental Compliance (EC) Sheet.

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 and/or 302-760-2259.

A handwritten signature in black ink, consisting of a long horizontal stroke with a loop on the left side and a sharp point on the right.

Van Adams

Natural Resource Supervisor



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

NICOLE MAJESKI
 SECRETARY

RAILROAD STATEMENT

For

State Contract No.:

Federal Aid No.:

Project Title:

The following railroad companies maintain facilities within the contract limits:

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

DOT Inventory No.: 516195T/516144H/ No. Trains/Day: _____ Passenger Trains (Y / N): _____
516143B/516142U/516140F _____

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 DelDOT's Railroad Program Coordinator at (302) 659-4664.

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 DelDOT's Railroad Program Coordinator at (302) 659-4664.

Approved As To Form:

Lei Xu

 DelDOT Railroad Program Coordinator

 DATE



Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T202230001

Project Descripton: Georgetown to Lewes Trail, Fisher Road to Airport Road

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
207002	PIPE, CULVERT, AND STRUCTURE EXCAVATION	CY	1798
207023	STRUCTURAL BACKFILL, BORROW TYPE C, PROVIDING ONLY	CY	1417
209001	BORROW, TYPE A	CY	312
209006	BORROW, TYPE F	CY	1000
211000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	124
211002	REMOVAL OF GUARDRAIL AND FENCE	LF	600
301001	GABC	CY	5477
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	5870
908019	PERMANENT GRASS SEEDING, STREAMBANK	SY	11990
908026	EROSION CONTROL MULCH	SY	5870
908023	STABILIZED CONSTRUCTION ENTRANCE	SY	1134
601033	REINFORCED CONCRETE PIPE, 18", CLASS IV	LF	304
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	27
763003	BASELINE SCHEDULE TYPE 2	LS	1
763004	MONTHLY UPDATE SCHEDULE TYPE 2	EAMO	15

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Delaware Department of Transportation
Quantity Sheet Summary

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Project Description: Georgetown to Lewes Trail, Fisher Road to Airport Road

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
621500	TEMPORARY TIMBER MAT	LS	1
623000	ELASTOMERIC BEARINGS	EACH	10
701010	PCC CURB, TYPE 1-2	LF	202
701012	PCC CURB, TYPE 1-6	LF	902
701014	PCC CURB, TYPE 2	LF	301
701510	CURB/SIDEWALK OPENING	EACH	1
705001	PCC SIDEWALK, 4"	SF	1046
705002	PCC SIDEWALK, 6"	SF	531
705005	PCC SIDEWALK, 8"	SF	4528
705012	DIRECTIONAL TACTILE SURFACE INDICATORS	SF	16
705511	BIKE RACKS	EACH	5
706000	MONUMENT	EACH	6
813001	TEMPORARY BARRICADES, TYPE III	LFDY	36000
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	1823
817003	TEMPORARY MARKINGS, PAINT, 4"	LF	2000
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	SF	1500
817012	RETROREFLECTIVE PREFORMED PATTERNED MARKINGS, SYMBOL/LEGEND	SF	272

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Delaware Department of Transportation
Quantity Sheet Summary

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Item Number	Description	Unit	Quantity
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	3
817027	RAISED/RECESSED PAVEMENT MARKER	EACH	28
817042	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 6"	LF	10593
818001	SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL, TYPE IV, RETROREFLECTIVE SHEETING	SF	542
818003	SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL, TYPE XI, RETROREFLECTIVE SHEETING	SF	11
819011	GALVANIZED TELESCOPING STEEL SIGN POSTS, 12' X 2", COMPLETE W/ BASEPOSTS AND HARDWARE	EACH	17
819017	INSTALLATION OF 4" DIAMETER HOLE, GREATER THAN 6" DEPTH	EACH	2
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	EACH	324
819023	GALVANIZED TELESCOPING STEEL SIGNPOSTS, 15'X2", COMPLETE W/BASEPOSTS & HARDWARE	EACH	58
824007	TUBULAR MARKER , YELLOW, 28"	EACH	12
830001	CONDUIT JUNCTION WELL, TYPE 1, 20" X 20" PRECAST CONCRETE	EACH	8
831002	PROVIDE AND INSTALL UP TO 4" SCEDULE 80 HDPE CONDUIT (BORE)	LF	130
831004	PROVIDE AND INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	73
831006	PROVIDE AND INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (TRENCH)	LF	84
831009	PROVIDE AND INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (ON STRUCTURE)	LF	60

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Item Number	Description	Unit	Quantity
834010	POLE BASE, TYPE 6B	EACH	5
905001	SILT FENCE	LF	2500
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	10
905005	INLET SEDIMENT CONTROL, CURB INLET	EACH	9
905006	INLET SEDIMENT CONTROL, CULVERT INLET	EACH	26
907017	COMPOST FILTER LOGS	LF	11319
908004	TOPSOIL, 6" DEPTH	SY	5870
727010	CHAIN LINK FENCE GATE	EACH	2
727030	FENCE RELOCATION	LF	36
302002	DELAWARE NO. 3 STONE	TON	8847
302005	DELAWARE NO. 57 STONE	TON	925
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	2411
401014	SUPERPAVE TYPE B, PG 64-22	TON	4085
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	141
401037	SUPERPAVE TYPE B, PG 64-22, WEDGE	TON	196
401046	SUPERPAVE TYPE C, PG 76-22 (NON-CARBONATE STONE)	TON	568
504001	CRACK AND JOINT SEALING LESS THAN 3/4 INCH WIDE	LF	619

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Item Number	Description	Unit	Quantity
601032	REINFORCED CONCRETE PIPE, 15", CLASS IV	LF	768
201000	CLEARING AND GRUBBING	LS	1
202000	EXCAVATION AND EMBANKMENT	CY	15941
202003	UNDERCUT EXCAVATION	CY	798
204000	TEST HOLE	CY	100
207001	PIPE, CULVERT, AND STRUCTURE BACKFILLING	CY	1417
705013	TRUNCATED DOME DETECTABLE WARNING SURFACE	SF	304
602505	PERSONNEL SAFETY GRATE	EACH	1
763503	TRAINEE	HOURL	10000
727005	DECORATIVE FENCE	LF	634
727508	DECORATIVE CANTILEVER SLIDE GATE	EACH	2
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	SYIN	3869
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	2460
763598	FIELD OFFICE, SPECIAL I	EAMO	15
801000	MAINTENANCE OF TRAFFIC	LS	1
801501	MAINTENANCE OF RAILROAD TRAFFIC	LS	1
803001	PROVIDE AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EADY	180

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Delaware Department of Transportation
Quantity Sheet Summary

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Item Number	Description	Unit	Quantity
805001	PLASTIC TRAFFIC CONTROL DRUMS	EADY	20400
806001	TRAFFIC OFFICERS	HOUR	100
808002	PROVIDE AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	EADY	80
810001	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	16200
811003	FLAGGER, SUSSEX COUNTY	HOUR	1120
811015	FLAGGER, SUSSEX COUNTY, OVERTIME	HOUR	280
763502	SITE FURNISHING	LS	1
908024	STABILIZED CONSTRUCTION ENTRANCE, TOPDRESSING	TON	254
911508	PRE-EMERGENT HERBICIDE APPLICATION	LS	1
763000	INITIAL EXPENSE/DE-MOBILIZATION	LS	1
763501	CONSTRUCTION ENGINEERING	LS	1
707015	RIPRAP, R-4	TON	68
601141	REINFORCED CONCRETE FLARED END SECTION, 15"	EACH	5
601142	REINFORCED CONCRETE FLARED END SECTION, 18"	EACH	8
602003	DRAINAGE INLET, 34" X 24"	EACH	9
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EACH	3
605503	HELICAL PILES	EACH	1169

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Delaware Department of Transportation
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Item Number	Description	Unit	Quantity
607012	CONCRETE MASONRY UNIT MODULAR BLOCK RETAINING WALLS	SF	595
610000	PCC MASONRY, CLASS A	CY	229
610002	PCC MASONRY, ABUTMENT ABOVE FOOTING, CLASS A	CY	57
611001	BAR REINFORCEMENT, EPOXY COATED	LB	35724
613000	EPOXY CONCRETE SEALER	SF	2171
621001	WOOD STRUCTURES, TIMBER	MFBM	1192
707001	RIPRAP, R-4	SY	1
708003	GEOTEXTILES, RIPRAP	SY	77
711005	ADJUST/RELOCATE FORCE MAIN	LS	1
711500	ADJUST AND REPAIR EXISTING SANITARY MANHOLE	EACH	3
720556	BOLLARD	EACH	11
727000	CHAIN LINK FENCE	LF	14853
727002	WOOD POST AND RAIL FENCE	LF	10363
705008	PEDESTRIAN CONNECTION, TYPE 1	SF	461