

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION



BID PROPOSAL

CONTRACT T201611601

SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

Federal Aid No. ESTP-N011(32)
CFDA: 20.205

Advertisement Date: July 19, 2022

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
DIESEL FUEL FORM
QUESTIONS & ANSWERS (if posted)

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

DRUG TESTING AFFIDAVIT
CERTIFICATION FORM
BID BOND FORM
CD FOR BID PRICE ENTRY & PRINTING

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

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

Paper Bids with CD will be received in the Bidder's Room at the DelDOT Administration Building, Dover, DE; **ALL BIDS DUE PRIOR TO 2:00 P.M. Local Time, AUGUST 16, 2022**

GENERAL DESCRIPTION

A. BIDS DUE: AUGUST 16, 2022 **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, 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: **n/a**

E. LOCATION: New Castle 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 to provide improvements to the existing SR 2 / Red Mill Road Intersection. Follow other incidental construction in accordance with the location, notes and details shown on the plans, and as directed by the Engineer.

G. COMPLETION TIME: All work on this contract must be complete within 362 Calendar Days.

Extensions of contract time due to weather are specified in the Standard Specifications, 108.7.F, Weather Delays. The Department's intent is to issue a Notice to Proceed for work to start on or about November 14, 2022.

H. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DELAWARE DEPARTMENT OF TRANSPORTATION, JUNE 2021 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.

I. 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*.

J. ADDENDA: All Addenda are posted on the internet at bids.delaware.gov, and [bidx.com/de/](http://www.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.

K. 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.

L. ROAD USER COSTS, LIQUIDATED DAMAGES:

FAILURE TO OPEN PROJECT TO UNRESTRICTED HIGHWAY TRAFFIC ON TIME

Interim Road User Costs (RUC) for delays in opening lanes on SR 2 EB & WB will be enforced according to the below charts.

Table 1

SR 2 EB & WB (Monday through Friday)		
Contractor Damages for Failure to Reopen Lanes		
Time All Lanes Reopened ("Eastern Standard Time")	One Eastbound Lane Closure	One Westbound Lane Closure
7:00 AM to 7:14 AM	\$ 200	\$ 800
7:15 AM to 7:29 AM	\$ 500	\$ 1,800
7:30 AM to 7:44 AM	\$ 900	\$ 3,100
7:45 AM to 7:59 AM	\$ 1,400	\$ 4,900
8:00 AM to 8:14 AM	\$ 2,100	\$ 7,000
8:15 AM to 8:29 AM	\$ 3,000	\$ 9,300
8:30 AM to 8:44 AM	\$ 3,900	\$ 11,800
8:45 AM to 8:59 AM	\$ 4,800	\$ 14,300
After 8:59 AM	+ \$ 900 / 15 Minutes	+ \$ 2,400 / 15 Minutes
Daily Total	\$ 10,000	\$ 24,000

For every 15 minutes after 8:59 am, additional costs will be assessed up to the **daily total** as shown in the above table.

Table 2

SR 2 EB & WB (Saturday through Sunday)		
Contractor Damages for Failure to Reopen Lanes		
Time All Lanes Reopened ("Eastern Standard Time")	One Eastbound Lane Closure	One Westbound Lane Closure
10:00 AM to 10:14 AM	\$ 0	\$ 0
10:15 AM to 10:29 AM	\$ 0	\$ 0
10:30 AM to 10:44 AM	\$ 0	\$ 10
10:45 AM to 10:59 AM	\$ 0	\$ 50
11:00 AM to 11:14 AM	\$ 0	\$ 100
11:15 AM to 11:29 AM	\$ 0	\$ 200
11:30 AM to 11:44 AM	\$ 100	\$ 300
11:45 AM to 11:59 AM	\$ 300	\$ 600
12:00 PM to 12:14 PM	\$ 600	\$ 1,000
12:15 PM to 12:29 PM	\$ 1000	\$ 1,700
12:30 PM to 12:44 PM	\$ 1500	\$ 2,500
12:45 PM to 12:59 PM	\$ 2,300	\$ 3,400
After 12:59 PM	+ \$ 1,200 / 15 Minutes	+ \$ 1,300 / 15 Minutes
Daily Total	\$ 7,100	\$ 8,500

For every 15 minutes after 12:59 pm, additional costs will be assessed up to the **daily total** as shown in the above table.

Assessment of Road User Costs and Liquidated Damages will be made by change order. There is no limit on the number of days that RUC's can be assessed. The Engineer will be the sole approving authority as to when lane closures are complete after traffic is returned to the ultimate alignment.

Examples Calculation for Assessment of Road User Cost After 6:59 AM on Tuesday SR 2 EB:

- 1) Lane closure on SR 2 WB until 8:08 AM on a Tuesday, Eastern time:

Per Table 1 a RUC of \$ 7,000 will be assessed.

Lane Closure RUC from 7:00 am to 8:08 am on SR 2 EB

7:00 AM to 7:14 AM	\$ 800
7:15 AM to 7:29 AM	\$ 1,800
7:30 AM to 7:44 AM	\$ 3,100
7:45 AM to 7:59 AM	\$ 4,900
8:00 AM to 8:14 AM	\$ 7,000

M. 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://deldot.gov/Business/cr/index.shtml?dc=civil_rights_eeo or request a copy by calling (302) 760-2555.

8. **DBE PROGRAM REQUIREMENTS** (49CFR §26.53(b)(3)(i)(B)) require submission of DBE participation information from the apparent low bidder no later than five (5) calendar days after bid opening,
9. **FLATWORK CONCRETE TECHNICIAN CERTIFICATION TRAINING:** Section 501.3, 503.3, 505.3, 610.3, 701.3 and 702.3 of the 2021 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.
10. **DIESEL FUEL COST PRICE ADJUSTMENT FORM** is posted and part of this Bid Proposal.

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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/>.

SPECIFICATIONS :

The Delaware specifications entitled "*Standard Specifications for Road and Bridge Construction June, 2021*", hereinafter referred to as the *Standard Specifications*; the *Supplemental Specifications* to the Standard Specifications effective as of the advertisement date of this Bid Proposal and hereby included by reference; the *Special Provisions*; *Notes on the Plans*; this *Bid Proposal* including referenced documents; any *Addenda* thereto; and any posted *Questions and Answers*; shall govern the work to be performed under this contract. The Contractor shall make itself aware of these specifications, revisions and corrections, and apply them to the applicable item(s) of this contract.

CLARIFICATIONS :

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

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

ATTESTING TO NON-COLLUSION :

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

QUANTITIES :

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

PERFORMANCE-BASED RATING SYSTEM

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

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

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

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

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

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

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**

12.3% (New Castle County)
14.5% (Kent & Sussex Counties)

**Goals for Female Participation In
Each Trade**

6.9% (Entire State)

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.

1. 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 insure 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.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM SPECIFICATION

The U.S. Department of Transportation (DOT) requires that the Delaware Department of Transportation continue the established Disadvantaged Business Enterprise (DBE) Program for participation in U.S. DOT programs and that the program follow the final rules as stated in 49 CFR Part 26 and the Department's approved DBE Program plan.

The following definitions apply to this subpart:

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.

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 individuals 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:

- (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 American Indians, Eskimos, Aluets, 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 Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, 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 Islands, 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.

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 goals for this contract are specified in the General Description section of this document.

DelDOT continues to reserve the right to approve DBE subcontractors and all substitutions of DBE subcontractors prior to award and during the time of the contract.

Bidders are required to submit with their bids the completed DBE Program Assurance portion of the Certification document which will state the bidders intent of meeting the goals established for this contract; or in the instance where a contractor cannot meet the assigned DBE Goals for this contract, he/she shall at the time of bid submit documentation required to verify that he/she has made a Good Faith Effort to meet the DBE Goals. Guidance for submitting a Good Faith Effort is identified in the next section and in the DBE Program Plan. Further, the apparent low bidder must submit to DelDOT within five (5) calendar days after the bid opening, executed originals of each and every DBE subcontract to satisfy contract goals consistent with the DBE Program Assurance submitted as part of the bid package.

No contract work shall be performed by a DBE subcontractor until the executed DBE subcontract is approved in writing by DelDOT and the Department 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. Description of the work to be performed by the DBE subcontractor.
3. 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.

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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 Department projects and such other sanctions as the Department may impose. It is critical that the bidder understands:

1. In the event that the bidder cannot meet the DBE goal as set forth in this specification, he/she shall at the time of bid submit to the Department that percentage of the DBE Goal that will be met, if any, on the written and notarized assurance made a part of this contract. The contractor shall also at the time of bid submit all documentation that the contractor wishes to have the Department consider in determining that the contractor made a Good Faith Effort to meet contract DBE Goals. The Department will not accept Good Faith Effort documentation other than on the scheduled date and time of the bid opening. However, the Department may ask for clarification of information submitted should the need arise.
2. A bid which does not contain either a completely executed DBE Program Assurance and/or Good Faith Effort documentation, where appropriate, shall be declared non-responsive and shall not be considered by the Department.
3. 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 five (5) calendar days after the bid opening shall create a rebuttable presumption that the bid is not responsive.
4. Bidders are advised that failure to meet DBE Goals during the term of the contract may subject them to Department sanctions as identified in the DBE Program Plan.

5. 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 the Department on a form to be determined by the Department 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.

6. 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

7. In addition to this specification, bidders must comply with all provisions of the rules and regulations adopted by the U.S. Department of Transportation for DBE participation in U.S. DOT and DelDOT Programs (49 CFR Part 26) and the Delaware Department of Transportation 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 responsible and responsive bidders in all other aspects aside from the DBE Program in order to be awarded the contract.

8. 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 Civil Rights Office. 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.

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GUIDANCE FOR GOOD FAITH EFFORT

When the DBE Goals established for a contract by DelDOT are not met, the contractor shall demonstrate good faith efforts to meet the DBE contract goals. 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.

The contractor is expected to demonstrate good faith efforts by actively and aggressively seeking out DBE participation in the project to the maximum extent, given all relevant circumstances. Following are the kinds of efforts that may be taken but are not deemed to be exclusive or exhaustive and DelDOT will consider other factors and types of efforts that may be relevant:

1. Efforts made to select portions of the work proposed to be performed by DBEs in order to increase the likelihood of achieving the stated goal. Selection of portions of work are required to at least equal the goal for DBE utilization specified in this contract.
2. Written notification at least ten (10) calendar days prior to the opening of a bid soliciting DBE interest in participating in the contract as a subcontractor or supplier and for specific items of work.

3. Efforts made to obtain and negotiate with DBE firms for specific items of work:
 - 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.
4. Efforts made to assist DBEs that need assistance in obtaining bonding, insurance, or lines of credit required by the contractor.
5. Reasons why certified DBEs are not available or not interested.
6. Efforts to effectively use the services of available disadvantaged community organizations; disadvantaged contractor's groups; local, state and federal DBE 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.

Administrative reconsideration:

Within five (5) days of being informed by DelDOT that it is not responsive because it has not documented sufficient good faith efforts, a bidder may request administrative reconsideration. Bidder should make this request in writing to the following reconsideration official: Director of Finance, DelDOT, 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 met the goal or made adequate good faith efforts to do so. The bidder will have the opportunity to meet in person with the reconsideration official, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. The final decision made by the reconsideration official will be communicated to the bidder in writing. 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. Nonsegregated 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. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

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 (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).

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.

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). 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 bid proposal or request for proposal 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).

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.

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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 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 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, 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 230, 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 (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 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 35 and 29 CFR 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.

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, 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 who 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.

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, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure 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. 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, 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, 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 there under. 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, 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 and 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. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. 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 other remedy as the contracting agency deems appropriate.

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 \$10,000 or more.

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, 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

a. All laborers and mechanics employed or working upon the site of the work, 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 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.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. 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 shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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 classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall 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. (1) The contracting officer shall 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 shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore 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 utilized 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) 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 shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. 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.

(3) 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 shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall 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.

c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. 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, 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.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, 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.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, 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 section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) 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 section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall 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. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed 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 Regulations, 29 CFR part 3;

(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 of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed 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 Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall 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 the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall 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, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. 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. 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 journeymen 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.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 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.

9. Disputes concerning labor standards. 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 he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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 watchmen 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.

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. 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 watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 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.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or 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, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLetting OR ASSIGNING THE CONTRACT

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

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" 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:

(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.

2. 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. 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.

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

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 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.

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 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).

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 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 1, 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

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

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

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.

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.

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.

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.

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 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.

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.

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. 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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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. 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) 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;

(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; 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.

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

2. 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)

a. By signing and submitting this proposal, the prospective lower tier 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.

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 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 grantee or subgrantee 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 grantee or subgrantee 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.

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.

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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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.

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall 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 20).

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.

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.

* * * * *

BUY AMERICA

Requirements in the Federal-aid Highway Program

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

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. This documentation shall be presented to the Department upon request.

At the Department's request, I/we will provide manufacturer's/supplier's documentation verifying domestic origin as defined in the Specifications. 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.

* * * * *

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) 761-8327

Mailing Address:
 4425 North Market Street
 3rd Floor
 Wilmington, DE 19802

Located at:
 4425 North Market Street
 3rd Floor
 Wilmington, DE 19802

PREVAILING WAGES FOR HIGHWAY CONSTRUCTION EFFECTIVE MARCH 15, 2022

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
BRICKLAYERS	61.64	61.64	61.41
CARPENTERS	60.48	58.31	46.55
CEMENT FINISHERS	62.82	38.53	30.63
ELECTRICAL LINE WORKERS	31.72	51.25	25.08
ELECTRICIANS	76.72	76.72	76.72
IRON WORKERS	77.20	28.16	29.91
LABORERS	48.88	44.99	44.16
MILLWRIGHTS	19.01	18.45	15.94
PAINTERS	77.29	77.29	77.29
PILEDRIVERS	84.93	28.04	31.80
POWER EQUIPMENT OPERATORS	73.20	46.74	42.82
SHEET METAL WORKERS	26.86	23.97	21.70
TRUCK DRIVERS	46.00	33.33	40.59

CERTIFIED: 07/06/2022 BY: Jad P.C.
 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) 761-8327.

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

PROJECT: T201611601 SR 2 Red Mill Road Intersection Improvements, New Castle County

General Decision Number: DE20220014 04/08/2022

Superseded General Decision Number: DE20210014

State: Delaware

Construction Type: Highway

County: **New Castle County in Delaware.**

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a) (2)-(60). If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022, Executive Order 14026 generally applies to the contract. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022. If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022, Executive Order 13658 generally applies to the contract. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022. The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request. Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
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0	01/07/2022
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1	04/08/2022
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	Rates	Fringes
BRICKLAYER.....	\$ 55.89	0.00
CARPENTER.....	\$ 55.95	0.00
CEMENT MASON/CONCRETE FINISHER....	\$ 35.48	0.00
ELECTRICIAN		
Electrician.....	\$ 70.49	0.00
Line Workers.....	\$ 29.40	0.00
IRONWORKER.....	\$ 65.24	0.00
LABORER.....	\$ 45.30	0.00
MILLWRIGHT.....	\$ 17.62	0.00
PAINTER.....	\$ 71.29	0.00
POWER EQUIPMENT OPERATOR		
Piledrivers.....	\$ 72.65	0.00
Power Equipment Operators....	\$ 67.07	0.00
SHEET METAL WORKER.....	\$ 24.89	0.00
TRUCK DRIVER.....	\$ 37.52	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
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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 <https://www.dol.gov/agencies/whd/government-contracts>.

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
701500-20	PORTLAND CEMENT CONCRETE CURB, TYPE 1, MODIFIED
705528-20	TEMPORARY CURB RAMP
711500-20	ADJUST AND REPAIR EXISTING SANITARY MANHOLE
723500-20	P.C.C. SAFETY BARRIER, PERMANENT, SINGLE FACE, MODIFIED TYPE 2
763501-20	CONSTRUCTION ENGINEERING
763520-20	ELECTRONIC TICKETING
763598-20	FIELD OFFICE, SPECIAL I
763626-20	DIESEL FUEL COST PRICE ADJUSTMENT
813501-20	TEMPORARY SIDEWALK, TYPE 2 (BOARDWALK)
813502-20	RELOCATE TEMPORARY SIDEWALK - TYPE 2
831501-20	FURNISH AND INSTALL 4" SCHEDULE 80 PVC CONDUIT (OPEN CUT)
831514-20	FURNISH AND INSTALL 2-1/2" SCHEDULE 80 PVC CONDUIT (TRENCH)
831515-20	FURNISH AND INSTALL 3" SCHEDULE 80 PVC CONDUIT (TRENCH)
831516-20	FURNISH AND INSTALL 4" SCHEDULE 80 PVC CONDUIT (TRENCH)
831523-20	FURNISH AND INSTALL 2" GALVANIZED STEEL CONDUIT (TRENCH)
831525-20	FURNISH AND INSATLL 3" GALVANIZED STEEL CONDUIT (TRENCH)
831545-20	FURNISH AND INSTALL 4" HDPE SDR-13.5 CONDUIT (BORE)
831574-20	FURNISH AND INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" SCHEDULE
831578-20	FURNISH AND INSTALL SECOND AND SUBSEQUENT ADDITIONAL
842501-20	FURNISH AND INSTALL ELECTRIC UTILITY SERVICE EQUIPMENT 120/240 (100 AMP)

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. 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".

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. The Contractor shall load contaminated soil onto trucks or containers 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. Contaminated material may be used as backfill in any excavated areas. Any excess contaminated material will be disposed of offsite as outlined in this specification.

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;
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. placement of contaminated soil; and
 4. 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.
- 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.

1/21/2022

401502 - ASPHALT CEMENT COST ADJUSTMENT

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

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

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

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

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

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

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

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

If the Contractor exceeds the authorized allotted completion time, the price of asphalt cement on the last authorized allotted workday, shall be the prices used for cost adjustment during the time liquidated damages are assessed. However, if the industry posted price for asphalt cement goes down, the asphalt-cement cost shall be adjusted downward accordingly.

NOTE:

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

12/14/2020

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.

Contract No. T201611601

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.

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

Where: L = Length Segment (ft.)

W = Lane Width (ft.)

Contract No. T201611601

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%

Contract No. T201611601

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 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 Gyratory Compactor
- AASHTO T166, Method C (Rapid Method) - Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA) Using Saturated Surface Dry Specimens
- AASHTO T308 - Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- AASHTO T30 - Mechanical Analysis of Extracted Aggregate
- AASHTO T209 - Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt (HMA)

- ASTM D7227 - Standard Practice for Rapid Drying of Compacted Asphalt Specimens using Vacuum Drying Apparatus

(b) Pavement Construction - Tests and Evaluations.

The Engineer will directly base acceptance on the compaction acceptance test results, and on the inspection of the construction, the Contractor's QC Plan work, ride smoothness as referenced in the contract documents, lift thickness as referenced in the contract documents, joint quality as referenced in the contract documents, surface texture as referenced in the contract documents, and possibly the comparisons of the acceptance test results to the independent test results. For the compaction acceptance testing, the Engineer will sample the work on a statistically random basis and will test and evaluate the work based on daily production.

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

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

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

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

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

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

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

Provide any traffic control required for the structural number investigation, sampling, and testing work at no additional cost to the Department.

Commence coring of the pavement after the pavement has cooled to a temperature of 140°F or less. Cut each core with care in order to prevent damaging the core. Damaged cores will not be tested. Label each core with contract number, date of construction, and number XX of XX upon removal from the roadway. Place cores in a 6-inch diameter plastic concrete cylinder mold or approved substitute for protection. Separate cores in the same cylinder mold with paper. Attach a completed QC test record for the represented area with the corresponding cores. The Engineer will also complete a test record for areas tested for the QA report and provide to Materials & Research. Deliver the cores to the Engineer for testing, processing, and report distribution at the end of each production day. Repair core holes per Appendix A, Repairing Core Holes in Bituminous Asphalt Pavements. Core holes shall be filled immediately. Failure to repair core holes at the time of coring will result in zero pay for compaction testing for the area in question.

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

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

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

.03 Payment and Pay Adjustment Factors

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

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

(a) Material Production - Pay Adjustment.

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

Table 2 - Material Parameter Weight Factors

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

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

1. For each parameter, calculate the mean value and the standard deviation of the test values for the lot to the nearest 0.1 unit.

2. For each parameter, calculate the Upper Quality Index (QU):

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

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.

Contract No. T201611601

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

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

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

Table 3 B Quality Level Analysis by the Standard Deviation Method

PU or PL	QU and QL for An@ Samples						
	n = 3	n = 4	n = 5	n = 6	n = 7	n = 8	n = 9
100	1.16	1.50	1.79	2.03	2.23	2.39	2.53
99	-	1.47	1.67	1.80	1.89	1.95	2.00
98	1.15	1.44	1.60	1.70	1.76	1.81	1.84
97	-	1.41	1.54	1.62	1.67	1.70	1.72
96	1.14	1.38	1.49	1.55	1.59	1.61	1.63
95	-	1.35	1.44	1.49	1.52	1.54	1.55

Contract No. T201611601

94	1.13	1.32	1.39	1.43	1.46	1.47	1.48
93	-	1.29	1.35	1.38	1.40	1.41	1.42
92	1.12	1.26	1.31	1.33	1.35	1.36	1.36
91	1.11	1.23	1.27	1.29	1.30	1.30	1.31
90	1.10	1.20	1.23	1.24	1.25	1.25	1.26
89	1.09	1.17	1.19	1.20	1.20	1.21	1.21
88	1.07	1.14	1.15	1.16	1.16	1.16	1.17
87	1.06	1.11	1.12	1.12	1.12	1.12	1.12
86	1.04	1.08	1.08	1.08	1.08	1.08	1.08
85	1.03	1.05	1.05	1.04	1.04	1.04	1.04
84	1.01	1.02	1.01	1.01	1.00	1.00	1.00
83	1.00	0.99	0.98	0.97	0.97	0.96	0.96
82	0.97	0.96	0.95	0.94	0.93	0.93	0.93
81	0.96	0.93	0.91	0.90	0.90	0.89	0.89
80	0.93	0.90	0.88	0.87	0.86	0.86	0.86
79	0.91	0.87	0.85	0.84	0.83	0.82	0.82
78	0.89	0.84	0.82	0.80	0.80	0.79	0.79
77	0.87	0.81	0.78	0.77	0.76	0.76	0.76

Contract No. T201611601

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:

Contract No. T201611601

- 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

Contract No. T201611601

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
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 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 - DeIDOT approved High Performance Cold Patch material shall be used.

The following equipment shall be available to complete this work:

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

Construction Method.

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

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

Performance Requirements.

The Engineer will judge the patch on the following basis:

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

Basis of Payment.

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

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

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

1. Contact Materials & Research (M&R) personnel to determine if information about the area is already available. If M&R has already obtained cores in the location that is being investigated, the contractor may opt to use the laboratory information for the investigation and not core the area on their own.
2. If M&R does not have information concerning the section of the roadway, the contractor needs to contact M&R to arrange for verification of coring operations. Arrangements shall be made to allow for an individual from M&R to be on the site when the cores are obtained. Cores will be turned over to M&R for evaluation.
3. The Contractor is responsible for providing all traffic control and repairing core holes in accordance to 401699 Appendix A - Repairing Core Holes in Bituminous Asphalt Pavements.
4. Cores are to be taken throughout the entire project for the area in question. Cores will be spaced, from the start of the project in increments determined based on field and project specifics. Cores will be evenly distributed throughout the project location. The cores will be taken in the center of the lane in question.
5. Additional cores may be taken at other locations, if surface conditions indicate that there may be a substantial difference in the underlying section. The location of these cores should be documented and submitted to M&R.
6. Cores shall be full depth and include underlying materials. If there is a stone base included in the pavement section, at a minimum 1 core must have information concerning the thickness of the base. This is determined by augering to the subgrade surface.
7. The calculations used to determine the structural capacity of the roadway is as follows. If the contractor finds, upon starting the coring process, that the areas are of greater thickness than applicable to Table 5a, they may terminate the coring process on their own and retract the request.

Structural Number Calculations

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

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

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

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

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

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

Example:

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

Calculation:

For the Type B lift the calculation would be:

$$\text{Existing HMA} \quad 2 * 0.32 \quad = \quad 0.64$$

$$\text{GABC} \quad 7 * 0.14 \quad = \quad 0.98$$

1.62

Contract No. T201611601

For the Type C lift the calculation would be:

Newly Placed B $2.25 * 0.4$ = 0.90

Existing HMA $2 * 0.32$ = 0.64

GABC $7 * 0.14$ = 0.98

2.52

11/3/14

701500 - PCC CURB, TYPE 1, MODIFIED

DESCRIPTION:

This work consists of providing all materials and constructing PCC Curb, Type 1, Modified at the location(s) as called for on the Plans.

MATERIALS:

A.	PCC, Class B	Section 1022
B.	Curing Compound	Section 1022
C.	½-inch Preformed Expansion Joint Material	Section 1042
D.	Bituminous Joint Sealant	Section 1042

CONSTRUCTION METHODS:

A. Construct curb in accordance with Section 701.3

METHOD OF MEASUREMENT:

A. The Department will measure PCC Curb, Type 1, Modified as the number of linear feet measured along the linear face of acceptably placed and completed curb.

BASIS OF PAYMENT:

A. The Department will pay for PCC Curb, Type 1, Modified at the contract unit price per linear foot. Price and payment will constitute full compensation in accordance with Section 701.5

705528 – TEMPORARY CURB RAMP

Description:

This work consists of providing all materials and installing temporary curb ramps at the required locations as required for maintenance of traffic and pedestrians.

Materials:

The engineer shall approve the temporary curb ramp materials including the posts and methods of fabrication prior to installation.

Construction Methods:

- A. Curb ramps must be provided wherever an accessible pedestrian route crosses a curb or experiences a change of grade requiring a temporary curb ramp.
 1. The smallest possible slope should be used for all ramps and the maximum slope is 1:12.
 2. Transitions from ramps to walks or streets should be flush without abrupt changes. The adjoining landing areas, within 3 feet of temporary curb ramps, shall not exceed 1:20.
 3. Temporary curb ramps must have a minimum width of 36 inches, exclusive of flared sides. The maximum slope of the flare shall be 1:10.
 4. Temporary curb ramp surfaces must be stable and slip resistant.
 5. Changes in surface level up to 1/4-inch may be vertical without edge treatment.
 6. If a curb ramp is located where pedestrians must walk across the ramp or where the ramp is not shielded by handrails or guardrails, it must have flared sides.
- B. Locations of curb ramps to be used during each stage of construction will be submitted to the Engineer as part of the maintenance of pedestrian access plan for approval.
- C. The temporary curb ramps will be moved as needed so that adjacent construction activities and pedestrian access can coexist within the project site simultaneously as required.

Method of Measurement:

The Department will measure the quantity of temporary curb ramp as each placed and accepted.

Basis of Payment:

- A. The Department will pay for temporary curb ramp at the contract unit price per each. Price and payment will constitute full compensation for:
 1. Providing and placing all materials;

Contract No. T201611601

2. cleaning and maintaining the curb ramp area;
3. moving or repositioning curb ramps; and
4. removal and disposal of the temporary curb ramps.

8/2/2021

711500 - ADJUST AND REPAIR EXISTING SANITARY MANHOLE

DESCRIPTION:

Adjust and repair existing sanitary manholes in accordance with the notes and details on the Plans and as directed by the Engineer.

MATERIALS:

Manhole frames, lids, and castings Section 711.3B.3

Portland Cement Concrete Section 1022, Class B

CONSTRUCTION METHODS:

Vertically adjust the sanitary manhole to be flush with the pavement or surrounding surface.

Repair any damage to the existing sanitary manhole to the satisfaction of the Engineer and Utility Owner in accordance with Section 711.3

If there is a conflict between the Department's Specifications and the Specifications of the Utility owner, the latter will prevail.

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 material, labor, tools, equipment, and incidentals to complete the item.

723500 - P.C.C. SAFETY BARRIER PERMANENT, SINGLE FACE, MODIFIED TYPE 2

723501 - P.C.C. SAFETY BARRIER PERMANENT, SINGLE FACE, MODIFIED TYPE 4

Description:

This work consists of constructing concrete barriers

Materials:

A. Borrow, Type C	Section 100
B. Bar Reinforcement	Section 1037
1. Epoxy Coated	
2. Grade 60	
C. Expansion Joint Material	Section 1042
D. Curing Compound	Section 1022
E. PCC	Section 1022
1. Minimum 28-day Compression Strength – 4500 pounds per square inch	
2. Blend of a minimum of 40% Ground Granulated Blast Furnace Slag (GGBFS)	
3. Fine Aggregate	
F. Geotextile	Section 1060
G. Barrier Reflectors	Section 1073
H. Coarse Aggregate	Section 1004
I. The Department will not allow supplier changes or substitutions once the project starts without the engineer's approval.	

Construction Methods:

- A. Refer to Section 723 – Concrete Barrier, 723.3 Construction, for construction information and follow instructions under subheadings A through I.
- B. Install barrier reflectors on the barrier side that faces traffic. Install barrier reflectors as follows:
 1. Place the reflector 29 inches above the final roadway surface for 32 inch barriers when measured to the top of the reflector.
 2. Space reflectors horizontally 100 feet apart measured from the center of 1 reflector to the next reflector.

For barrier sections less than 200 linear feet long, evenly space a minimum of 2 reflectors on the traffic face of the barrier.

Method of Measurement:

A. The Department will measure the quantity of concrete barrier as the number of linear feet constructed and accepted. The Department will measure the length along the centerline of the concrete barrier.

Basis of Payment:

A. The Department will pay the quantity of concrete barrier at the contract unit price per linear foot constructed and accepted. Price and payment will constitute full compensation for:

1. Excavation within the template of the item;
2. removal and disposal of existing materials;
3. bedding and foundation preparation;
4. providing and placing materials and components;
5. compaction;
6. forms and forming;
7. supplying, placing, finishing, and curing PCC;
8. reinforcing steel;
9. joints; and
10. installation of barrier reflectors.

B. The Department will pay for:

1. Undercut in accordance with Section 202;
2. PCC removal in accordance with Section 211;
3. saw cutting in accordance with Section 762;
4. GABC in accordance with Section 301;
5. bituminous pavement patching in accordance with section 402 in addition to the curb item;
6. delineators in accordance with section 824.

763501 - CONSTRUCTION ENGINEERING

Description

Provide construction layout including stakes, lines and grades as specified below. Standard Specification Subsection 105.10, Construction Stakes, Lines and Grades Provided by the Department, is voided.

Based on contract plans and information provided by the Engineer, stake out right-of-way and easements lines, limits of construction and wetlands, slopes, profile grades, drainage system, centerline or offset lines, benchmarks, structure working points and any additional points to complete the project. The Engineer will establish only the following:

- A. Original and final cross-sections for borrow pits.
- B. Final cross-sections: Top and bottom pay limit elevations for all excavation bid items that are not field measured by Construction inspection personnel. 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.
- C. Line and grade for extra work added on to the project plans.

Equipment and Staff

- A. Provide written certification that the survey equipment/instrument has been calibrated and is within manufacturer's tolerance. Date the certification a maximum of 9 months before the start of construction. Renew the certification a minimum of every 9 months. Provide equipment/instruments having a minimum measuring accuracy of $[3\text{mm}+2\text{ppmxD}]$ and an angle accuracy of up to 2.0 arc seconds or 0.6 milligons.
- B. If any of the equipment or instruments are found to be out of adjustment or inadequate to perform its function, immediately replace such instrument to the satisfaction of the Engineer.
- C. Provide and have available for the project an adequate engineering staff that is competent and experienced to set lines and grades needed to construct the project. Provide engineering personnel having experience and the ability compatible with the magnitude and 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 will not be subject to the subcontracting requirements of Subsection 108.01 of the Standard Specifications. Assume full responsibility for any errors and/or omissions in the work of the engineering staff described herein. If construction errors are caused due to erroneous work done under Construction Engineering the Contractor accepts full responsibility, no matter when the error is discovered. Consideration will not be given 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 by this specification.

Submittals

- A. Make and preserve computations necessary to establish the exact position of all work from the control points. Make available to the Department at any time, all computations in a neat and organized manner, survey notes, electronic files, and other records necessary to accomplish the work, as requested. The Engineer may check all or any portion of the stakeout survey work or notes made by the Contractor. Make any necessary correction to the work as soon as possible. Furnish the Engineer with assistance as may be required for checking all lines, grades, and measurements established by the Contractor and necessary for the execution of the work. Such checking by the Engineer will not relieve the Contractor of his/her responsibility for the accuracy or completeness of the work. Furnish copies of all notes to the Engineer at the completion of the project.
- B. Submit any of the following at the Engineer's request:
 1. Proposed method of recording information in field books to ensure clarity and adequacy.
 2. A printout of horizontal control verification, as well as coordinates, differences and error of closure for all reestablished or temporary Control Points.
 3. A printout of vertical control verification, with benchmark location elevation and differences from plan elevation.
 4. Sketch and location of newly referenced horizontal control, with text printout of coordinates, method of reference and field notes associated with referencing control - traverse closure report.
 5. Description of newly established benchmarks with location, elevation and closed loop survey field notes - bench closure report.
 6. All updated electronic and manuscript survey records.
 7. Stakeout plan for each structure and culvert.
 8. Computations for buildups over beams, screed grades and overhang form elevations.
 9. A report showing differences between supplied baseline coordinates and field obtained coordinates, including a list of preliminary input data.
 10. Any proposed plan alteration to rectify a construction stakeout error, including design calculations, narrative and sealed drawings.
 11. Baseline for each borrows pit location.
 12. Detailed sketch of proposed overhead ground mounted signs or signals showing obstructions that may interfere with their installation.
 13. Copies of cut sheets.

Performance Requirements

- A. Establish the survey points and survey centerlines; find, reference, and offset the project control points; run a horizontal and vertical circuit to verify the precision of given control points. Establish plan coordinates and elevation marks for culverts, slopes, subbase, subsurface drains, paving, subgrade, retaining walls, and any other stakes required for control lines and grades; and set vertical control elevations, such as footings, caps, bridge seats and deck screed. Preserve the Department's project control points and benchmarks. Establish and preserve any temporary control points (traverse points or benchmarks) needed for construction. Relocate any project control points (traverse points) or benchmarks conflicting with construction of the project. If directed by the Engineer, replace any or all stakes that are destroyed at any time during the life of the contract. 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 ft times. The Horizontal Control precision ratio shall have a minimum precision of 1:20,000 feet of distance traversed prior to adjustment.
- B. Perform construction centerline layout of all roadways, ramps and connections, etc. from project control points set by the Engineer. Using the profiles and typical sections provided in the plans, calculate proposed grades at the edge of pavement or verify information shown on Grades and Geometric sheets.
- C. 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.
- D. Establish the working points, 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 as per Contract Plans. Before completion of the fabrication of beams for bridge superstructures, verify by accurate field measurements 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-ft stations and compute screed grades. Submit these to the Engineer for review and approval before the stay in place forms are set. Set construction stakes and other reference control marks at sufficiently frequent intervals to assure that all components of the structure are constructed in accordance with the lines and grades shown on the plans. Assume responsibility for all structure alignment control, grade control, and all necessary calculations to establish and set these controls.
- E. Investigate proposed construction for possible conflicts with existing and proposed utilities. Report such conflicts to the Engineer for resolution. All stakes for utility relocations, which will be performed by others, after the Notice to Proceed has been given to the Contractor, will be paid for by the Department under Item 763597 Utility Construction Engineering.
- F. Stake all sidewalk and curb ramp grades in accordance with the plans and the Department's Standard Construction Details. Review the stakeout with the Engineer prior to construction. The Engineer must approve any deviation from plans, Department Standard Construction Details, and Specifications in writing. Assume responsibility for any corrective actions resulting from problems created by adjustments if they fail to obtain such approval.
- G. Stake all drainage inlets in accordance with the plans and the Department Standard Construction Details. Calculate offsets and top of grate elevations for each type of drainage inlet specified in the contract plans to line up the drainage inlet's flow line with the specified curb or ditch flow line as shown in the Contract

Documents. The Engineer must approve any deviations from plans, Department Standard Construction Details and Specifications in writing. Correct any work or other actions resulting from problems created by adjustments if they fail to obtain such approval.

H. Whenever the Engineer will be recording data for establishment of pay limits, invite the Contractor 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 will be used to compute the quantities in question.

Requirements for Wetland Areas Specifically Defined on the Plans

- A. Do not damage or destroy wetland areas, which exist beyond the construction limits. These provisions will be strictly enforced. Advise personnel and those of any Subcontractor of the importance of these provisions.
- B. Perform clearing operations and delineation of wetlands in accordance with these Special Provisions. Before any clearing operation commences, demarcate wetlands at the Limits of Construction throughout the entire project as shown on the Plans and label them as Limits of Construction or Wetland Delineation to the satisfaction of the Engineer.
- C. Use orange vinyl material with the wording "Wetland Boundary" printed thereon to flag the limits of construction. In wooded areas, tie the flagging on the trees, at approximate 20-foot intervals through the 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, then reflag the area at no cost to the Department. If the Contractor, after notification by the Engineer that replacement flagging is needed, does not replace the destroyed flagging within 48 hours, the Engineer may proceed to have the area reflagged. The cost of the reflagging by the Engineer will be charged to the Contractor and deducted from any monies due under the Contract.
- E. Remove all posts and flagging at the completion of construction.
- F. Assume responsibility during the life of the contract for any damages to wetlands located beyond the construction limits, occurring as a result of Contractor activity. Restore all temporarily disturbed wetland areas to their preconstruction conditions. This includes restoring bank elevations, streambed and wetland surface contours and wetlands vegetation disturbed or destroyed. The expense for this restoration shall be borne solely by the Contractor.

**MACHINE CONTROL GRADING – APPLY THIS SECTION OF THE SPECIFICATION ONLY IF
MACHINE CONTROL IS AUTHORIZED FOR USE ON THE PROJECT**

Description

This specification contains the requirements for grading operations utilizing Global Positioning Systems (GPS).

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. GPS technology and machine control technology cannot be used in the construction of bridges.

Choosing to use GPS technology does not give the Contractor authority to use machine control. Construction Engineering (GPS) Machine Control Grading can only be used if noted in the General Notes in the plan set outlining the available files that will be provided to the Contractor and if "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 General Notes will be provided to the contractor. Convert the electronic data provided by the Department into the format required by the Contractor's system. The Department will only provide the information outlined in this document and no additional electronic data will be provided.

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. If the Contractor fails to demonstrate this ability to the satisfaction of the Department, the Contractor shall construct the project using conventional surveying and staking methods.

Equipment and Staff

- A. Provide all equipment required to perform GPS machine control grading, including equipment needed by DelDOT to verify the work and to generate end results that are in accordance with the requirements of Section 200 EARTHWORK of the Standard Specifications.
- B. The Contractor may use any manufacturer's GPS machine control equipment and system that results in achieving the grading requirements outlined in Section 202 of the standard specifications.
- C. Provide the Engineer with a GPS rover and Automatic Level for the duration of the contract. The GPS rover shall be in good working condition and of similar make and model used by the Contractor. Provide up to 8 hours of formal training on the Contractor's GPS system to a maximum of four Engineer's appointees (DELDOT Construction Inspectors). At the end of the contract, the Engineer will return the GPS rover to the Contractor. If any of the equipment/instruments are found to be out of adjustment or inadequate to perform its function, immediately replace such instrument or equipment to the satisfaction of the Engineer.

Submittals

- A. Submit for review by the Engineer no less than 2 weeks before the scheduled preconstruction meeting, a written machine control grading work plan including 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.
- B. Contract Control Plan
 1. 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 (as described below) 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. Submit the Contract Control Plan to the Department for review and approval by the Department's 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.
 2. Develop and submit a Contract Control Plan for all contracts which use Machine Control Grading. Contract control includes all primary and secondary horizontal and vertical control which will be used for the construction contract. Upon the Contractor's completion of the initial survey reconnaissance and control verification, but prior to beginning primary field operations, submit a Contract Control Plan document (signed and sealed by the Delaware licensed Land Surveyor or Delaware Professional Engineer who oversees its preparation) for acceptance by the Engineer, including the following:
 - a. A control network diagram of all existing horizontal and vertical control recovered in the field as contract control.
 - b. 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.
 - c. 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.
 - d. 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.
 - e. 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.

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

Construction

A. DelDOT Responsibilities:

- 1. The Department will set initial vertical and horizontal control points in the field for the project as indicated in the contract documents, (plans set). If the Contractor needs to establish new control points they shall be traversed from existing control points and verified to be accurate by conventional surveying techniques.
- 2. The Department will provide the project specific localized coordinate system.
- 3. The Department will provide data in an electronic format to the Contractor as indicated in the General Notes.
 - a. The information provided shall not be considered a representation of actual conditions to be encountered during construction. Furnishing this information does not relieve the Contractor from the responsibility of making an investigation of conditions to be encountered including, but not limited to site visits, and basing the bid on information obtained from these investigations, and the professional interpretations and judgments of the Contractor. The Contractor assumes the risk of error if the information is used for any purpose for which the information is not intended.
 - b. Any assumption the Contractor makes from this electronic information shall be at their risk. If the Contractor chooses to develop their own digital terrain model the Contractor shall be fully responsible for all cost, liability, accuracy, and delays.
 - c. The Department will develop and provide electronic data to the Contractor for their use as part of the contract documents in a format as indicated in the General Notes. The Contractor shall independently ensure that the electronic data will function in their machine control grading system.
- 4. The Files that are provided were originally created with the computer software applications MicroStation (CADD software) and INROADS (civil engineering software). The data files will be provided in the native formats and other software formats described below. The contractor shall perform necessary conversion of the files for their selected grade control equipment. The Department will furnish the Contractor with the following electronic files:

- a. CAD files
 - i. Inroads -Existing digital terrain model (.DTM)
 - ii. Inroads -Proposed digital terrain model (.DTM)
 - iii. Microstation -Proposed surface elements - triangles
- b. Alignment Data Files:
 - i. ASCII Format

5. The Engineer will perform spot checks of the Contractor's machine control grading results, surveying calculations, records, field procedures, and actual staking. If the Engineer determines that the work is not being performed in a manner that will assure accurate results, the Engineer may order the Contractor to redo such work to the requirements of the contract documents, and in addition, may require the Contractor to use conventional surveying and staking, both at no additional cost to the Department.

B . Contractor Responsibilities

- 1. Review and apply the data provided by the Department to perform GPS machine control grading.
- 2. Bear all costs, including but not limited to the cost of actual reconstruction of work, that may be incurred due to application of GPS machine control grading techniques. Correct at no cost to the Department any grade elevation errors and associated corrections including quantity adjustments resulting from the use of GPS machine control.
- 3. Convert the electronic data provided by the Department into a format compatible with their system.
- 4. Perform at Contractor risk the manipulation of the electronic data provided by the Department.
- 5. Check and if necessary, recalibrate their GPS machine control system at the beginning of each workday in accordance with the manufacturer's recommendations, or more frequently as needed to meet the requirements of the project.
- 6. Meet the accuracy requirements as detailed in the Standard Specifications.

7. 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 be at intervals not to exceed 1000 feet. Determine the horizontal position of these points by conventional survey traverse and adjustments from the original baseline control points. The conventional traverse shall meet or exceed the Department's Standards. Establish the elevation of these control points using differential leveling from the project benchmarks, forming a closed loop. Provide for approval of the Engineer a copy of all new control point information including the closure report prior to construction activities. Assume responsibility for all errors resulting from their efforts and correct deficiencies to the satisfaction of the Engineer and at no additional cost to the Department.
8. Provide stakes at all alignment control points, at every 500 foot stationing, and where required for coordination activities involving environmental agencies and utility companies at the Contractor's expense. Perform and be paid for work that is done solely for utility companies and that is beyond the work performed under item 763501 as part of item 763597 -Utility Construction Engineering.
9. Set hubs at the top of finished grade at all hinge points on the cross section at 500 foot intervals 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. Place a minimum of 4 control points outside the limits of disturbance for the excavation of borrow pits, Stormwater Management Ponds, wetland mitigation sites etc. Establish these control points using conventional survey methods for use by the Engineer to check the accuracy of the construction.
10. Preserve all reference points and monuments that are identified and established by the Engineer for the project. If the Contractor fails to preserve these items, then reestablish them at no additional cost to the Department.
11. Provide control points and conventional grades stakes at critical points such as, but not limited to, PC's, PT's, superelevation points, and other critical points required for the construction of drainage and roadway structures.
12. 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.

Method of Measurement

The Department will not measure Construction Engineering.

Basis of Payment

The Department will pay for Construction Engineering as a lump sum item. Payment is full compensation for all work described in this specification. Issues with equipment, including inconsistent satellite reception of signals to operate the GPS machine control system, will not result in adjustment to the "Basis of Payment" for any construction items or be justification for granting contract time extension.

Monthly payment will be made under this item in proportion to the amount of work done as determined by the Engineer.

2/4/22

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 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:

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.

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.

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:

Contract No. T201611601

Reference Field No.	Description	Examples	Data Type	Required
1	Ticket Number	5126349, 101R, 539-19	String	Yes
2	Contract Number	T202011001	String	Yes
3	Contract Name (Job)	Walnut Street Streetscape Improvements	String	Yes
4	Contractor Name (Customer)	Mumford & Miller, Inc.; A Del Construction	String	Yes
5	Supplier Name	River Asphalt; Allan Myers Materials	String	Yes
6	Supplier Plant	Plant #1 Dagsboro; Dover Asphalt	String	Yes
7	Job Number (Location)	Task 1; Location 5	String	Yes
8	Weigh Master Name	Johnny Scales	String	Yes
9	Weigh Master ID	1234567	String	Yes
10	Left Intentionally Blank			No
11	Mix Design ID (Product)	1628p; AM-WILM-29 76-22	String	Yes
12	Material Type (Product Description)	9.5mm top; 19MM 76-22 NON CARB	String	Yes
13	Item No. (Product Code)	401005; 401016	String	Yes
14	Load Number	75	Number	Yes
15	Identifying Vehicle Number	T-1	String	Yes
16	Hauler	John Doe Trucking	String	Yes
17	Legal Gross Vehicle Weight	73,280	Number	Yes
18	Loading Date & Time	2020-06-15T13:45:30	String	Yes
19	Gross Weight	72,980	Number	Yes
20	Net Weight	27,900	Number	Yes
21	Truck Tare Weight	45,080	Number	Yes
22	Void	280	Number	No
23	Daily Running Total	44.43	Number	Yes

All provided weights shall be accurate to 0.01 tons.

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

Setup and Calibration:

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

Uptime:

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

Load Identification:

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

Method of Measurement:

The Department will not measure electronic ticketing.

Basis of Payment:

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.

The Department will make no payment for material that is rejected.

01/18/2022

763598 – FIELD OFFICE, SPECIAL I

DESCRIPTION:

This work consists of providing, erecting, equipping, maintaining, and removing a singlewide modular office and adjacent parking area. The field office and parking area are for the exclusive use for the Department personnel, North Region Construction Personnel, and Consultants.

MATERIALS:

- A. Provide a new field office and an adjacent parking lot meeting the requirements in Table 1 and described below:
 1. Must be of 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. Must be 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. Must have 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. 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;
 9. 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;
 10. 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.
 11. Perform or arrange all necessary utility connections and/or their maintenance.
 12. Provide maintenance of the heating, exhaust fan, and air conditioning equipment by validated service contracts for the length of the contract.
 13. 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.
 14. Provide and maintain the interior with new furnishings. All furnishings must be approved by the engineer prior to installation in the 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. 2 full-size office desks
 - b. 2 fully adjustable ergonomic design swivel chairs with armrests and 5-leg base having wheel casters
 - c. 12 folding chairs
 - d. 1 large conference table for a minimum of 12 people
 - e. 2 trash cans with lids and new plastic liners at each disposal interval – (1) 30+ gallons, (1) 10+ gallons
 - f. 2 dry erase boards a minimum of 4' x 3' each with markers and erasers
 - g. 1 floor mat at each entrance
 - h. 1 long-handled large-size broom with synthetic bristles and dustpan

Contract No. T201611601

15. Provide and maintain the following office equipment; engineer must approve the equipment prior to installation in the field office. The required equipment will enable the Department to synchronize project record keeping and office functions. Deliver the equipment in new and working condition:

- a. 1 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

16. Provide all consumables required for the office equipment and furnishings for the length of the contract. These consumables must be provided on request and include paper, tape, toner/printer ink, cleaning kits, and batteries. Provide maintenance of all office equipment by a validated service contract for the length of the contract. Service contracts must allow a Department-authorized individual to deal directly with the service organization to request repair.

B. Construct a field office parking lot in accordance with all applicable city, county, state, and federal codes.

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 field office and its adjacent parking area includes the following:

1. Removing snow and/or ice from the parking area and from the entrance pathways to the field office within 12 hours of each occurrence.
2. Maintaining and replacing all provided items, furnishings, and equipment.
3. Providing bottled water and drinking cups for the water cooler.
4. Providing lavatory supplies, trash bags, and janitorial supplies.
5. Providing replacement items for all lighting fixtures.
6. Maintaining all utilities.
7. Providing janitorial and waste disposal services twice a week.
8. Cleaning up trash and debris from the parking lot once a week.

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

TABLE 1. General Field Office Requirements

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.
Exterior Dimensions	Minimum 50'-0" long x 12'-0" wide.
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.
Floor Space	Minimum of 600 sq ft.
Height (Floor to Ceiling)	8'-0" nominal.
Insulation	Exterior walls, ceiling, and floor must be insulated.

Internet Access	Via a broadband connection with WiFi access utilizing WPA2 security. Options include cable modem, DSL, or similar service; dial-up is not acceptable. Position the WiFi router to provide sufficient coverage in the field office with a minimum 50-ft radius. Provide 2 data jacks in locations indicated on the approved office plan accepted by the Department. Provide usernames and passwords for authorized wireless users as determined by the Department Construction Project Manager. Ascertain the means by which the Internet source will be provided. Provide Internet download and upload speeds of at least 100 Mbps at all times. Coordinate the Internet source with the Department Construction Project Manager to assure compatibility with the Department's hardware/software requirements. Provide and maintain an operational wireless access point. At the Department's sole discretion, a 4G LTE wireless hotspot may be acceptable.
Keys	Minimum of 2 complete sets; give to the Engineer's representative.
Lighting	One 4,000-lumen overhead light centrally located and evenly spaced every 10 ft along the interior ceiling, with a minimum of 1 overhead light per room.
Microwave	New; minimum 900 watts.
Other Material Requirements	Free of asbestos and all other hazardous materials.
Parking Spaces	4 functional spaces, each measuring 9'-0" x 20'-0".
Refrigerator	New; minimum 2.6 cubic ft.
Smoke Detector	New; minimum 1 working combination smoke and carbon dioxide detector per room.
Water Cooler	New portable water cooler with hot and cold taps; minimum 5-gallon capacity; maintain a supply of at least 5 gallons of extra water at all times.
Windows	Minimum of 6 insulated windows total; minimum glass area of 1,150 sq inches per window. Equip each window with a horizontal mini-blind covering the full glass area, a screen, and a locking device. Cover exterior of each window with steel bar grids.

CONSTRUCTION METHODS:

A. General Requirements

1. The field office must be ready for use no later than 30 calendar days after the date of the fully executed contract and before construction begins unless site mobilization is delayed for Department-approved reasons. In the event of approved delay, the field office must be ready for use no later than 10 calendar days after initial mobilization.

Contract No. T201611601

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. This item will not be measured but will be paid for on a monthly basis. Partial months will be paid at the rate of 0.033 months per day.

BASIS OF PAYMENT:

A. The Department will pay for field office at the contract unit price per each month of actual number of months acceptable provided. Partial months will be paid at the rate of 0.003 months per day. Price and payment will constitute full compensation for:

1. Providing and maintaining all materials;
2. submittals and all drawings;
3. removal and restoration to original conditions; and
4. removing hazardous material and/or underground tanks; and
5. obtaining licenses and permits.

1/20/22

763626 - DIESEL FUEL COST PRICE ADJUSTMENT

Description:

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

Contract Applicability:

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

Price Adjustment Provisions:

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

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

B. Diesel Fuel Usage Factors

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

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

C. Delaware Posted Diesel Fuel Price will be issued monthly by the Department at https://deldot.gov/Business/bids/index.shtml?dc=diesel_fuel.

1. The Project Base Price Index (FB) is the index price posted by the Department on the project advertisement date in \$/gallon.
2. The Fuel Price Index for adjustment (FP), will be the index price posted by the department monthly in \$/gallon.

Price Adjustment Determination:

The following criteria and conditions will be considered in determining a price adjustment for diesel fuel cost fluctuations on a monthly basis.

A. Unit Price Adjustment Calculation.

1. When the ratio FP/FB is calculated to be less than 0.95 or calculated to be greater than 1.05, the Department will adjust unit bid price prices in accordance with the following formula:

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

where:

AUP = Adjusted Unit Price

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

FB = Project Base Price Index

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

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

Payment of Adjusted Unit Prices:

- A. The unit bid prices of work items affected by the fuel escalation will be adjusted by change order, either up or down. The Diesel Fuel Price Index will be used for all the applicable items performed during the monthly period.
- B. If the Contractor exceeds the authorized allotted completion time, the adjusted item prices on the last authorized allotted calendar day or working day shall be the prices used during the time liquidated damages are assessed. However, if the posted price for diesel fuel goes down, the item prices shall be adjusted downward accordingly.
- C. Upon completion of the work and determination of final pay quantities, an adjusting work order will be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for FP used in the price adjustment formula will be the average of all FP's previously used for computing price adjustments.
- D. The Department reserves the right to inspect the records of the prime contractor and its subcontractors and material suppliers to ascertain actual pricing and cost information for the diesel fuel used in the performance of applicable items of work.
- E. When applicable items of work, as specified herein, are added to the contract as Extra Work in accordance with the provisions of Section 104.2.E, no price adjustment will be made for fluctuations in the cost of diesel fuel consumed in the performance of the extra work, unless otherwise approved by the Engineer. The current price for diesel fuel is to be used when preparing required backup data for extra work to be performed at a negotiated price. For extra work performed on force account basis, reimbursement for material and equipment along with specified overhead and profit markups will be considered to include full compensation for the current cost of diesel fuel.
- F. Any Price Increases or Price Rebates that are calculated based on items of work performed by subcontractors will be added to or deducted from payments due to the Contractor in the appropriate pay period. The Contractor shall then accurately record on the appropriate CN-103 form the additions or deductions into adjusted contract value. The Contractor shall make payment to the subcontractor(s) who actually performed the work in accordance with DelCode Title 17, Chapter 8.

813501 - TEMPORARY SIDEWALK – TYPE 2 (BOARDWALK)

DESCRIPTION:

This work consists of the installation of temporary sidewalk – type 2.

MATERIALS:

A. Exterior Grade Lumber	Section 1041
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CONSTRUCTION METHODS:

- A. Construct a temporary wooden walkway to maintain pedestrian traffic through the work zone in accordance with the requirements of the Americans with Disabilities Act, locations, notes and details in the Plans and as directed by the engineer
- B. Remove the temporary sidewalk, restore the area when it is no longer needed and dispose of all materials in accordance with Subsection 106.8.

METHOD OF MEASUREMENT:

The Department will measure the quantity of Temporary Sidewalk – Type 2 in linear feet.

BASIS OF PAYMENT:

- A. The Department will pay for the Temporary Sidewalk – Type 2 at the contract unit price per linear foot. Price and payment will constitute full compensation for:
 1. Providing all materials;
 2. constructing, placing, and maintaining the temporary sidewalk;
 3. removal and disposal;
 4. restoration;
 5. seeding;
 6. labor;
 7. equipment;
 8. tools; and
 9. topsoil, if required.

813502 – RELOCATE TEMPORARY SIDEWALK – TYPE 2

DESCRIPTION:

This work consists of relocating temporary sidewalk – type 2.

CONSTRUCTION METHODS:

- A. Carefully salvage an existing temporary sidewalk – type 2, transport it to a secondary site and acceptably install it to meet the original construction details.
- B. Remove the temporary sidewalk, restore the area when it is no longer needed and dispose of all materials in accordance with Subsection 106.8.

METHOD OF MEASUREMENT:

The Department will measure the quantity of temporary sidewalk – type 2 in linear feet relocated and accepted.

BASIS OF PAYMENT:

- A. The Department will pay for the relocating of temporary sidewalk- type 2 at the contract unit price per linear foot relocated and accepted. Price and payment will constitute full compensation for:
 1. Providing all replacement materials;
 2. transporting, resetting, and maintaining;
 3. removal and disposal;
 4. restoration and seeding;
 5. topsoil, if required;
 6. labor;
 7. equipment; and
 8. tools.

831500 - PROVIDE AND INSTALL UP TO 6" SCHEDULE 80 PVC CONDUIT (OPEN CUT)

831501 - PROVIDE AND INSTALL 4" SCHEDULE 80 PVC CONDUIT (OPEN CUT)

831502 - PROVIDE AND INSTALL 3" SCHEDULE 80 PVC CONDUIT (OPEN CUT)

831503 - PROVIDE AND INSTALL 2-1/2" SCHEDULE 80 PVC CONDUIT (OPEN CUT)

831504 - PROVIDE AND INSTALL 2" SCHEDULE 80 PVC CONDUIT (OPEN CUT)

831505 - PROVIDE AND INSTALL 1" SCHEDULE 80 PVC CONDUIT (OPEN CUT)

831506 - PROVIDE AND INSTALL 1" FLEXIBLE METALLIC-LIQUIDTIGHT CONDUIT

831507 - PROVIDE AND INSTALL 2" FLEXIBLE METALLIC-LIQUIDTIGHT CONDUIT

831508 - PROVIDE AND INSTALL 3" FLEXIBLE METALLIC-LIQUIDTIGHT CONDUIT

831509 - PROVIDE AND INSTALL 4" FLEXIBLE METALLIC-LIQUIDTIGHT CONDUIT

831512 - PROVIDE AND INSTALL 1" SCHEDULE 80 PVC CONDUIT (TRENCH)

831513 - PROVIDE AND INSTALL 2" SCHEDULE 80 PVC CONDUIT (TRENCH)

831514 - PROVIDE AND INSTALL 2-1/2" SCHEDULE 80 PVC CONDUIT (TRENCH)

831515 - PROVIDE AND INSTALL 3" SCHEDULE 80 PVC CONDUIT (TRENCH)

831516 - PROVIDE AND INSTALL 4" SCHEDULE 80 PVC CONDUIT (TRENCH)

831517 - PROVIDE AND INSTALL 1" SCHEDULE 80 PVC CONDUIT (ON STRUCTURE)

831518 - PROVIDE AND INSTALL 2" SCHEDULE 80 PVC CONDUIT (ON STRUCTURE)

831519 - PROVIDE AND INSTALL 2-1/2" SCHEDULE 80 PVC CONDUIT (ON STRUCTURE)

831520 - PROVIDE AND INSTALL 3" SCHEDULE 80 PVC CONDUIT (ON STRUCTURE)

831521 - PROVIDE AND INSTALL 4" SCHEDULE 80 PVC CONDUIT (ON STRUCTURE)

831522 - PROVIDE AND INSTALL 1" GALVANIZED STEEL CONDUIT (TRENCH)

831523 - PROVIDE AND INSTALL 2" GALVANIZED STEEL CONDUIT (TRENCH)

831524 - PROVIDE AND INSTALL 2-1/2" GALVANIZED STEEL CONDUIT (TRENCH)

831525 - PROVIDE AND INSTALL 3" GALVANIZED STEEL CONDUIT (TRENCH)

831526 - PROVIDE AND INSTALL 4" GALVANIZED STEEL CONDUIT (TRENCH)

831527 - PROVIDE AND INSTALL 1" GALVANIZED STEEL CONDUIT (BORE)

831528 - PROVIDE AND INSTALL 2" GALVANIZED STEEL CONDUIT (BORE)

831529 - PROVIDE AND INSTALL 2-1/2" GALVANIZED STEEL CONDUIT (BORE)

831530 - PROVIDE AND INSTALL 3" GALVANIZED STEEL CONDUIT (BORE)

831531 - PROVIDE AND INSTALL 4" GALVANIZED STEEL CONDUIT (BORE)

831532 - PROVIDE AND INSTALL 1" GALVANIZED STEEL CONDUIT (OPEN CUT)

831533 - PROVIDE AND INSTALL 2" GALVANIZED STEEL CONDUIT (OPEN CUT)

831534 - PROVIDE AND INSTALL 2-1/2" GALVANIZED STEEL CONDUIT (OPEN CUT)

831535 - PROVIDE AND INSTALL 3" GALVANIZED STEEL CONDUIT (OPEN CUT)

831536 - PROVIDE AND INSTALL 4" GALVANIZED STEEL CONDUIT (OPEN CUT)

831537 - PROVIDE AND INSTALL 1" GALVANIZED STEEL CONDUIT (ON STRUCTURE)

831538 - PROVIDE AND INSTALL 2" GALVANIZED STEEL CONDUIT (ON STRUCTURE)

831539 - PROVIDE AND INSTALL 2-1/2" GALVANIZED STEEL CONDUIT (ON STRUCTURE)

831540 - PROVIDE AND INSTALL 3" GALVANIZED STEEL CONDUIT (ON STRUCTURE)

831541 - PROVIDE AND INSTALL 4" GALVANIZED STEEL CONDUIT (ON STRUCTURE)

831542 - PROVIDE AND INSTALL 2" HDPE SDR-13.5 CONDUIT (BORE)

831543 - PROVIDE AND INSTALL 2-1/2" HDPE SDR-13.5 CONDUIT (BORE)

831544 - PROVIDE AND INSTALL 3" HDPE SDR-13.5 CONDUIT (BORE)

831545 - PROVIDE AND INSTALL 4" HDPE SDR-13.5 CONDUIT (BORE)

831560 - PROVIDE AND INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (OPEN CUT)

831561 - PROVIDE AND INSTALL 1-1/2" SCHEDULE 80 PVC CONDUIT (TRENCH)

831562 - PROVIDE AND INSTALL 1-1/2" SCHEDULE 80 PVC CONDUIT (ON STRUCTURE)

831563- PROVIDE AND INSTALL 1-1/2" GALVANIZED STEEL CONDUIT (OPEN CUT)

831564 - PROVIDE AND INSTALL 1-1/2" GALVANIZED STEEL CONDUIT (TRENCH)

831565 - PROVIDE AND INSTALL 1-1/2" GALVANIZED STEEL CONDUIT (BORE)

831566 - PROVIDE AND INSTALL 1-1/2" GALVANIZED STEEL CONDUIT (ON STRUCTURE)

831569 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 1" SCHEDULE 80 PVC CONDUITS IN TRENCH OR OPEN CUT

831570 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 1-1/2" SCHEDULE 80 PVC CONDUITS IN TRENCH OR OPEN CUT

831571 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 2" SCHEDULE 80 PVC CONDUITS IN TRENCH OR OPEN CUT

831572 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 2-1/2" SCHEDULE 80 PVC CONDUITS IN TRENCH OR OPEN CUT

831573 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 3" SCHEDULE 80 PVC CONDUITS IN TRENCH OR OPEN CUT

831574 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" SCHEDULE 80 PVC CONDUITS IN TRENCH OR OPEN CUT

831575 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 2" HDPE 13.5 SDR CONDUIT IN DIRECTIONAL BORE

831576 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 2-1/2" HDPE 13.5 SDR CONDUIT IN DIRECTIONAL BORE

831577 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 3" HDPE 13.5 SDR CONDUIT IN DIRECTIONAL BORE

831578 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" HDPE 13.5 SDR CONDUIT IN DIRECTIONAL BORE

831579 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 1" GALVANIZED STEEL CONDUIT IN TRENCH OR OPEN CUT

831580 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 1-1/2" GALVANIZED STEEL CONDUIT IN TRENCH OR OPEN CUT

831581 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 2" GALVANIZED STEEL CONDUIT IN TRENCH OR OPEN CUT

831582 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 2-1/2" GALVANIZED STEEL CONDUIT IN TRENCH OR OPEN CUT

831583 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 3" GALVANIZED STEEL CONDUIT IN TRENCH OR OPEN CUT

831584 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" GALVANIZED STEEL CONDUIT IN TRENCH OR OPEN CUT

831585 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 1" STEEL CONDUIT IN DIRECTIONAL BORE

**831586 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 1-1/2" STEEL CONDUIT
IN DIRECTIONAL BORE**

831587 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 2" STEEL CONDUIT IN DIRECTIONAL BORE

**831588 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 2-1/2" STEEL CONDUIT
IN DIRECTIONAL BORE**

831589 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 3" STEEL CONDUIT IN DIRECTIONAL BORE

831590 - PROVIDE & INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" STEEL CONDUIT IN DIRECTIONAL BORE

DESCRIPTION:

This work consists of providing and installing a conduit or shield, of the type and size required.

MATERIALS:

A. Conduit Section 831

CONSTRUCTION METHODS:

A. General Installation Requirements -

1. The Department has the right to reject any installation method proposed for a given work site. PVC shall not be installed under existing pavement unless it is on a continuous roll or with the engineer's written approval.

Contract No. T201611601

2. Conduit installed underground shall be installed in a straight line between terminal points. In straight runs, junction well spacing shall be no more than 600 feet for fiber optic conduit or no more than 300 feet for copper in conduit, or as directed by the engineer. If bends are required during installation, they must be manufactured sweeping bends. The engineer will be consulted before any bends are installed to ensure that the proper arc is provided.
3. Underground conduit shall have a minimum cover as measured from the finished grade of 24 inches and a maximum cover of 48 inches. The opening shall be filled halfway with the cover material and tamped down firmly before filling in the remainder of the opening. Additional lifts shall be used as required to install the metallic warning tape at the specified depth. All cover material shall be free of rocks, debris, vegetation or other deleterious material that may damage the conduit. An underground utility warning tape shall be installed as specified in this section and the remainder of the fill shall be added, tamping down the top layer.
4. Conduit not terminated to a base or in a junction well shall be terminated 2 feet beyond the edge of the pavement unless otherwise directed by the engineer, and properly capped. Tape is not an approved method. Conduit shall not extend more than 3 inches inside a junction well. See Standard Construction Details or applicable Plan Details for typical methods of termination.
5. All underground conduits shall be marked in the ground with a metallic warning tape. The marking tape shall be buried directly above the conduit run that it identifies, at a depth of approximately 12 inches below final grade. The tape identifying all conduits shall be at least 6 inches wide and have a minimum thickness of 3 mils and 500 percent elongation.
6. The color of the metallic warning tape identifying fiber optic cable should be bright orange (preferably AULCC orange) and shall read "WARNING - OPTICAL CABLE" or other wording approved by the engineer that conveys the same message. The color of the tape identifying all other cables shall be bright red and shall read "WARNING - BURIED ELECTRIC BELOW" or other wording approved by the engineer that conveys the same message.
7. Using conduit tools, rigid metallic conduit shall be cut, reamed, and threaded. The thread length shall be as necessary to ensure that the sections of conduits when screwed into a coupling and tightened correctly will butt together and the joint will be watertight. A three-piece threaded union, as approved by the engineer, shall be used to join two threaded lengths of conduit in the case where a standard coupling will not work. A threaded union shall not be used in a conduit run that is to be driven. At no time is a threadless coupling or a split-bolt coupling to be used for direct buried conduit.
8. All lengths of HDPE conduit shall be connected with irreversible fusion couplings. Mechanical and removable couplings will not be accepted.
9. All lengths of PVC conduit shall be connected by one conduit end fitting inside the flared end of the other conduit section. If this is not possible, then a coupling may be used. Regardless of how connection is made, all joints shall be sealed with the appropriate epoxy to ensure that the two conduit pieces bond to one another to form a solid waterproof link. Using conduit tools, the conduit shall be cut and prepared. If approved by the engineer, a coupler module may be used where conduit segments do not align properly to allow the flared end of one conduit segment to mate with the normal end of the other segment.
10. Sealed end caps (with knockouts if empty) shall be placed on the ends of all conduits, after compressed air has been used to clear all foreign matter.
11. If not already pre-installed by the manufacturer, a polyester or polypropylene pulling rope or tape (fish wire) with a minimum rated strength of 1,250 pounds shall be installed in each conduit for future use. In instances where the Contractor installs the cable, the fish wire may be eliminated.
12. All PVC and HDPE conduits shall have a continuous metallic trace wire installed for the entire length of the conduit run for all fiber installations.
13. Stabilize slopes in accordance with section 908 as directed by the engineer.

B. Installation of Conduit Under Existing Pavement, Directional Bore -

1. Directional bore shall be used for installation of conduits under existing pavement with a conduit diameter not less than 1-1/2-inch. The size of a bore shall not exceed the outside diameter of the conduit by more than 1 inch. If it does, cement grout shall be pumped into the void. Only HDPE and/or Galvanized Steel conduit may be installed by Directional Bore methods.

C. Installation of Conduit Under Existing Pavement, Open Cut -

1. Installation by saw cutting the full pavement depth and removing the existing pavement with an excavator or by hand methods, shall be used only for conduits not less than 1-1/2-inch diameter. The engineer must first approve all open cutting of roadways. The width and length of open cut and patch restoration materials shall be as shown on the plan details. The Contractor shall be responsible for the removal of all cut pavement and surplus excavation, and for the replacement and correction of any damaged pavement outside the sawcut limits after the conduit(s) are installed.

D. Installation of Conduit Under Existing Pavement, Unpaved Trench -

1. Trenching or other approved method shall be used for installation of conduit in unpaved trench or under new pavement. Backfill in conduit trenches shall be compacted thoroughly as it is being placed. At the discretion of the engineer, remove sod to place conduit with an approved sod cutter and replace, or place 6 inches of topsoil and seed in accordance with section 908. In areas where new pavement is to be placed or in areas where total reconstruction is taking place, sodding or seeding may not be required by the engineer.

E. Installation of Conduit on Structure -

1. Conduit installed on structure shall consist of drilling anchors into concrete, brick, stone, steel or wood and mounting the conduit with the proper clamps or hangers. The conduit shall be attached to the structure by use of one-hole conduit hangers and approved anchors not more than 36 inches apart. Any 90-degree turns in the conduit run shall be accomplished by placing the proper size and type manufactured sweeping bends for the application needed.

F. Installation of Additional Conduit in Trench or Open Cut Pavement -

1. In the case of slotted or trenched installations, install additional conduits at the same time as the initial installation. The engineer shall indicate the quantity of conduits to be installed during a build. Additional conduits may be stacked one on top of the other, side by side or in a matrix. Conduits shall not twist around one another or be allowed to deviate from straight line paths except in the case of bend installations. Conduits installed at the same time in the same trench or slot shall remain oriented the same in relation to one another throughout the conduit run.

G. Installation of Additional Conduits in Directional Bore -

1. In the case of a directional bore that more than one conduit shall be installed at the same time as the initial installation, install 1 or more additional conduits. The engineer shall indicate the quantity of conduits to be installed during a build. The additional conduits may be stacked one on top of the other, side by side or in a matrix. Conduits shall not twist around one another or be allowed to deviate from straight line paths except in the case of a gentle bend. Conduits installed at the same time, in the same bore shall remain oriented in the same relation to one another throughout the conduit run.

METHOD OF MEASUREMENT:

- A. The Department will measure the quantity of conduit in linear feet of conduit provided and installed and accepted.
- B. The Department will measure the quantity of conduit in linear feet of conduit installed under existing pavement by a directional bore or by open cutting the pavement along the path of the bore or open cut, from the point that cannot be trenched to the point that trenching can resume.
- C. The Department will measure the quantity of conduit in linear feet of conduit reduced or divided (with a junction well or conduit body) as part of the larger conduit.

BASIS OF PAYMENT:

- A. The Department will pay for providing and installing conduit at the contract unit price per linear foot. Price and payment will constitute full compensation for:
 - 1. Providing all materials;
 - 2. labor;
 - 3. topsoil; and
 - 4. seed.
- B. The Department will pay for installing conduit by directional bore at the contract unit price per linear foot. Price and payment will constitute full compensation for:
 - 1. Excavation and backfilling;
 - 2. placing the conduit;
 - 3. caps, if required; and
 - 4. all other requirements.
- C. The Department will pay for installing conduit by open cutting existing pavement at the contract unit price per linear foot. Price and payment will constitute full compensation for:
 - 1. Excavation and backfilling;
 - 2. placing the conduit;
 - 3. disposal of excess materials; and
 - 4. all other requirements.
- D. The Department will pay for installing conduit by unpaved trench at the contract unit price per linear foot. Price and payment will constitute full compensation for:
 - 1. Excavation and backfilling;
 - 2. removal of sod, if required;
 - 3. placing the conduit;
 - 4. disposal of excess materials;
 - 5. replacing excavated on site sod, if required;
 - 6. seeding, if required; and
 - 7. all other requirements.
- E. The Department will pay for:
 - 1. Borrow in accordance with section 209;
 - 2. Base courses in accordance with sections 301 and 302;
 - 3. Bituminous pavement materials in accordance with section 402;
 - 4. PCC patching in accordance with section 505;
 - 5. Saw cutting in accordance with section 762; and
 - 6. Sodding and/or topsoil from an outside source in accordance with section 908.

Contract No. T201611601

842501 - PROVIDE & INSTALL ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 (100 AMP)

842502 - PROVIDE & INSTALL ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 (200 AMP)

DESCRIPTION:

This work consists of providing and installing Traffic Signals, ITS Devices and Lighting service pedestals and safety switches in accordance with the contract and as directed by the Engineer. Electrical service equipment consists of the equipment necessary to connect a utility company service to a traffic signal or ITS device controller cabinet, traffic monitoring station cabinet, or other traffic control device cabinet or lighting control cabinet. Provide electrical service equipment at the phasing and amperage specified in the Contract. This work includes coordinating the connection with the local utility company. While the 100 Amp Service may be specified for both Traffic and Highway Lighting, the 200 Amp Service is typically specified for Highway Lighting Only.

MATERIALS:

A. Service Pedestal and Safety Switch	Section 1078
B. Ground Rod & Wire	Section 833
C. Cables and Wire	Section 832
D. Conduit & Fittings, Galvanized Steel	Section 831; Section 1062
E. Hex Bolts & Washers, Stainless Steel	Section 1039
F. Square Tube Steel Posts	Section 1039
G. Portland Cement Concrete, Class B	Section 1022
H. Galvanizing	Section 1039
I. Aluminum Pedestal Board/Panel	Section 1078
J. 24" x 30" Minimum Size Circuit Breaker Box (To be determined by serviceable needs)	Section 1078

CONSTRUCTION METHODS:

- A. All work shall be performed in compliance with NEC, NFPA, and NESC Standards and with utility company minimum requirements. The electric service pedestal shall be installed as shown in the Contract Details. Locate line side safety switch and meter adjacent to service drop location, fuse and size line side safety switch to service. The load side safety switch should not be fused. Safety switch should be marked with weatherproof stamp. Switch should be labeled "Signal", "Camera", "Repeater", "VMS", "Detector" "RWIS" or "Lighting", denoting the device it serves. All conduits and hardware connections should be tightened with the appropriate wrenches or tools.

- B. The ground resistance of each rod must be measured before connecting the rod to the grounding conductor. If the measured resistance exceeds 25 ohms, exothermically weld a 10-foot extension to the top of the first rod and drive to its full depth. Measure the earth resistance again. If it still exceeds 25 ohms, contact the engineer for instruction.

Contract No. T201611601

C. Service Pedestal Installation

1. Area for service pedestal should be excavated. Where a pole base is to be placed in existing concrete pavement such as a sidewalk, the concrete should be saw cut in a square pattern or be removed to the nearest joint. Install conduit using a conduit adapter to connect sweeps to underground conduit and conduit leading to the safety switch and meter. An appropriate length of 2-inch galvanized conduit (threaded and reamed on both ends) should be installed on the end of the 90 degree sweeps at the base of the pedestal so that the end of the conduit will be 3 feet above the finished grade of the area.
- D. Install square tube steel posts per Contract Details in 12-inch X 12-inch X 36-inch concrete footings. 3-inch clearance should be provided on the base of footing. Backfill around the conduit and concrete footings and dispose of excess or unsuitable materials to grade of the bottom of concrete footings. Place backfill after 24 hours of install, in accordance with Section 202.
- E. Remove all excess material. Suitable Material may be used elsewhere on the Project as directed by the Engineer. Set square tube steel posts and determine the finished length of the tubular steel posts by adding the total height of the meter and safety switch to 5 feet. Install ground rod in accordance with the contract. The ground resistance of each rod must be measured before connecting the rod to the grounding conductor. If the measured resistance exceeds 25 ohms, exothermically weld a 10-foot extension to the top of the first rod and drive to its full depth. Measure the earth resistance again. If it still exceeds 25 ohms, contact the engineer for instruction.
- F. Attach pedestal aluminum board/panel to square tube steel posts using six (three for each post) 5/16-inch x 2 1/2-inch long Grade 5 stainless steel hex bolts, flat washers and nylon lock nuts. Attach meter socket to the board/panel with four 5/16-inch x 3/4-inch stainless steel hex bolts and nylon lock nuts. Attach the circuit breaker box to the board/panel with four 5/16-inch x 3/4-inch stainless steel hex bolts and nylon lock nuts.
- G. Arrange inspection by a Delaware licensed electrical inspection agency (or contractor's licensed staff) for all lighting system work including but not limited to service, branch circuits, junction wells, underground conduit, all grounding and bonding and any electrical work performed on the project. Submit certification for the chosen Delaware licensed electrical inspection agency or contractor's staff to the Project Engineer for approval prior to starting work.

METHOD OF MEASUREMENT:

- A. The Department will measure the quantity of electrical utility services in number of complete electric services installed, complete, in place, and accepted.

BASIS OF PAYMENT:

- A. The Department will pay for electrical services installed at the contract price per each of the size and type specified, installed, complete in place, tested, and accepted. Price and payment constitutes full compensation for:
 1. Materials:
 - a. Enclosures,
 - b. Panel boards
 - c. Ground rods,
 - d. Circuit breakers,
 - e. Internal wiring,

Contract No. T201611601

- f. Wiring devices,
- g. Wiring up to 10 feet each underground from the service pedestal to the utility pole and up to 50 feet each vertical (up the service pedestal and up the utility pole combined and including all required coils),
- h. Concrete collar,
- i. Meter sockets,
- j. Meter,
- k. Shunts,
- l. Cover plates,
- m. Wiring,
- n. Square tubing,
- o. Back panel,

- 2. Labor;
- 3. Tools;
- 4. Inspection by Delaware licensed electrical agency;
- 5. Incidentals necessary to complete the item.

8/10/21

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
May 20, 2022
State Contract No. T201611601
Project ID No. 04-00137
F.A.P. #ESTP-N011 (32)
SR 2 / Red Mill Road Intersection Improvements
New Castle County

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

Artesian Water Company	Water
City of Newark	Water
Comcast Cable	Communications
Crown Castle (Fibertech)	Communications
Delmarva Power	Electric
Delmarva Power Gas	Gas
Eastern Shore Natural Gas	Gas
New Castle County – Special Services	Sanitary Sewer
Verizon of Delaware Inc.	Telephone

The following is a breakdown of the utilities involved, adjustments and/or relocations as required (all Station counts, offsets, lengths, working days and calendar days are approximate). Relocations and adjustments called out are pending test hole information:

Artesian Water Company - Water

Artesian maintains the following underground water facilities within the project limits:

SR2 Capital Trail:

1. Artesian maintains a 12" C.I.P. under the sidewalk along SR2 left (north side) of the construction alignment from approximately Sta. 98+60 to Sta. 102+15 and exists the project limits.
2. Artesian maintains a 12" D.I.P and meter pit on the northeast corner of SR2 from Sta. 99+55 to Sta. 100+04.

Polly Drummond Hill Road:

- Artesian maintains a 12" C.I.P. along Polly Drummond Hill Road from the 90 degree bend left (west side) of the construction alignment bend and runs north from approximately Sta. 35+34 to Sta. 47+37 (Sta. 98+60) where the water main exits the project limits.

Chestnut Avenue:

- Artesian maintains a 12" C.I.P. along the south side of Chestnut Avenue connects with the 12" C.I.P. on Polly Drummond Hill Road at approximately Sta. 42+04.
- Artesian maintains a 12" C.I.P. along the south side of Chestnut Avenue connects with the 12" C.I.P. on Polly Drummond Hill Road at approximately Sta. 42+36.

STATEMENT OF WORK FOR WATER FACILITY ADJUSTMENTS:

Below is an itemized list of identified action items has been performed in advance of the state highway project. Each action item lists the location, offset, and description of work required or proposed by Artesian. The action items have been identified as follows:

Conflict Number	Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
1 (R)	102+10	6+74	L 69' To R 51'	Clearing & Grubbing (as needed)	Advance Work	-	3
2	101+92	101+96	L 49' To L 75'	Tie into existing 12-in Cast with a new 12-in 90° Bend at Sta. 101+92 (L 49'). Install approx. 26-ft of 12-in DIP to a new 16-in X 12-in Tee at Sta. 101+92 (L 75'). Install approx. 18-ft of 16-in DIP to a new 16-in End Cap at Sta. 102+09 (L 75'). Install a new 16-in Butterfly Valve at Sta. 101+96 (L 75').	Advance Work	-	3
3	101+96	100+18	L 75' To L 110'	From the aforementioned 16-in X 12-in Tee, install approx. 140-ft of new 16-in DIP to a new 16-in 45° Bend at Sta. 101+51 (L 76'). Install approx. 47-ft of 16-in DIP to a new 16-in X 12-in Tee at Sta. 100+18 (L 110').	Advance Work	-	4
4	100+18	99+91	L 110' To L 102'	From 16-in X 12-in Tee at Sta. 100+18 (L 110'), Install approx. 12-ft of 12-in DIP to a new 12-in 45° Bend at Sta. 100+09 (L 101'). Install approx. 18-ft of 12-in DIP and tie into existing 12-in service with a new 12-in Sleeve at Sta. 99+91 (L 102'). Install a new 12-in Butterfly valve at Sta. 101+12 (L 105').	Advance Work	-	2
5	100+19	36+75	L 110' To R 53'	From the aforementioned 16-in X 12-in Tee, install approx. 67-ft of 16-in to a new 16-in 45° Bend at Sta. 36+68 (R 56'). Next, install approx. 8-ft of 16-in DIP to a new 16-in 22.5° Bend at Sta. 36+75 (R 53'). Install a new 16-in Butterfly valve at Sta. 100+14 IL 114\.	Advance Work	-	3
6	36+75	41+57	R 53' To R 60'	From the aforementioned 16-in 22.5° Bend, install approx. 484-ft of 16-in DIP along the easterly side of Polly Drummond Hill Rd. to a new 16-in X 6-in Hydrant Tee at Sta. 41+57 (R 60'). Install a new Fire Hydrant at Sta. 41+56 (R 54').	Advance Work	-	12

Conflict Number	Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
7	41+57	41+80	R60' To R60'	From afore mentioned 16-in X 6-in Hydrant Tee, install approx. 10-ft of 16-in DIP to a new 16-in Butterfly valve at Sta. 41+67 (R 60'). From this valve, install approx. 13-ft of 16-in DIP to a new 16-in 90° Bend at Sta. 41+80 (R 60').	Advance Work	-	2
8	41+80	41+80	R 60' To L 72'	From the aforementioned 16-in 90° Bend, Bore & Jack approx. 80-ft of 24-in Steel Casing across Polly Drummond Rd. to Sta. 41+80 (L 33'). Install approx. 132-ft of 16-in DIP through Casing to a new 16-in 90° Bend at Sta. 41+80 (L 72'), located in AWC's Easement.	Advance Work	-	7
9	41+80	42+00	L 72' To L72'	From aforementioned 16-in 90° Bend, install approx. 19-ft of 16-in DIP to a new 16-in X 12-in Tee at Sta. 42+00 (L 72'). Install a new 16-in Butterfly Valve at Sta. 41+97 (L 72').	Advance Work	-	2
10	42+00	42+04	L 72' To L 82'	From aforementioned 16-in X 12-in Tee, install approx. 4-ft of 12-in DIP to a new 12-in Butterfly Valve at Sta. 42+01 (L 74'). Install approx. 3-ft of 12-in DIP to a new 12-in 45° Bend at Sta. 42+01 (L 77'). Install approx. 5-ft of 12-in DIP and tie into existing 12-in Cast with a new 12-in 90° Bend at Sta. 42+04 (L 82')	Advance Work	-	2
11	42+00	42+44	L 72' To L 72'	From the aforementioned 16-in X 12-in Tee, Open Cut approx. 39-ft of new 16-in DIP to a new 16-in Butterfly Valve at Sta. 42+39 (L 72'). Install approx. 5-ft of 16-in DIP to a new 16-in X 12-in Tee at Sta. 42+44 (L 72').	Advance Work	-	4
12	42+44	42+36	L 72' To L 87'	From aforementioned 16-in X 12-in Tee install approx. 3-ft of 12-in DIP to a new 12-in Butterfly Valve at Sta. 42+44 (R 75'). Install approx. 4-ft of 12-in DIP to a new 12-in 45° Bend at Sta. 42+44 (L 79'). Install approx. 12-ft of 12-in DIP and tie into existing 12-in Cast with a new 12-in 45° Bend at Sta. 42+36 (L 87').	Advance Work	-	2
13	42+44	42+50	L 72' To L 66'	From the aforementioned 16-in X 12-in Tee, install approx. 6-ft of 16-in DIP to a new 90° Bend at Sta. 42+50 (L 71'). Install approx. 5-ft of 16-in DIP to a new 16-in 90° Bend at Sta. 42+50 (L 66')	Advance Work	-	1
14	42+50	44+29	L 66' To L 62'	From aforementioned 90° Bend, install approx. 179-ft of 16-in DIP through AWC Easement along the westerly side of Polly Drummond Rd to a new 16-in 45° Bend at Sta. 44+29 (L 62').	Advance Work	-	4
15	44+29	45+13	L 62' To L 38'	From the aforementioned 16-in 45° Bend, install approx. 30-ft of 16-in DIP to a new 45° Bend at Sta. 44+49 (L 39'). Install approx. 60-ft of 16-in DIP to a new 16-in Butterfly Valve at Sta. 45+09 (L 36'). Install approx. 4-ft of 16-in DIP to a new 16-in X 8-in Tee at Sta. 45+13 (L 38').	Advance Work	-	3
16	45+13	45+15	L 38' To L 30'	From the aforementioned 16-in X 8-in Tee, Install approx. 2-ft of 8-in DIP to a new 8-in Gate Valve at Sta. 45+13 (L 34'). Install approx. 3-ft of 8-in DIP to a new 45° Bend at Sta. 45+13 (L 31') then install approx. 3-ft of 8-in DIP and tie into existing 8-in DIP with a new 45° Bend at Sta. 45+15 (L 30').	Advance Work	-	1

Conflict Number	Start Station	Finish Station	Offset	Action	M.O.T Phase	Type C Select Borrow	Estimated Calendar Days
17	45+13	47+40	L 36' To L 37'	From aforementioned 16-in X 8-in Tee, install approx. 228-ft of 16-in DIP to a new 16-in X 6-in Hydrant Tee at Sta. 47+40 (L 43'). Install a new Fire Hydrant at Sta. 47+40 (L 37').	Advance Work	-	6
18	47+40	47+86	L 43' To L 45'	From aforementioned 16-in X 6-in Hydrant Tee, install approx. 27-ft of 16-in DIP to a new 16-in X 12-in Tee at Sta. 47+68 (L 44'). Install approx. 6- ft to a new 16-in Butterfly Valve at Sta. 47+74 (L 45), then install approx. 12-ft of 16-in DIP to a new 16-in End Cap at Sta. 47+86 (L 45').	Advance Work	-	2
19	7+68	47+68	L 44' To L 37'	From the aforementioned 16-in X 12-in Tee, install approx. 3-ft of 12-in DIP to a new 12-in Butterfly Valve at Sta. 47+68 (L 41'). Install approx. 4-ft of 12-in DIP and tie into existing 12-in Cast with a new 12-in 90° Bend at Sta. 47+68 (L 37').	Advance Work	-	2
20	101+87	101+87	L 49'	Cut and Cap existing 12-in Cast at Station 101+87 (L 49').	Advance Work	-	1
21	99+99	99+99	L 95'	Cut and Cap existing 12-in DIP at Station 99+99 (L 95').	Advance Work	-	1
22	42+04	42+04	L 76'	Cut and Cap existing 12-in Cast at Station 42+04 (L 76').	Advance Work	-	1
23	42+36	42+36	L 76'	Cut and Cap existing 12-in Cast at Station 42+36 (L 76').	Advance Work	-	1
24	45+17	45+17	L 30'	Cut and Cap existing 8-in DIP at Station 45+17 (L 30').	Advance Work	-	1
25	47+62	47+62	L 37'	Cut and Cap existing 12-in Cast at Station 47+62 (L 37').	Advance Work	-	1
26	ALL	ALL	-	Properly purge and seal existing water mains within the project limits that will be retired as a result of the relocations. Pull valve boxes on all valves and blowoffs to be abandoned.	Advance Work	-	2
Total	-	-	-		-	-	73 days

ABANDONMENT: Existing main s are to be withdrawn from service once the new mains are installed and activated. Retired mains are to be purged and sealed with supplied MJ End Cap(s) once the relocation work has been completed. Artesian's contractor will remove any valve boxes, hydrants, and blow-off asse mb lies that are to be abandoned.

SPECIAL PERMITTING: At this time, we assume that we will not be required to file a General Sediment and Storm Water Management Permit for utility construction and

that should we be required to file a sub-aqueous application for utility crossings, we will promptly file and commence construction upon receipt.

The following adjustments are required for the existing Artesian facilities. All adjustments shall be performed so that there are no unnecessary disruptions of services:

1. Adjust water valve at Station 41+86, 22.5' left.
2. Adjust water valve at Station 42+26, 22' left.
3. Adjust water valve at Station 42+34, 22' left.
4. Adjust water valve at Station 44+31, 20' left.

There are no anticipated impacts to these facilities other then what is outlined above. The State's contractor shall adjust each water valve box to match the surface elevation and slope. Payment for each water valve adjusted shall be paid as per item #710002 – *ADJUST WATER VALVE BOXES*. The State's contractor shall contact the *Water Company* representative prior to any adjustment to existing water utilities.

Artesian's review is based upon information contained in DelDOT's Final Plans for contract T201611601, received on 01/20/2022, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

Note: The Contractor is not permitted to draw water from any hydrant for any use, without the written permission of the Artesian Water Company and proper metering and backflow prevention equipment in place.

Under no circumstances shall any valve box be paved over, filled, or knocked out of vertical alignment during construction.

No working/existing Artesian Water Company facilities can be taken out of service.

These facilities will remain in place and active during the duration of this contract.

24-hour emergency phone number - 1-800-332-5114.

City of Newark Department of Public Works and Water Resources – Water

The City of Newark (CoN) maintains underground water facilities within the project limits.

SR2 Capital Trail:

1. CoN maintains a 8" water main along SR2 within the eastbound lanes right (south side) of the construction alignment. The water main entering into the project limits at Sta. 88+50 to exit the project limits at Sta. 102+15.

Red Mill Road:

1. CoN maintains a 12" water main along Red Mill left (west side) of the construction alignment entering into the project limits Sta. 27+00 to Sta. 34+82 (Sta. 98+25) and tie into the 12" water on SR2.

Polly Drummond Hill Road:

1. CoN maintains a 12" water main along Polly Drummond Hill Road left (west side) of the construction alignment beginning at connection to the 12" water main Sta. 34+82 (Sta. 98+25) to approximately Sta. 38+08.
2. The 12" water main crosses Polly Drummond Hill Road to the interconnection with Artesian at Sta. 36+11 (99+55) meter pit located on the east side of Polly Drummond Hill Road.

The following adjustments are required for the existing CoN facilities. All adjustments shall be performed so that there are no unnecessary disruptions of services:

1. Adjust water valves (3) at Station 98+30, 5' left.
2. Adjust water valve at Station 36+10, 56' right.
3. Adjust water valve at Station 32+42, 43' right.

All adjustments to the CoN's existing facilities will be done by the State's Contractor as shown in the contract documents and as directed by the State's Engineer. The Contractor shall determine the number of days required and show that in schedule. The work is not considered complete until accepted by The City of Newark. Any water valve riser adjustments that are required by the Engineer, shall be made by the State's contractor as per item #710002.

Any relocations/adjustments of the City's water facilities that may arise during construction beyond those listed above shall be coordinated with the City to confirm the State's Contractor can perform the necessary work and as directed by the State's Engineer. The State contractor shall notify the City for their permission to perform such work a minimum of seven (7) calendar days in advance of the State contractor performing any necessary facility adjustments.

Under no circumstances shall any valve box be paved over, filled, or knocked out of vertical alignment during construction.

No working/existing CoN 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 maintains the following aerial facilities within the project limits:

1. Comcast maintains aerial facilities along the north side of SR 2 from pole 43994/41647 to pole 44073/41683.

2. Comcast maintains aerial facilities from pole 43994/41647 along Laurel Ave to outside the project limits.
3. Comcast maintains aerial facilities along the south side of SR 2 from west of the project limits to pole 44074/41670.
4. Comcast maintains aerial facilities laterally across SR 2 pole from 43994/41647 to pole 44007/41638.
5. Comcast maintains aerial facilities along the west side of Red Mill Rd from pole 44074/41670 to south of the project limits.

Comcast maintains the following underground facilities within the project limits:

1. Comcast maintains underground facilities on the south side of SR 2 from pole 44007/41638 as a service to Red Mill Square Plaza.

The following adjustments are required for the existing Comcast Cable facilities. All adjustments shall be performed so that there are no unnecessary disruptions of services:

1. Comcast to relocate on DPL Pole #44024-41642 at Sta. 91+75, 62' right.
2. Comcast to relocate on DPL Pole #44044-41656 at Sta. 94+15 right.
3. Comcast to relocate on DPL Pole #44058-41662 at Sta. 95+53, 60' right.
4. Comcast to relocate on DPL Pole #44074-41670 at Sta. 97+37, 60' right.
5. Comcast to relocate on DPL Pole #44X77-41669 at Sta. 33+46, 46' left.

Comcast will complete these changes. These relocations/adjustments are expected to take approximately **Four (4) calendar** days to complete after Comcast has been given a minimum of **Sixty (60)** 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 Contract, clearing and grubbing has been performed. Comcast relocations will begin once DP&L has completed their work.

Comcast's review is based upon information contained in DelDOT's Final Plans for contract T201611601, received on 01/20/2022, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

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

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

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

It is anticipated that this work will be completed in advance of the State's Contract. It is the responsibility of the Contractor to confirm whether this work has been completed in advance.

Crown Castle (Fibertech)

Crown Castle maintains aerial facilities within the project limits.

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

1. Crown Castle maintains aerial facilities along the south side of SR 2 from west of the project limits to east of the project limits.
2. Crown Castle maintains aerial facilities along the west side of Polly Drummond Hill Rd from pole 44074/41670 to north of the project limits.

Anticipated Crown Castle Relocations/Adjustments:

The following adjustments are required for the existing Crown Castle facilities. All adjustments shall be performed so that there are no unnecessary disruptions of services:

1. Crown Castle to relocate on DPL Pole #44024-41642 at Sta. 91+75, 62' right.
2. Crown Castle to relocate on DPL Pole #44044-41656 at Sta. 94+15 right.
3. Crown Castle to relocate on DPL Pole #44058-41662 at Sta. 95+53, 60' right.
4. Crown Castle to relocate on DPL Pole #44074-41670 at Sta. 97+37, 60' right.
5. Crown Castle to relocate on DPL Pole #44X77-41669 at Sta. 33+46, 46' left.

Crown Castle will complete these changes. These relocations/adjustments are expected to take approximately **nine (9)** calendar days to complete after Crown Castle has been given a minimum of **fourteen (14)** 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 Contract, clearing and grubbing has been performed. Crown Castle relocations will begin once DP&L has completed their work.

Crown Castle's review is based upon information contained in DelDOT's Final Plans for contract T201611601, received on 01/20/2022, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

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

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

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

It is anticipated that this work will be completed in advance of the State's Contract. It is the responsibility of the Contractor to confirm whether this work has been completed in advance.

Delmarva Power (Electric)

Delmarva Power Electric Distribution (Delmarva) maintains aerial and underground facilities within the project limits.

Delmarva Power maintains the following aerial facilities within the project limits:

1. Delmarva Power maintains aerial facilities along the north side of SR 2 from west of the project limits to east of the project limits.
2. Delmarva Power maintains aerial facilities along the south side of SR 2 from west of the project limits to east of the project limits.
3. Delmarva Power maintains aerial facilities along the west side of Polly Drummond Hill Rd from south of the project limits to north of the project limits.

Anticipated Delmarva Power Relocations/Adjustments:

The following adjustments are required for the existing Delmarva Power Electric facilities. All adjustments or relocations shall be performed so that there are no unnecessary disruptions of services.

1. Delmarva will relocate DPL Pole #44024-41642 at Sta. 91+75, 62' right.
2. Delmarva will relocate DPL Pole #44044-41656 at Sta. 94+15 right.
3. Delmarva will relocate DPL Pole #44058-41662 at Sta. 95+53, 60' right.
4. Delmarva will relocate DPL Pole #44074-41670 at Sta. 97+37, 60' right.
5. Delmarva will relocate DPL Pole #44X77-41669 at Sta. 33+46, 46' left.
6. Delmarva will relocate Guy Anchor at Sta. 32+65, 46' right.

Delmarva will complete this work. These relocations/adjustments are expected to take approximately **twenty-five (25)** calendar days to complete after Delmarva has been given a minimum of **thirty (30) 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 Contract, clearing and grubbing has

been performed, cuts and fills have been completed to within one foot of final grades and the relocations have been made accessible. Delmarva's lead time for cable and associated materials is approximately 16 weeks (subject to change due to volatile supply chain).

Anticipated Point of Service:

Delmarva power will supply and install proposed lighting as shown on the plans and execute the lighting agreement through the tariff system with the Department.

Delmarva Power will supply service to the proposed luminaire on the proposed signal pole at approximate Sta. 34+14, 55' right.

Delmarva Power will supply service to the proposed traffic signal and traffic camera cabinets at approximate Sta. 100+05 left, from DPL pole 44088/41688.

Delmarva Power's review is based upon information contained in DelDOT's Final Plans for contract T201611601, received on 01/20/2022, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

No Delmarva Power Electric involvement is anticipated during the contract duration.

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

Delmarva Power has provided plan markups for relocating/removing poles and existing aerial wires. No outages are anticipated.

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

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

DelDOT has not planned for or coordinated with Delmarva Power -Electric Distribution for any temporary power outages, relocations, physical pole support for excavation nor arranged for the installation of insulation of any power line during this contract other than as outlined in the above description. Due to varying construction possibilities; if a contractors means-and-methods should require support from Delmarva Power to fulfill the requirement of 16 Del. C. § 7405B, OSHA Regulations Table A of § 1926.1408, other applicable federal, state or local law or regulation or the Contractor's company policy; it shall be at the Contractor's sole expense and the contractor shall directly coordinate this request with Delmarva Power. All costs associated with any temporary power outages, relocations, physical pole support for excavation or the installation of insulation of any power line during this contract shall be incidental, including the

cost of the coordination, to the work being performed. The Department makes no guarantees that the request for any temporary power outages, relocation or the installation of insulation of any power line during this contract will be granted by Delmarva Power in part or in total; or during the time periods requested by the Contractor for construction purposes. Any proposed coordination with Delmarva Power shall be included in the contractor's CPM schedule. In addition, Delmarva Power will determine if these outages can be accommodated.

General

For exact location of electric facilities, please contact Miss Utility at (800) 282-8555.

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 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 in to satisfy OSHA”

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

It is anticipated that this work will be completed in advance of the State’s Contract. It is the responsibility of the Contractor to confirm whether this work has been completed in advance.

Delmarva Power – Gas

Delmarva Power (DPL Gas) owns and maintains gas facilities within the project limits.

Delmarva Power maintains the following gas facilities within the project limits:

1. Delmarva Power maintains 8" Poly main along the north side of SR 2 from west of the project limits to the NW corner of the SR 2/ Polly Drummond Hill Rd intersection.
2. Delmarva Power maintains 8" Poly main along the west side of Polly Drummond Hill Rd from the NE corner of the SR 2/ Polly Drummond Hill Rd intersection to approximate Station 36+50.
3. Delmarva Power maintains 8" Poly main with 12" Steel casing laterally crossing Polly Drummond Hill Rd at approximate Station 36+50.
4. Delmarva Power maintains 8" Poly main along the north side of SR 2 from the lateral crossing of Polly Drummond Hill Rd to east of the project limits.
5. Delmarva Power maintains 6" Poly main with 10" Steel casing laterally across SR 2 at approximate Station 97+40.
6. Delmarva Power maintains 2" Poly main along the south side of SR 2 from approximate Station 96+25 to the lateral crossing at approximate Station 97+40.
7. Delmarva Power maintains 6" Poly main along the west side of Red Mill Rd from the SW corner of the SR 2/ Red Mill Rd intersection to south of the project limits.

Anticipated DPL Gas Relocations/Adjustments:

1. DPL Gas will remove from service temporarily during the culvert construction a segment of 8-inch polyethylene gas main between Sta. 92+00 and 93+00 offset left 30 ft. along SR 2/ Capitol Trail.
2. The gas main segment will be placed out of service according to the following:
 - o The 8-inch pipe segment can only be taken out of service between **May 1st** and **September 30th** due to operating constraints within the gas system.
 - o Field stakes are to be placed by the contractor **7 days** in advance of the 8-inch pipe being placed out of service. The stakes shall be placed on both sides of the culvert over the 8-inch gas main identifying the cut and cap locations. The contractor shall allow for ample room for the culvert construction when determining these two locations.
 - o The area identified for the cut and cap shall be clear of all equipment and materials prior to the arrival of DPL Gas.
3. DPL Gas requests twenty-one (**21**) **days advanced notice** to begin the 8-inch main segment isolation and seven (**7**) **days** to conduct this work. Once completed, DPL Gas will leave the construction site.
4. The isolated segment of 8-inch gas main will remain in place for the contractor to remove during the culvert construction.
5. DPL Gas requests fourteen (**14**) **days advanced notice** to return to the site and replace the 8-inch gas main segment over the culvert and twelve (**12**) **days** to conduct this work.

6. Final restoration of the site is to be performed by DelDOT's contractor in accordance with the roadway improvement designs.

DPL Gas is not proposing additional modifications to the gas system within the limits of the project.

In the event a gas valve box is in conflict, DPL Gas requests DelDOT's contractor to adjust each box vertically to achieve the proposed surface grade change. **Any gas valve riser adjustments that are required by the Engineer, shall be made by the State's contractor as per item #710503.**

All valve boxes must remain plumb to the valve with the cap level with the surface grade. No valve box shall be obstructed or covered at any time.

The following adjustments are required for the existing DPL Gas facilities. All adjustments shall be performed so that there are no unnecessary disruptions of services:

1. Adjust gas valve at Station 92+18, 30' left.
2. Adjust gas valve at Station 97+18, 55' right.
3. Adjust gas valve at Station 36+68, 51' right.

With the exception of the pipe segment noted above, no existing Delmarva Power Gas facilities can be taken out of service. These facilities will remain in place and active during the duration of this contract.

Caution: When saw cutting or digging in close proximity to gas facilities, the contractor is required to verify the depth of the gas main or service to ensure shallow pipe is not encountered.

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

If gas equipment such as pipe, tracer wire, valve boxes, etc. are damaged or you smell gas, call **DPL's emergency number at 302-454-0317 (24 hours a day)** from a safe location. Do not call the project engineer or other contacts from DPL Gas.

DPL Gas's review is based upon information contained in DelDOT's Final Plans for contract T201611601, received on 01/20/2022, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

No DPL Gas involvement is anticipated during the contract duration.

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

Eastern Shore Natural Gas – Gas

Eastern Shore Natural Gas (ESNG) owns and maintains gas facilities within the project limits.

ESNG maintains the following gas facilities within the project limits:

1. Eastern Shore Natural Gas (ESNG) maintains 10- and 16-inch steel high-pressure transmission gas mains within the project limits along the west side of Red Mill Road and Polly Drummond Road.

Anticipated ESNG Relocations/Adjustments:

The following adjustments and/or relocations to its existing facilities to be completed concurrently with the State's Contract. All adjustments or relocations shall be performed so that there are no unnecessary disruptions of services:

1. ESNG will relocate the existing 10" buried gas line from approximate stations 31+50 left 42+55 left.

ESNG will complete this work. The relocation is expected to take approximately forty-five (45) calendar days after ESNG has been given a minimum of thirty (30) 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, clearing and grubbing has been performed, cuts and fills have been completed to within one foot of final grades and the relocations have been made accessible.

This work will require 200 CY of select borrow.

Eastern Shore's estimate is based on information contained in DelDOT's Final Plans for Contract T201611601, received on January 20, 2022, and all available data as of this date. Changes in the project scope or in the project's current construction phasing may revise the number of working days required.

The existing 16-inch facility will remain active throughout the duration of this project. The existing 10-inch facility will only be taken out of service during the relocation portion of the work. Any issues or emergencies shall immediately be reported to ESNG Gas Control at (302) 734-6720.

ESNG's review is based upon information contained in DelDOT's Final Plans for contract T201611601, received on 01/20/2022, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

New Castle County – Sanitary Sewer

New Castle County Sanitary Sewer (NCC) maintains underground facilities within the project limits from the western limits to Poplar Ave on the west leg of the intersection.

New Castle County Department of Special Services owns and maintains the following facilities:

1. New Castle County Department of Special Services maintains 12" D.S.V.C main along the eastbound lanes of SR 2 from west of the project limits to approximate Station 91+50.
2. New Castle County Department of Special Services maintains 8" S.S.V.C from approximate Station 91+50 north to Roseville Park.
3. New Castle County Department of Special Services maintains 8" PVC private service from approximate Station 91+50 south to Red Mill Square Plaza.
4. New Castle County Department of Special Services maintains various private services within Red Mill Square Plaza.
5. New Castle County Department of Special Services maintains 4" Steel sanitary force main laterally crossing Polly Drummond Hill Rd at approximate Station 42+45.

The following adjustments and/or relocations to its existing facilities are to be completed concurrently with the State's Contract. All adjustments or relocations shall be performed so that there are no unnecessary disruptions of services:

New Castle County Department of Public Works anticipates the state's contractor to perform the following adjustments in accordance with the plans and specifications:

1. Adjust manhole at Station 88+69, 22' right.

All adjustments to New Castle County's existing facilities will be done by the State's Contractor in accordance with the Standard Details and Standard Specifications of New Castle County and as shown in the contract documents as directed by the Project engineer. **Any sewer manhole adjustments that are required by the Engineer, shall be made by the State's contractor as per item #711500.**

The Contractor shall contact New Castle County Dept. Special Services at (302) 395-5756 five (5) calendar days prior to any relocation work beginning. The Contractor shall determine the number of days required and show that in schedule. The work is not considered complete until accepted by New Castle County.

NCC's review is based upon information contained in DelDOT's Final Plans for contract T201611601, received on 01/20/2022, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

No existing New Castle County's facilities can be taken out of service.

These facilities will remain in place and active during the duration of this contract.

Verizon of Delaware Inc. – Telephone

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

1. Verizon maintains aerial facilities on the Northeast side of SR 2 Capitol Trail from Pole #43982/41641 at station 88+40 L30 extending East and West beyond the project limits.
2. Verizon maintains aerial facilities on the South side of SR 2 Capitol Trail from Pole #43990/41631 at station 88+15 R45 extending East and West beyond the project limits.
3. Verizon maintains aerial facilities on the Northeast side of SR Capitol Trail from Pole 43994/41647 at Station 89+90 L30 extending West across Rose Circle beyond the project limits. Verizon maintains aerial facilities on the South side of SR 2 Capitol Trail from Pole #44074/41670 at station 97+38 R50 extending South along the west side of Red Mill Rd. beyond the project limits.
4. Verizon maintains aerial facilities along the West side of Polly Drummond Hill Rd. from Pole #750/P1 at station 36+11 L53 extending North beyond the project limits.
5. Verizon maintains aerial facilities on the South side of Chestnut Av. from Pole #44072/41752 at station 41+96 L52 extending West beyond the project limits.
6. Verizon maintains aerial facilities on Polly Drummond Hill Rd from Pole #44071/41767 at station 43+65 L48 extending East across Polly Drummond Hill Rd. to Pole #44081/41767 at station 43+27 R60.

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

1. Verizon maintains underground facilities along the North side of SR 2 Capitol Trail from MH 122 at station 89+90 L20 extending West and East beyond the project limits.
2. Verizon maintains underground facilities along the South side of SR 2 Capitol Trail from MH 140 at station 91+22 R32 extending East along SR 2 Capitol Trails to MH 141 at station 99+25 R68.
3. Verizon maintains underground facilities on the North side of SR 2 Capitol Trail from MH 122 at station 89+90 L30 extending Northwest along Rose Circle beyond the project limits.
4. Verizon maintains underground facilities from MH 123 at station 97+26 L31 extending North along Polly Drummond Hill Rd to Pole #750/P1 at station 36+11 L53.
5. Verizon maintains underground facilities from MH 123 at station 97+26 L31 extending South along Red Mill Rd. to Pole #44077/41659 at station 32+93 L39.
6. Verizon maintains underground facilities from MH 141 at station 99+23 R72 extending North along Polly Drummond Hill Rd beyond the project limits.
7. Verizon maintains buried facilities on the South side of SR 2 Capitol Trail from Pole #44084/41674 at station 99+32 R76 extending South beyond the project limits.

8. Verizon maintains buried facilities on the South side of SR 2 Capitol Trail from Pole #44073/41683 at station 100+15 R74 extending South beyond the project limits.
9. Verizon maintains underground facilities on SR 2 Capitol Trail from MH 142 at station 99+00 L35 extending North through MH 143 at station 36+25 R27 to dead end roughly at station 36+65 R22.
10. Verizon maintains underground facilities from MH 143 at station 36+25 R27 extending East and dead ending roughly at station 36+24 R51.
11. Verizon maintains buried facilities from MH144 at station 100+94 L42 extending North West to Pole #44097/41693 at station 100+71 L53.
12. Verizon maintains buried facilities on the North side of SR 2 Capitol Trail from Pole #44097/41693 at station 100+71 L53 extending North beyond the project limits.
13. Verizon maintains underground facilities from MH 144 at station 100+94 L42 extending South across SR 2 Capitol Trail to Pole #24/P65-1/K813/33 at station 100+90 R79 and to Pole #24/P66/K813/32 at station 102+02 R80.
14. Verizon maintains buried facilities on the East side of Polly Drummond Hill Rd from Pole #44081/41767 at station 43+27 R56 extending East beyond the project limits.
15. Verizon maintains buried facilities on the West side of Polly Drummond Hill Rd from Pole #44071/41767 at station 43+65 L37 extending North to a VZ pedestal at station 43 +78 R40 then continuing beyond the project limits.

Anticipated Verizon Aerial Relocations:

1. Verizon will relocate aerial cables along the South side of Capitol Trail from Pole #44007/41638 at station 89+80 R58 extending Southeast to Pole #44084/41674 at station 99+28 R76 once new Power Company Poles are relocated.
2. Verizon aerial cables will be relocated to new pole when Pole 44074/41670 at station 97+20 R78 is relocated at the corner of Capitol Trail Rd.
3. Verizon aerial cables will be relocated to new pole when Pole 44x77/41669 at station 33+60 L45 is relocated on Red Mill Rd.

Anticipated Underground Relocations:

1. Verizon to have contractors hold in place existing underground facilities, nine underground ducts while proposed drainage pipe is being installed from MH 122 at station 89+92 L20 extending East along SR 2 Capitol Trail to MH 123 at station 97+30 L25 on SR 2 Capitol Trail and Polly Drummond Hill Rd.

Verizon of Delaware Inc. will complete these changes. These relocations/adjustments are expected to take approximately **twenty-one (21)** calendar days to complete after the company has been given a minimum of **thirty-one (31)** 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 and required tree trimming and clearing has been performed.

The State's Contractor shall adjust existing Verizon manholes within the project limits as shown on the plans.

Verizon's review is based upon information contained in DelDOT's Final Plans for contract T201611601, received on 01/20/2022, and all data available as of this date. Changes in the project scope or in the projects current construction phasing may revise the number of working days required.

It is anticipated that this work will be completed in advance of the State's Contract. It is the responsibility of the Contractor to confirm whether this work has been completed in advance.

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 105.09 Utilities, Delaware Standard Specifications, August 2016. 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. The information shown in the Contract Documents, including the Utility Statement and the Utility Schedule contained herein, concerning the location, type and size of existing and proposed utilities, their locations, and construction timing has been compiled by the preparer based on information furnished by each of the involved Utility Companies. It shall be the responsibility of the State's Contractor to verify all information and coordinate with the Utility Companies prior to and during construction, as specified in Section 105.09 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.**

Company	Contact	Email	Phone
Artesian Water Company - Water	Wayne Tyler	WTyler@artesianwater.com	(302) 453-6987
City of Newark – Water	Brian Laws	blaws@newark.de.us	(302) 366-7000x2103

Comcast Cable Communications, Inc	Darren Marsteller	dmarsteller@amercomm-llc.com	(717) 509-7873x1004
Crown Castle (Fibertech)	Jeffrey Bracken	Jeffrey.Bracken@crowncastle.com	(484) 903-4024
Delmarva – Electric	Mike Drabczyk	Michael.Drabczyk@delmarva.com	(302) 454-4328
Delmarva – Gas	Laszlo Keszler	Laszlo.keszler@delmarva.com	(302) 429-3069
Eastern Shore Natural Gas	Mark Parker	maparker@esng.com	(302) 213-7270
New Castle County – Sanitary Sewer	David Clark	DAStreets@nccde.org	(302) 395-5705
Verizon Delaware Inc.	George Zang	George.w.zang@verizon.com	(302) 422-1238

5. As outlined in Chapter 3 of the DelDOT 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. In conjunction with bid preparation and prior to starting work, the State's Contractor shall confirm with all respective Utility Companies noted in this Utility Statement to have advance utility relocations that the advance relocations have in fact been accomplished as summarized herein.

Prepared and Recommended by:

Zach Brander

PENNONI, Zach Brander, EIT

5/20/2022

DATE

Approved as to form by

Deborah J. Kuklak

Utilities Section, DelDOT

May 23, 2022

DATE

COMPANY	2-8	9-15	16-22	23-29	30-5	6-12	13-19	20-26	27-5	6-12	13-19	20-26	27-2	3-9	10-16	17-23	24-30	1-7	8-14	15-21	22-28	29-4	5-11	12-18	19-25	26-2	3-9	10-16	17-23	24-30	31-6	4-10	11-17	18-24	25-1	4-10	11-17	18-24	25-1
State Contractor																																							
Artesian Water																																							
Delmarva Power Electric																																							
Crown Castle																																							
Comcast																																							
Verizon																																							
ESNG																																							
DP-Gas																																							
City of Newark*																																							
New Castle County*																																							

*All adjustments will be performed by the State's Contractor during construction.

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

CERTIFICATE OF RIGHT-OF-WAY STATUS

STATE PROJECT NO. T201611601

F.A.P. NO. ESTP-N011(32)

SR 2 RED MILL ROAD INTERSECTION IMPROVEMENTS

NEW CASTLE COUNTY

Certificate of Right-of-Way Status – 100%

Status - LEVEL 1

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

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

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

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

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

All occupants have vacated the lands and improvements; and,

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

RIGHT OF WAY SECTION



Monroe C. Hite, III
Chief of Right of Way

June 16, 2022

Updated from April 28, 2022



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

NICOLE MAJESKI
SECRETARY

February 16, 2022

ENVIRONMENTAL REQUIREMENTS

FOR

Contract Title: SR 2 / Red Mill Road Intersection Improvements

State Contract No. T201611601
Federal Aid No.: ESTP-N011(32)

Class II Action / Level C
CE action: 23 CFR 771.117 (c)(27)

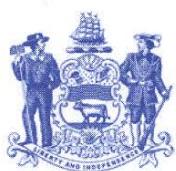
Environmental (NEPA) Approval Date: 1/19/2022

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

GENERAL REQUIREMENTS:

1. All construction debris, excavated material, brush, rocks, and refuse incidental to such work shall be placed either on shore above the influence of flood waters or on some suitable dumping ground.
2. That effort shall be made to keep construction debris from entering adjacent waterways or wetlands. Any debris that enters those areas shall be removed immediately.
3. The disposal of trees, brush, and other debris in any stream corridor, wetland, surface water, or drainage area is prohibited.

4. 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 (302) 760-2259 or DOT_EnvironmentalStudies@delaware.gov.



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

JENNIFER COHAN
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.: _____ No. Trains/Day: _____ Passenger Trains (Y / N): _____

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 Manager at (302) 659-4060.

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 Manager at (302) 659-4060.

Approved As To Form:

A handwritten signature in black ink that reads "Richard Singen".
DelDOT Railroad Program Manager

DATE

134 of 143



Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	4125
401036	SUPERPAVE TYPE C, PG 64-22, WEDGE	TON	568
401045	SUPERPAVE TYPE C, PG 70-22 (NON-CARBONATE STONE)	TON	2847
503002	PATCHING PCC PAVEMENT, 15' TO 100', TYPE B	SY	75
601032	REINFORCED CONCRETE PIPE, 15", CLASS IV	LF	1675
601033	REINFORCED CONCRETE PIPE, 18", CLASS IV	LF	249
601053	REINFORCED CONCRETE PIPE, 15", CLASS V	LF	71
601037	REINFORCED CONCRETE PIPE, 30", CLASS IV	LF	289
601039	REINFORCED CONCRETE PIPE, 36", CLASS IV	LF	137
601040	REINFORCED CONCRETE PIPE, 42", CLASS IV	LF	206
601120	REINFORCED CONCRETE ELLIPTICAL PIPE, 29" X 45", CLASS IV	LF	22
601122	REINFORCED CONCRETE ELLIPTICAL PIPE, 34"X53", CLASS IV	LF	67
602003	DRAINAGE INLET, 34" X 24"	EACH	8
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	1389
602004	DRAINAGE INLET, 48" X 30"	EACH	6
602005	DRAINAGE INLET, 48" X 48"	EACH	3
602009	DRAINAGE INLET, 72" X 24"	EACH	10



Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
602010	DRAINAGE INLET, 72" X 48"	EACH	16
602011	DRAINAGE INLET, 72" X 72"	EACH	2
602012	DRAINAGE INLET, SPECIAL	EACH	1
602035	MANHOLE, ROUND	EACH	4
602037	MANHOLE, SPECIAL	LS	1
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EACH	15
201000	CLEARING AND GRUBBING	LS	1
202000	EXCAVATION AND EMBANKMENT	CY	8450
208000	FLOWABLE FILL	CY	30
209006	BORROW, TYPE F	CY	870
207021	STRUCTURAL BACKFILL, (BORROW TYPE C)	CY	4400
211000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	2736
301001	GABC	CY	1275
401014	SUPERPAVE TYPE B, PG 64-22	TON	639
301002	GABC, PATCHING	CY	2718



Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	195
401015	SUPERPAVE TYPE B, PG 70-22	TON	360
707017	RIPRAP, R-6	TON	40
709001	PERFORATED PIPE UNDERDRAINS, 6"	LF	3700
710002	ADJUST WATER VALVE BOXES	EACH	8
711500	ADJUST AND REPAIR EXISTING SANITARY MANHOLE	EACH	1
721001	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	EACH	1
721010	GUARDRAIL TO BARRIER CONNECTION, APPROACH TYPE 1-31	EACH	1
727004	WOOD VERTICAL SLAT FENCE	LF	24
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	SYIN	45821
760012	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT, VARIABLE DEPTH	SYIN	9998
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	7671
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	295
763000	INITIAL EXPENSE/DE-MOBILIZATION	LS	1
763501	CONSTRUCTION ENGINEERING	LS	1
801000	MAINTENANCE OF TRAFFIC	LS	1
802003	ARROW PANELS TYPE C	EADY	810

Page: 3 of 9

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Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
803001	PROVIDE AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EADY	15
804001	PROVIDE AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	EADY	792
805001	PLASTIC TRAFFIC CONTROL DRUMS	EADY	157075
806001	TRAFFIC OFFICERS	HOUR	24
808001	PROVIDE AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE I	EADY	305
810001	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	8405
811001	FLAGGER, NEW CASTLE COUNTY	HOUR	2573
811013	FLAGGER, NEW CASTLE COUNTY, OVERTIME	HOUR	858
813001	TEMPORARY BARRICADES, TYPE III	LFDY	960
813501	TEMPORARY SIDEWALK, TYPE 2 (BOARDWALK)	LF	50
813502	RELOCATE TEMPORARY SIDEWALK - TYPE 2	LF	300
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	4657
817003	TEMPORARY MARKINGS, PAINT, 4"	LF	9829
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	SF	813
817005	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 5"	LF	134
817008	BLACKOUT TAPE	LF	93
602100	DRAINAGE INLET GRATE(S)	EACH	15



Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

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Item Number	Description	Unit	Quantity
602101	DRAINAGE INLET FRAME(S)	EACH	15
708003	GEOTEXTILES, RIPRAP	SY	40
602132	ADJUSTING AND REPAIRING EXISTING MANHOLE	EACH	15
607010	MODULAR BLOCK RETAINING WALLS	SF	372
612002	PRECAST CONCRETE ARCH	LS	1
701012	PCC CURB, TYPE 1-6	LF	1139
701013	PCC CURB, TYPE 1-8	LF	119
701014	PCC CURB, TYPE 2	LF	62
701015	I.PCC CURB AND GUTTER, TYPE 1-2	LF	102
701017	I.PCC CURB AND GUTTER, TYPE 1-6	LF	1894
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	466
701023	I.PCC CURB AND GUTTER, TYPE 3-8	LF	390
701026	PCC MONOLITHIC MEDIAN	LF	357
701500	PCC CURB, TYPE 1, MODIFIED	LF	203
702000	TRIANGULAR CHANNELIZING ISLANDS	SF	1094
705001	PCC SIDEWALK, 4"	SF	16025
705002	PCC SIDEWALK, 6"	SF	1477

Page: 5 of 9

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Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

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Item Number	Description	Unit	Quantity
705005	PCC SIDEWALK, 8"	SF	357
705007	DETECTABLE WARNING SURFACE	SF	519
705008	PEDESTRIAN CONNECTION, TYPE 1	SF	2529
705009	PEDESTRIAN CONNECTION, TYPE 2, 3, AND/OR 4	SF	2046
705528	TEMPORARY PEDESTRIAN CONNECTION	EACH	2
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	17010
817014	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 10"	LF	288
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	29
817031	REMOVAL OF PAVEMENT STRIPING	SF	4921
817032	REMOVAL OF PAVEMENT MARKING TAPE	SF	47
819016	INSTALLATION OF 4" DIAMETER HOLE, LESS THAN OR EQUAL TO 6" DEPTH	EACH	2
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	EACH	122
819019	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS	SF	114
830001	CONDUIT JUNCTION WELL, TYPE 1, 20" X 20" PRECAST CONCRETE	EACH	7
830002	CONDUIT JUNCTION WELL, TYPE 4, 20" X 42-1/2" PRECAST CONCRETE	EACH	11
830003	CONDUIT JUNCTION WELL, TYPE 5, 24" X 16" PRECAST CONCRETE	EACH	2
830008	ADJUST OR REPAIR EXISTING CONDUIT JUNCTION WELL	EACH	7



Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
830010	REMOVAL OF EXISTING JUNCTION WELL	EACH	9
831501	PROVIDE AND INSTALL 4" SCHEDULE 80 PVC CONDUIT (OPEN CUT)	LF	103
831514	PROVIDE AND INSTALL 2-1/2" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	118
831515	PROVIDE AND INSTALL 3" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	101
831516	PROVIDE AND INSTALL 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	LF	886
831523	PROVIDE AND INSTALL 2" GALVANIZED CONDUIT (TRENCH)	LF	35
831525	PROVIDE AND INSTALL 3" GALVANIZED STEEL CONDUIT (TRENCH)	LF	54
831545	PROVIDE AND INSTALL 4" HDPE SDR-13.5 CONDUIT (BORE)	LF	1028
831574	PROVIDE AND INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" SCHEDULE 80 PVC CONDUIT IN TRENCH OR OPEN CUT	LF	29
831578	PROVIDE AND INSTALL SECOND AND SUBSEQUENT ADDITIONAL 4" HDPE SDR-13.5 CONDUIT IN DIRECTIONAL BORE	LF	672
834001	POLE BASE, TYPE 3	EACH	4
834002	POLE BASE, TYPE 3A	EACH	1
834005	POLE BASE, TYPE 4A	EACH	5
835001	CABINET BASE TYPE F	EACH	1
835003	CABINET BASE TYPE P	EACH	1
842501	PROVIDE AND INSTALL ELECTRIC UTILITY SERVICE EQUIPMENT 120/240 (100 AMP)	EACH	2



Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

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Item Number	Description	Unit	Quantity
846001	PROVIDE AND INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	LF	1591
850011	REMOVAL OF LUMINAIRE	EACH	1
905001	SILT FENCE	LF	1635
302002	DELAWARE NO. 3 STONE	TON	10
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	1
905005	INLET SEDIMENT CONTROL, CURB INLET	EACH	106
907017	COMPOST FILTER LOGS	LF	160
908004	TOPSOIL, 6" DEPTH	SY	7875
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	7875
908020	EROSION CONTROL BLANKET MULCH	SY	72
908026	EROSION CONTROL MULCH	SY	7875
909005	STREAM DIVERSION	LS	1
763001	BASELINE SCHEDULE TYPE 1	LS	1
763002	MONTHLY UPDATE SCHEDULE TYPE 1	EAMO	12
763598	FIELD OFFICE, SPECIAL I	EAMO	12
809001	INSTALL TEMPORARY IMPACT ATTENUATOR	EACH	1

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T201611601

Project Description: SR 2 / RED MILL ROAD INTERSECTION IMPROVEMENTS

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809005	PROVIDE TEMPORARY IMPACT ATTENUATOR - NON-GATING, REDIRECTIVE, TEST LEVEL 3	EACH	1
723500	PORLTAND CEMENT CONCRETE SAFETY BARRIER, PERMANENT, SINGLE FACE, MODIFIED TYPE 2	LF	174