STATE OF DELAWARE

This Copy is for information only.
You must purchase the Proposal
in order to submit a Bid.

DEPARTMENT OF TRANSPORTATION

BID PROPOSAL

for

CONTRACT DOT1423-PAVEMARK_SRTLN

STATEWIDE SHORT LINE PAVEMENT MARKINGS PROGRAM

STATEWIDE

ADVERTISEMENT DATE: March 23, 2015

COMPLETION TIME: 1,095 Calendar Days

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
DELAWARE DEPARTMENT OF TRANSPORTATION
AUGUST 2001

Bids will be received in the Bidder's Room at the Delaware Department of Transportation's Administration Building, 800 Bay Road, Dover, Delaware until 2:00 P.M. local time **April 21, 2015**

STATEWIDE SHORT LINE PAVEMENT MARKINGS PROGRAM

STATEWIDE

GENERAL DESCRIPTION

LOCATION

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

DESCRIPTION

The improvements consist of furnishing all labor and materials for this project. This contract provides for the furnishing and installation of short line pavement marking materials at various locations in the State. The pavement marking materials to be used, are paint with surface applied glass spheres, thermoplastic with surface applied glass spheres, preformed thermoplastic and permanent pavement marking tape, and other incidental construction in accordance with the location, notes and details shown on the plans and as directed by the Engineer.

COMPLETION TIME

All work on this contract must be complete within 1,095 Calendar Days. It is the Department's intent to issue a Notice to Proceed such that work starts on or about June 1, 2015.

PROSPECTIVE BIDDERS NOTES:

1. BIDDERS MUST BE REGISTERED with DelDOT and request a cd of the official plans and specifications in order to submit a bid. Contact DelDOT at dot-ask@state.de.us, or (302) 760-2031.
2. QUESTIONS regarding this project are to be e-mailed to dot-ask@state.de.us no less than six business days prior to the proposal opening date in order to receive a response. Please include DOT1423-PAVEMARK_SRTLN in the subject line. Responses to inquiries are posted on-line at http://www.bids.delaware.gov.
3. This project incorporates the electronic bidding system **Expedite**, **version 5.9a**. Bidders wishing to use the electronic bidding option will find the installation file on the plan holders bid file disk. The installation file and instructions are also available on DelDOT's Website at: http://www.deldot.gov/information/business/bids/const_proj_bid_info.shtml.
4. No retainage will be withheld on this contract.
5. The Department's External Complaint Procedure can be viewed on DelDOT's Website at; http://www.deldot.gov/information/business/, or you may request a copy by calling (302) 760-2555.

---

6. **SPECIFICATIONS**: New Supplemental Specifications to the August 2001 Standard Specifications were issued November 24, 2014 and apply to this project. They can be viewed here. The Department is currently updating the August 2001 Specifications for Road and Bridge Construction. Through this update, some Divisions were renumbered and some new ones were created and added. The ***Specifications Note*** document is for the use by the bidders to reference the new numbers to the past numbers used for bidding purposes on previous Department contracts.
7. **PLEASE NOTE** the requirements of special provision 'Changes to Project Documents During Advertisement' have moved to Supplemental Specifications, the special provision is no longer needed.
8. **PLEASE NOTE** federal requirements for the DBE program under 49CFR §26.53(b)(3)(i)(B) have changed effective November 3, 2014. Submission of DBE participation information is now required from the lowest apparent bidder no later than seven (7) days after bid opening *(formerly 10 days)*.

CONSTRUCTION ITEMS UNITS OF MEASURE

English Code	English Description	Multiply By	Metric Code	Metric Description	Suggested CEC Metric Code
ACRE	Acre	0.4047	ha	Hectare	HECTARE
BAG	Bag	N/A	Bag	Bag	BAG
C.F.	Cubic Foot	0.02832	m^3	Cubic Meter	M3
C.Y.	Cubic Yard	0.7646	m^3	Cubic Meter	M3
EA-DY	Each Day	N/A	EA-DY	Each Day	EA-DY
EA-MO	Each Month	N/A	EA-MO	Each Month	EA-MO
EA/NT	Each Night	N/A	EA-NT	Each Night	EA/NT
EACH	Each	N/A	EA	Each	EACH
GAL	Gallon	3.785	L	Liter	L
HOUR	Hour	N/A	h	Hour	HOUR
INCH	Inch	25.4	mm	Millimeter	MM
L.F.	Linear Foot	0.3048	m	Linear Meter	L.M.
L.S.	Lump Sum	N/A	L.S.	Lump Sum	L.S.
LA-MI	Lane Mile	1.609	LA-km	Lane-Kilometer	LA-KM
LB	Pound	0.4536	kg	Kilogram	KG
MFBM	Thousand Feet of Board Measure	2.3597	m^3	Cubic Meter	M3
MGAL	Thousand Gallons	3.785	kL	Kiloliter	KL
MILE	Mile	1.609	km	Kilometer	KM
S.F.	Square Foot	0.0929	m^2	Square Meter	M2
S.Y.	Square Yard	0.8361	m^2	Square Meter	M2
SY-IN	Square Yard-Inch	0.8495	m^2-25 mm	Square Meter-25 Millimeter	M2-25 MM
TON	Ton	.9072	t	Metric Ton (1000kg)	TON
N.A.*	Kip	4.448	kN	Kilonewton	N.A.*
N.A.*	Thousand Pounds per Square Inch	6.895	MPa	Megapascal	N.A.*

*Not used for units of measurement for payment.

TABLE OF CONTENTS

GENERAL DESCRIPTION . . . i
LOCATION . . . i
DESCRIPTION . . . i
COMPLETION TIME . . . i
PROSPECTIVE BIDDERS NOTES . . . i
CONSTRUCTION ITEMS UNITS OF MEASURE . . . ii

GENERAL NOTICES . . . 1
SPECIFICATIONS . . . 1
CLARIFICATIONS . . . 1
ATTESTING TO NON-COLLUSION . . . 1
QUANTITIES . . . 1
PREFERENCE FOR DELAWARE LABOR . . . 1
EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS . . . 1
TAX CLEARANCE . . . 2
LICENSE . . . 2
DIFFERING SITE CONDITIONS . . . 2
CONFLICT WITH FEDERAL STATUTES OR REGULATIONS . . . 3
FEDERAL LABOR AND EMPLOYMENT REQUIREMENTS . . . 3
CONVICT PRODUCED MATERIALS: . . . 3
TO REPORT BID RIGGING ACTIVITIES . . . 4
NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION . . . 5
STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY . . . 6
TRAINING SPECIAL PROVISIONS . . . 9
INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT . . . 10
DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM SPECIFICATION . . . 10
CRITICAL DBE REQUIREMENTS . . . 12
GUIDANCE FOR GOOD FAITH EFFORT . . . 13

REQUIRED CONTRACT PROVISIONS - FEDERAL-AID CONSTRUCTION CONTRACTS . . . 15
I. GENERAL . . . 15
II. NONDISCRIMINATION . . . 15
III. NONSEGREGATED FACILITIES . . . 19
IV. DAVIS-BACON AND RELATED ACT PROVISIONS . . . 19
VI. SUBLETTING OR ASSIGNING THE CONTRACT . . . 24
VII. SAFETY: ACCIDENT PREVENTION . . . 25
VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS . . . 26
X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY . . . 26
XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING . . . 29
APPENDICES TO THE TITLE VI ASSURANCE . . . 30

PREVAILING WAGES . . . 32
PREVAILING WAGE REQUIREMENTS . . . 32
APPLICABILITY OF DAVIS-BACON LABOR STANDARD PROVISIONS TO FLAGGERS . . . 37
ALL AGENCY MEMORANDUM NO. 130 . . . 37

SUPPLEMENTAL SPECIFICATIONS . . . 38

SPECIAL PROVISIONS . . . 39
CONSTRUCTION ITEM NUMBERS . . . 40
401502 - ASPHALT CEMENT COST ADJUSTMENT . . . 41
748665 - WHITE PAINT LINE - TRANSVERSE, 12" . . . 42
748666 - WHITE PAINT LINE - TRANSVERSE, 16" . . . 42
748667 - STRAIGHT ARROW - PAINT . . . 42
748668 - RIGHT OR LEFT ARROW - PAINT . . . 42
748669 - COMBINATION ARROW - PAINT . . . 42
748670 - SYMBOL - PAINT . . . 42
748676 - YELLOW PAINT TRANSVERSE, 12" . . . 42
748677 - CURB PAINT . . . 42

748740 - WHITE PAINT LINE, 5". 42
748741 - WHITE PAINT LINE, LONG LINE, 5". 42
748742 - YELLOW PAINT LINE, 5". 42
748743 - YELLOW PAINT LINE, LONG LINE, 5". 42
748755 - WHITE PAINT LINE, 10". 42
748756 - YELLOW PAINT LINE, 10". 42
748683 - TYPE “A” LINE, 12". 48
748684 - TYPE “A” LINE, 16". 48
748685 - STRAIGHT ARROW TYPE “A”. 48
748686 - RIGHT OR LEFT ARROW TYPE “A”. 48
748687 - COMBINATION ARROW TYPE “A”. 48
748688 - SCHOOL LEGEND TYPE “A”. 48
748689 - R x R LEGEND TYPE “A”. 48
748690 - SYMBOL TYPE “A”. 48
748735 - TYPE “A” LINE, 5". 48
748736 - TYPE “A” LINE - LONG, 5". 48
748737 - TYPE “A” LINE, 10". 48
748738 - TYPE “A” LINE, CONTRAST, 8". 48
748739 - TYPE “A” LINE, CONTRAST, 13". 48
748696 - THERMOPLASTIC TRANSVERSE LINE, 12". 52
748697 - THERMOPLASTIC TRANSVERSE LINE, 16". 52
748698 - STRAIGHT ARROW THERMOPLASTIC. 52
748699 - LEFT OR RIGHT THERMOPLASTIC ARROW. 52
748700 - COMBINATION ARROW THERMOPLASTIC. 52
748702 - SYMBOL - THERMOPLASTIC. 52
748732 - THERMOPLASTIC LINE, 5". 52
748733 - THERMOPLASTIC LINE - LONG, 5". 52
748734 - THERMOPLASTIC LINE, 10". 52
748703 – SYMBOL - PREFORMED THERMOPLASTIC MARKINGS. 54
748704 – REMOVAL OF EXISTING PAVEMENT MARKINGS. 57
763563 - PERFORMANCE AND PAYMENT BOND. 58

PROJECT NOTES. 59

MOT CASES. 75

BID PROPOSAL FORMS. 83

CERTIFICATION. 89

BID BOND. 91

GENERAL NOTICES

SPECIFICATIONS:

The specifications entitled "Delaware Standard Specifications for Road and Bridge Construction, August, 2001", hereinafter referred to as the Standard Specifications; Supplemental Standard Specifications; the Special Provisions; notes on the Plans; this Bid Proposal; and any addenda thereto, shall govern the work to be performed under 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.

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.

PREFERENCE FOR DELAWARE LABOR:

Delaware Code, Title 29, Chapter 69, Section 6962, Paragraph (d), Subsection (4)b

> "In the construction of all public works for the State or any political subdivision thereof, or by firms contracting with the State or any political subdivision thereof, preference in employment of laborers, workmen or mechanics shall be given to bona fide legal citizens of the State who have established citizenship by residence of at least 90 days in the State. Each public works contract for the construction of public works for the State or any political subdivision thereof shall contain a stipulation that any person, company or corporation who violates this section shall pay a penalty to the Secretary of Finance equal to the amount of compensation paid to any person in violation of this section."

EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS:

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

> "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 or natural 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 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 or national origin.'

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 insure compliance.

LICENSE:

A person desiring to engage in business in this State as a contractor shall obtain a license upon making application to the Division of Revenue. 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 of if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the engineer will investigate the conditions, and if he/she determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of his/her determination whether or not an adjustment of the contract is warranted. No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice. No contract adjustment will be allowed under their clause for any effects caused on unchanged work.

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

TO REPORT BID RIGGING ACTIVITIES:

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

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

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

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

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals for Minority Participation In Each Trade	Goals for Female Participation In Each Trade
12.3% (New Castle County) 14.5% (Kent & Sussex Counties)	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 STATEWIDE.

REV. 11-3-80

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

1. As used in these specifications:

   a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
   b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
   c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
   d. "Minority" includes:
      i. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
      ii. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
      iii. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
      iv. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Program Office or from the Federal procurement contracting offices. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

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

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participating, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Order of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate

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

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

* * * * *

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 __0__. 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.

* * * * *

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:

Disadvantaged Business Enterprise 0 % Percent

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 seven (7) 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.

* * * * *

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 seven (7) 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.

* * * * *

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 Administration, DelDOT, P. O. Box 778, Dover, Delaware 19903. 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.

* * * * *

REQUIRED CONTRACT PROVISIONS - FEDERAL-AID CONSTRUCTION CONTRACTS
(Exclusive of Appalachian Contracts)

FHWA-1273 -- Revised May 1, 2012 http://www.fhwa.dot.gov/programadmin/contracts/1273/1273.docx

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

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.

* * * * *

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 ithas 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 l964,The AgeDiscrimination Act of 1975and Section 504 of the Rehabilitation Act of l973,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.

STATE OF DELAWARE
DEPARTMENT OF LABOR
DIVISION OF INDUSTRIAL AFFAIRS
OFFICE OF LABOR LAW ENFORCEMENT
PHONE: (302) 451-3423

Mailing Address:
225 CORPORATE BOULEVARD
SUITE 104
NEWARK, DE 19702

Located at:
225 CORPORATE BOULEVARD
SUITE 104
NEWARK, DE 19702

PREVAILING WAGES FOR **HIGHWAY CONSTRUCTION** EFFECTIVE MARCH 13, 2015

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
BRICKLAYERS	49.39	49.39	14.51
CARPENTERS	42.55	51.86	41.22
CEMENT FINISHERS	31.06	30.92	19.65
ELECTRICAL LINE WORKERS	22.50	22.50	21.25
ELECTRICIANS	63.60	63.60	63.60
IRON WORKERS	42.20	23.87	25.35
LABORERS	31.10	34.12	37.75
MILLWRIGHTS	16.11	15.63	13.49
PAINTERS	48.84	48.84	48.84
PILEDRIVERS	66.42	23.75	26.95
POWER EQUIPMENT OPERATORS	39.15	32.92	29.04
SHEET METAL WORKERS	22.75	20.31	18.40
TRUCK DRIVERS	32.31	20.65	25.55

CERTIFIED: 3/16/15

BY: ADMINISTRATOR, OFFICE OF LABOR LAW ENFORCEMENT

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

CLASSIFICATIONS OF WORKERS ARE DETERMINED BY THE DEPARTMENT OF LABOR. FOR ASSISTANCE IN CLASSIFYING WORKERS, OR FOR A COPY OF THE REGULATIONS OR CLASSIFICATIONS, PHONE (302) 451-3423.

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

PROJECT: DOT1423.01 State Wide Line Pavement Markings Program, Multiple Counties

General Decision Number: DE150013 01/02/2015 DE13

State: Delaware

Construction Type: Highway

County: New Castle County in Delaware.

HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of $10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number: 0 Publication Date: 01/02/2015

SUDE2014-001 03/19/2014

	Rates	Fringes
Bricklayer	48.08	
Carpenter	43.15	
Cement mason/concrete finisher	30.88	
ELECTRICIAN		
Electrician	62.10	
Line Workers	22.50	
Ironworker	42.20	
Laborer	33.01	
Millwright	16.11	
Painter	60.64	
Power Equipment Operator:		
Piledriver	66.42	
Power Equipment Operators	41.18	
Sheet Metal Worker	22.75	
Truck Driver	33.90	

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

General Decision Number: DE150014 01/02/2015 DE14

State: Delaware

Construction Type: Highway

County: Kent County in Delaware.

HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of $10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number: 0 Publication Date: 01/02/2015

SUDE2014-002 03/19/2014

	Rates	Fringes
Bricklayer	48.08	
Carpenter	50.91	
Cement Mason/Concrete Finisher	26.13	
ELECTRICIAN:		
Electrician	62.10	
Line Workers	22.50	
Ironworker	23.87	
Laborer	38.68	
Millwright	15.63	
Painter	60.64	
POWER EQUIPMENT OPERATOR:		
Piledriver	23.75	
Power Equipment Operators	27.61	
Sheet Metal Worker	20.31	
Truck Driver	21.03	

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

General Decision Number: DE150015 01/02/2015

State: Delaware

Construction Type: Highway

County: Sussex County in Delaware

HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of $10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number: 0 Publication Date: 01/02/2015

SUDE2014-003 03/19/2014

	Rates	Fringes
Bricklayer	14.51	
Carpenter	40.47	
Cement Mason/Concrete Finisher	26.33	
ELECTRICIAN:		
Electrician	62.10	
Line Workers	21.25	
Ironworker	25.35	
Laborer	37.97	
Millwright	13.49	
Painter	60.64	
POWER EQUIPMENT OPERATOR:		
Piledriver	26.95	
Power Equipment Operators	28.47	
Sheet Metal Worker	18.40	
Truck Driver	22.19	

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

APPLICABILITY OF DAVIS-BACON LABOR STANDARD PROVISIONS TO FLAGGERS

The U.S. Department of Labor has established that the duties of flaggers working on contracts covered by the Davis-Bacon Act, are manual and physical in nature. Accordingly, all employees performing the work of flaggers on Davis-Bacon covered contracts shall be entitled to receive applicable prevailing wage rates.

* * * * *

ALL AGENCY MEMORANDUM NO. 130
U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON, DC 20210

GUIDELINES

HIGHWAY CONSTRUCTION

Highway projects include the construction, alteration, or repair of roads, streets, highways, runways, taxiways, alleys, trails, paths, parking areas, and other similar projects not incidental to building or heavy construction.

EXAMPLES: Alleys, Base Courses, Bituminous treatments, Bridle Paths, Concrete pavement, Curbs, Excavation and embankment (for road construction), Fencing (highway), Grade crossing elimination (overpasses and underpasses), Guard rails on highway, Highway signs, Highway bridges (overpasses, underpasses, grade separation), Medians, Parking lots, Parkways, Resurfacing streets and highways, Roadbeds, Roadways, Runways, Shoulders, Stabilizing courses, Storm sewers incidental to road construction, Street paving, Surface courses, Taxiways, and Trails.

ANY QUESTIONS REGARDING THE APPLICATION OF THE GUIDELINES ABOVE TO A PARTICULAR PROJECT OR ANY DISPUTES REGARDING THE APPLICATION OF THE WAGE SCHEDULES ARE TO BE REFERRED TO THE WAGE AND HOUR DIVISION, U.S. DEPARTMENT OF LABOR FOR RESOLUTION, AND THE INSTRUCTIONS OF THE WAGE AND HOUR DIVISION ARE TO BE OBSERVED IN ALL INSTANCES.

* ALL AGENCY MEMORANDUM NO. 130
U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON, DC 20210

SUPPLEMENTAL SPECIFICATIONS
TO THE
AUGUST 2001
STANDARD SPECIFICATIONS

EFFECTIVE AS OF THE ADVERTISEMENT DATE OF THIS PROPOSAL AND INCLUDED BY REFERENCE

The Supplemental Specifications can be viewed and printed from the Department's Website.

To access the Website;
- in your internet browser, enter; http://www.deldot.gov
- on the left side of the page under 'INFORMATION', Click; 'Publications'
- scroll down under 'MANUALS' and Click; "Standard Specifications 2001"

The full Website Link is;
http://www.deldot.gov/information/pubs_forms/manuals/standard_specifications/index.shtml

Printed copies of the Supplemental Specifications are available upon request. A printed copy of the above referenced Supplemental Specifications will be included in the final contract documents upon award.

The Contractor shall make himself aware of these revisions and corrections (Supplemental Specifications), and apply them to the applicable item(s) of this contract.

SPECIAL PROVISIONS

CONSTRUCTION ITEM NUMBERS

All construction pay items are assigned a six (6) digit number, shown as Item Number on the Plans and/or in the Special Provisions, and shall be interpreted in accordance with the following:

Standard Item Number:

The first three digits of the construction item numbers indicates the Section number as described in the Standard Specifications, and all applicable requirements of the Section shall remain effective unless otherwise modified by the Special Provisions. The last three digits of the construction item identifies the item by sequential number under that Section. Sequential numbers for all items covered under Standard Specifications range from 000 to 499. A comprehensive list of construction item numbers begins on page 421 of the Standard Specifications. Additions to this list will be made as required.

Special Provisions Item Number:

The first three digits of the construction items, covered under Special Provisions, indicates the applicable Section number of the Standard Specifications, and shall be governed fully by the requirements of the Special Provisions. The last three digit of the items covered under Special Provisions identifies the item by sequential number. Sequential numbers for Special Provision items, range from 500 to 999.

Examples

Standard Item Number - 202000 Excavation and Embankment

202 Indicates Section Number

000 Indicates Sequential Number

Special Provision Item Number - 202500 Grading and Reshaping Roadway

202 Indicates Section Number

500 Indicates Sequential Number

NOTE:

PLEASE NOTE revised Supplemental Specifications to the August 2001 Standard Specifications were issued November 24, 2014 and apply to this project. They can be viewed here and at www.deldot.gov.

SPECIFICATIONS: The Department is currently updating the August 2001 Specifications for Road and Bridge Construction. Through this update, some Divisions were renumbered and some new ones were created and added. The ***Specifications Note*** document is for the use by the bidders to reference the new numbers to the past numbers used for bidding purposes on previous Department contracts.

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 Project Asphalt Cement Base Price will be the anticipated Delaware Posted Asphalt Cement Price expected to be in effect at the time of receipt of bids.

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 on the basis of weight tickets and asphalt percentage from the approved job mix formula.

For Recycled Hot-Mix the asphalt percentage eligible for cost adjustment shall be only the new asphalt cement added to the mix.

There shall be no separate payment per ton (metric ton) cost of asphalt cement. That cost shall be included in the various unit prices bid per ton (metric 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. The Project Asphalt Cement Base Price for the project will be $550.00 per ton ($606.27 per metric ton).

If the Contractor exceeds the authorized allotted completion time, the price of asphalt cement on the last authorized allotted work day, 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 (1,000 metric tons) or more of hot-mix bid quantity in case of Sections 401, 402 and 403; and 15,000 gallons (60 000 liters) or more in case of Sections 304, 404 and 405.

748660 - WHITE PAINT LINE, 4"
748661 - WHITE PAINT LINE, 6"
748662 - WHITE PAINT LINE - LONG, 4"
748663 - WHITE PAINT LINE - LONG, 6"
748664 - WHITE PAINT LINE - TRANSVERSE, 8"
748665 - WHITE PAINT LINE - TRANSVERSE, 12"
748666 - WHITE PAINT LINE - TRANSVERSE, 16"
748667 - STRAIGHT ARROW - PAINT
748668 - RIGHT OR LEFT ARROW - PAINT
748669 - COMBINATION ARROW - PAINT
748670 - SYMBOL - PAINT
748671 - YELLOW PAINT LINE, 4"
748672 - YELLOW PAINT LINE, 6"
748673 - YELLOW PAINT LINE - LONG, 4"
748674 - YELLOW PAINT LINE - LONG, 6"
748675 - YELLOW PAINT LINE TRANSVERSE, 8"
748676 - YELLOW PAINT TRANSVERSE, 12"
748677 - CURB PAINT
748740 - WHITE PAINT LINE, 5"
748741 - WHITE PAINT LINE, LONG LINE, 5"
748742 - YELLOW PAINT LINE, 5"
748743 - YELLOW PAINT LINE, LONG LINE, 5"
748755 - WHITE PAINT LINE, 10"
748756 - YELLOW PAINT LINE, 10"

Description:

This work consists of repainting of existing reflective pavement markings or painting where the line has not previously existed. The Contractor shall furnish the fast dry paint; the glass spheres; maintenance of traffic; and all labor, equipment and incidentals necessary to apply pavement markings in a safe and efficient manner.

Application:

General Requirements

These specifications cover the application of a heated pigmented binder (white and yellow) and optical glass spheres system to highway surfaces with specialized application equipment.

The reflective surface shall be obtained by applying optical glass spheres in a specified ratio onto and into the pigmented binder after the binder application in one operation by specialized equipment hereafter described in these specifications.

During and after material application, both daylight and nighttime inspections of the markings will be made by an authorized representative of the Division of Highway Operations, and if found to be defective or if they fail in any way to meet the specifications in this proposal, such markings will be rejected and must be replaced at no cost to the Department within the time limit specified.

The contractor shall assume all costs arising from the use of patented materials, equipment, devices, and processes used on or incorporated in the work.

Equipment Required

The successful bidder must use on this contract equipment meeting the following minimum requirements:

The equipment used to apply pavement markings shall meet the following requirements:

A. PAINT EQUIPMENT

1. Be able to apply double centerlines simultaneously (except temporary markings may be applied separately).

2. Capability to apply paint and glass beads to pavement at same time, leaving no more than 2" (50 mm) of painted line without glass beads at the beginning or end of a line.

3. Capability of hand gun operation for applying special markings. (This may be a separate piece of equipment).

B. Truck Mounted Paint Equipment

1. Must apply double centerlines simultaneously.

2. Shall be capable of pneumatically applying glass beads 1" (25 mm behind the spray pattern of the paint gun.

3. Shall have automatic electrically controlled skipline mechanism capable of retracing the existing approximate 10 ft (3 m) stripe and 30 ft (9 m) skip or applying a new 10 ft (3 m) stripe and 30 ft (9 m) skip.

The application speed of the paint machine shall not be greater than 10 mph (17 km/h) unless approved by the Project Coordinator.

The wet film thickness shall be (15 Mils), (+/- 1 Mil). A deduction will be made from the monies due the contractor for improper film thickness according to the following table:

Thickness in (Mils) From To Less Than	Deduction for a 5” line
(12)	Reapply
(12) To (13)	Deduct .015
(13) To (14)	Deduct .002

* Proportional rates apply to wider lines.

When the contractor is required to repaint a line, no payment will be made for the repainting.

The reflective surface shall be obtained by applying glass spheres at an average rate of 7 lbs. per gallon of pigmented binder onto and into the pigmented binder. The glass spheres shall be dispensed by a pneumatic system that results in the spheres being retained on the surface and embedded within the binder.

The rate of beads and paint application shall be determined at the end of the workday. The number of gallons of paint used and the number of pounds of glass spheres used shall be determined. The number of gallons of paint shall be divided into the number of pounds of glass spheres and result shall be 7 lbs. per gallon or greater.

A deduction will be made from monies due the contractor for improper bead application according to the following table:

Glass Beads (lbs/gallons) From To Less Than	Deduction (5”)
(6.5)	Reapply
(6.5) to (6.7)	.015
(6.7) To (6.9)	.002

* Proportional rates apply to wider lines.

APPROVED MATERIALS:

GLASS BEADS

1. Scope

1.1 This specification covers glass beads to be sprayed upon pavement marking paint so as to produce a reflective pavement marking.

2. General Requirements

2.1 The beads shall be transparent, clean, colorless glass, smooth and spherically shaped, free from milkiness, pits, or excessive air bubbles and conform to all of the requirements of AASHTO M-247-81 (1996) with the addition of the requirements as noted below.

3. Specific Properties

3.1 Gradation. The beads shall meet the gradation requirements for Type 1 as given in Table I of AASHTO M-247-81 (1996).
3.2 Roundness. The glass beads shall have a minimum of 80 percent true spheres.
*3.3 Moisture Resistant. A moisture resistant coating shall be applied to prevent absorption of moisture. The beads shall remain free of clusters and lumps; and flow freely from dispensing equipment.

* When Latex Traffic Paint is used the glass beads shall be Moisture Resistant.

4. Submission of Samples

4.1 A 50 lb. unopened bag of glass beads shall be submitted to the Bureau of Materials and Research for each lot or batch for testing 30 days prior to use.
4.2 A copy of the Manufacturer's certified analysis of each lot or batch and Material Safety Data Sheet shall also accompany the samples.
4.3 All samples shall be identified with the contract number(s) for which the glass beads will be used.

5. Packaging and Marking

5.1 Glass beads shall be furnished in 50 lb. moisture proof bags. Containers are to be guaranteed to furnish dry and undamaged beads.
5.2 Each package shall contain the following information:
5.2.1 Name and address of manufacturer
5.2.2 Shipping point
5.2.3 Trademark or name
5.2.4 The working "glass beads"
5.2.5 Specification number
5.2.6 Net weight in kilograms or lbs.
5.2.7 Lot or batch number
5.2.8 Month and year of manufacture

6. Retroreflectivity Readings

All Paint lines are required to meet a minimum reflectivity. The minimum reflectivity reading that will be accepted is 150 Millicandelas for white and 125 Millicandelas for yellow. These readings will be taken with a Delta LTL-X Retrometer with 30-meter geometry. If the Reflectivity fails to meet the minimum requirements the contractor will be required to re-paint the lines at their expense. The following list contains all alkyd paints (pigmented binder) currently approved for use to perform the work:

1.

Manufacturer	Manufacturer's Code
Aexcel Corporation	72W-A042
Ennis Paint Inc.	WX08W001
Ennis Paint Inc.	DEW-21-M-1
Sherwin Williams	BP17949

2.

Manufacturer	Manufacturer's Code
Aexcel Corporation	72Y-A080
Ennis Paint Inc.	WX08L001
Ennis Paint Inc.	DEY-21-M-1
Sherwin Williams	BP17952

LATEX TRAFFIC PAINT

Latex Traffic Paint for traffic stripes or traffic markings shall be a white or a yellow ready-mixed pigmented binder which is emulsified in water and capable of anchoring reflective glass beads which are separately applied. In addition, the paint shall not contain any of the materials listed in the Environmental Protection Agency Code of Regulations (CFR) 40, section 261.24, table 1.

Manufacturers of Latex Paint shall have produced, to the satisfaction of the Department's Materials and Research Section, a Fast-Drying Traffic Paint, which meets the physical and composition requirements of this specification.

COMPOSITION: The exact composition of the Latex Paint shall be left the discretion of the manufacturer as stipulated hereinafter.

Pigment: The Pigment portion shall be a combination of prime and extender pigments as required to produce either a white or yellow Traffic Paint meeting the color and other requirements of the finished product for white or yellow, as specified elsewhere in this specification.

The prime pigment for white paint shall be Titanium Dioxide conforming to ASTM D 476, Type IV, with a minimum Titanium Dioxide content of 94 percent and shall be used at a minimum rate of 1 pd per gallon (.12 Kg/Liter).

The prime pigment for yellow paint shall be a non-toxic organic pigment yellow, No. 75 or equal pre-approved by the Department, with excellent exterior and color permanence. The prime pigment shall also contain a minimum 0.2 pounds per gallon (.02 kg/liter) of Titanium Dioxide conforming to ASTM D 476, Type IV, 94 percent purity.

The percent pigment by weight of the finished product shall not be less than 60 nor more than 62 percent.

Vehicle: The Non-Volatile vehicle shall not be less than 42 percent by weight, and shall be pre-approved by the Department's Materials and Research section and meet the Dry Through (Early Washout) Requirements specified hereinafter.

Physical Properties:

- Color: The color shall match Federal Test Standard No. 595A, Latest Edition, No. 33538 for Yellow and No. 37886 for White.

- Organic Volatiles: The Volatile Organic Content (VOC) of the finished paint shall contain less than 2.1 pounds per gallon (0.25 Kg/Liter) of Volatile Organic Matter of total Non-Volatile paint material.

- Volume of Solids: The finished paint shall not be less than 61 percent solids by volume.

- Total Solids: The finished paint shall not be less than 77.5 percent total Non-Volatiles by weight, when tested in accordance with ASTM D 2369.

- Liter Weight: The weight of the finished paint shall be 14 pounds per gallon (1.7 Kg/Liter) plus or minus 0.2 pounds per gallon (0.02 Kg/Liter) for each color.

- Grind: The grind shall not be less than 2 Hegman when tested in accordance with Federal Test Standard No. 141B, method 4411.

- Field No-Tracking Time: The paint shall dry to a no-trackcondition under traffic in no more than 75 seconds. The no tracking condition shall be determined by actual application on the pavement at a wet film thickness of .38 mm (15 mils) with white or yellow paint covered with glass beads at a rate of 7 pounds per gallon (.84 kg/liter). The paint lines for this test shall be applied with the striping equipment operated so as to have the paint at temperatures up to 140 degrees F (60 degrees C) at the spray orifice. This maximum tracking time shall not be exceeded when the pavement temperature varies from 50 to 120 degrees F (10 to 50 degrees C) and under humidity conditions of 80% or less providing that the pavement is dry.

- Viscosity: The consistency of the paint shall be not less than 70 nor more than 95 KREB units at 77 degrees F (25 degrees C), when tested in accordance with ASTM D 562.

- Flexibility: The paint shall show no cracking or flaking when tested in accordance with Federal Specification TT-P-1952B, section 4.3.7.

- Dry Opacity: The minimum contrast ratio shall be 0.95 when tested in accordance with Federal Test Standard No. 141B, Method 4121, Procedure B, using an 0.005 Bird Applicator.

- Daylight Reflectance: The Daylight Directional Reflectance shall no be less than 85 percent for the white paint and not less than 54 percent for the yellow (Relative to Magnesium Oxide), when tested in accordance with Federal Test Standard No. 141B, Method 6121.

Abrasion Resistance: The Abrasion Resistance shall be such that no less than 210 liters of sand shall be required for removal of the paint film when tested in accordance this Federal Specification TT-P-1952B, Section 4.3.8.

- Water Resistance: The paint shall conform to Federal Specification TT-P-1952B, section 4.5.6. There shall be no blistering or appreciable loss of adhesion, softening, or other deterioration after examination.

- Freeze-Thaw Stability: The paint shall show no coagulation or change in consistency greater than 5 KREB units, when tested in accordance with Federal Specification TT-P-1952B, Section 4.5.7.

- Heat Stability: The paint shall show no coagulation, discoloration, or changes in consistency greater than plus or minus 5 KREB units when tested in accordance with Federal Specification TT-P-1952B, section 4.5.8.

- Dilution Test: The paint shall be capable of dilution with water at all levels without curdling or precipitation such that the wet paint can be readily cleaned up with only water.

- Dry Through (Early Washout): The Dry Through time of a (15 mil) wet film placed immediately in a Humidity Chamber, maintained at 72.5 plus or minus 2.5 degrees F (22.5 degrees C plus or minus 1.4 degrees C) and 90 plus or minus 5 percent relative humidity shall be less than or equal to the Department Laboratory reference film when tested in accordance with ASTM D 1640, except that the pressure exerted the minimum needed to maintain contact with the thumb and film.

- Color Appearance After Aging: The white paint shall show no more than slight discoloration and the yellow paint shall be within the limits of the Color Tolerance Chart for Standard Highway Yellow, after accelerated weathering in accordance with Federal Specification TT-P-115D, Section 3.5.9.1.

- Shelf Life: All paint furnished shall have a minimum shelf life of 9 months at temperatures above 35 degrees F (2 degrees C). When tested, the paint shall conform to the physical requirements specified herein. In addition, the paint shall show no skinning, gelling or hardening on the surface, nor hard settling upon storage in the sealed containers, that will affect the performance of the product.

Inspection and Testing:

More detailed information concerning these materials is available by contacting the Department's Materials and Research Section, (302) 760-2400.

Upon notification of award, it shall be the responsibility of the vendor to contact the Department's Materials and Research Section to arrange for sampling and testing of approved materials.

All samples required by the Department's Materials and Research Section shall be supplied by the vendor 30 days prior to use in amounts and sizes indicated, at no cost to the Department.

Method of Measurement:

The quantity of pavement striping will be measured by the number of linear feet of pavement striping line placed on the pavement and accepted. The Contractor shall have on his equipment a suitable measuring device capable of determining the total number of "Linear Feet" of materials actually applied within a tolerance of ± 2%. This device shall be calibrated, at least, twice weekly during marking operations.

Basis of Payment:

The quantity of pavement striping payment will be paid for at the Contract unit price per linear foot. Price and payment shall include constitute full compensation for supplying and applying the marking material and for all labor, test, protection, equipment, tools, manipulation, supplying maintenance of traffic, and incidentals necessary to complete the item of work to the satisfaction of the Department. All Arrows shall be paid for as Each. All symbols shall be paid for per Square Foot.

2/13/12

748678 - TYPE "A" LINE, 4"
748679 - TYPE "A" LINE - LONG, 4"
748680 - TYPE "A" LINE, 6"
748681 - TYPE "A" LINE - LONG, 6"
748682 - TYPE "A" LINE, 8"
748683 - TYPE "A" LINE, 12"
748684 - TYPE "A" LINE, 16"
748685 - STRAIGHT ARROW TYPE "A"
748686 - RIGHT OR LEFT ARROW TYPE "A"
748687 - COMBINATION ARROW TYPE "A"
748688 - SCHOOL LEGEND TYPE "A"
748689 - R x R LEGEND TYPE "A"
748690 - SYMBOL TYPE "A"
748735 - TYPE "A" LINE, 5"
748736 - TYPE "A" LINE - LONG, 5"
748737 - TYPE "A" LINE, 10"
748738 - TYPE "A" LINE, CONTRAST, 8"
748739 - TYPE "A" LINE, CONTRAST, 13"

Description:

This work shall consist of furnishing and installing retroreflective preformed patterned pavement marking in accordance with this provision and in conformance to the existing pavement markings or as established by the Engineer. The Contractor is required to have all subcontractors involved in the placement of these markings attend the pre-placement meeting along with the tape manufacturer representative and Department representatives to coordinate this operation. The subcontractor for pavement markings shall be approved by the Department prior to the preconstruction meeting.

Materials:

General: The preformed patterned markings shall consist of white or yellow films with clear microcrystalline ceramic beads incorporated to provide immediate and continuing retroreflection. The markings shall be suitable for application on new or existing P.C. Concrete or bituminous pavements with a pre-coated pressure sensitive adhesive

The preformed marking material must be used prior to one year from date of manufacture. When not placed by inlaid method a surface preparation adhesive shall be used. The markings shall be capable of providing retroreflection during both wet and dry conditions.

The markings shall be highly durable retroreflective pliant polymer materials designed for longitudinal and word/symbol markings subjected to high traffic volumes and severe wear conditions such as shear action from crossover or encroachment on typical longitudinal configurations such as edge lines and lane lines. This film shall be manufactured without the use of lead chromate pigments or other similar, lead-containing chemicals.

Composition: The pavement marking shall consist of a mixture of high quality polymeric materials and pigments with glass beads distributed throughout the base cross-sectional area, with a reflective layer of microcrystalline ceramic beads bonded to a durable polyurethane topcoat surface. The patterned surface shall have approximately 50% plus or minus 15% of the surface area raised and presenting a near vertical face, angled from 0 degrees to 60 degrees, to traffic from any direction. The channels between the raised areas shall be substantially free of exposed beads or particles. The marking shall have a precoated pressure sensitive adhesive. The edges of the markings shall be clean cut and true.

Retroreflectance: The white and yellow markings shall have the initial expected retroreflectance values as shown in Table 1 under dry, wet, and rainy conditions. The photometric quantity to be measured shall be coefficient of retroreflected luminance (R_L) and shall be expressed as millicandelas per square foot per foot-candle [(mcd C ft^{-2}) C fc^{-1}]. The metric equivalent shall be expressed as millicandelas per square meter per lux [(mcd C m^{-2}) C lx^{-1}].

Retroreflectance values shall be measured under dry conditions in accordance with the testing procedures of ASTM D4061. Retroreflectance values shall be measured under wet conditions in accordance with ASTM

E2176 or ASTM E2177. Wet retroreflectance values measured under a 'condition of continuous wetting' (simulated rain) shall be in accordance with ASTM E2176. Wet retroreflectance values measured under a 'condition of wetness' shall be in accordance with ASTM E2177.

Table 1		
Expected Initial R_L under dry, wet, and rainy conditions		
White	Dry	Wet & Rainy
Entrance Angle	88.76°	88.76°
Observation Angle	1.05°	1.05°
Retroreflected Luminance	500	250
R_L [(mcd C m^{-2}) C lx^{-1}]		
Yellow	Dry	Wet & Rainy
Entrance Angle	88.76°	88.76°
Observation Angle	1.05°	1.05°
Retroreflected Luminance	300	250
R_L [(mcd C m^{-2}) C lx^{-1}]		

Beads, Index of Refraction: All Adry-performing@ microcrystalline ceramic beads bonded to the polyurethane-coated, patterned surface of the material shall have a minimum index of refraction of 1.70 when tested using the liquid oil immersion method. All 'wet-performing' microcrystalline ceramic beads bonded to the polyurethane-coated, patterned surface of the material shall have a minimum index of refraction of 2.30 when tested using the liquid oil immersion method. The glass beads mixed into the pliant polymer shall have a minimum index of refraction of 1.5 when tested by the liquid oil immersion method.

Beads, Acid Resistance: The beads shall show resistance to corrosion of their surface after exposure to a 1% solution (by weight) of sulfuric acid. The 1% acid solution shall be made by adding 5.7 cc of concentrated acid into 1000 cc of distilled water.

Color: The markings shall consist of white and/or yellow films with pigments selected and blended to conform to standard highway colors.

Skid Resistance: The patterned surface of the markings shall provide an initial average skid resistance value of 45 BPN when tested according to ASTM E 303.

Patchability: The pavement marking material shall be capable of use for patching worn areas of the same type in accordance with manufacturer's instructions.

Thickness: The patterned material without adhesive shall have a minimum caliper of 0.065 inches (1.651mm) at the thickest portion of the patterned cross section and a minimum caliper of 0.020 inches (.508mm) at the thinnest portion of the cross section.

Tolerance: The Contractor will be responsible for applying these markings in a straight manner not exceeding ½" (12 mm) per 40' (12 m). Any markings exceeding the ½" (12 mm) tolerance will require the Contractor to make corrective action approved by the Engineer and the tape manufacturer representative at no extra cost to the Department.

Construction Methods:

The Contractor shall be certified, by the manufacturer, in the installation of the pavement marking material prior to the start of the markings. The Contractor shall install the pavement marking material in accordance with the manufacturer's published recommendations.

The manufacturer shall provide technical assistance as required to ensure successful installation of the markings. This shall include a representative on site for the start of the markings, training, product information, problem solving, etc.

Installation of the pavement markings shall be performed in a neat and workmanlike manner. The Contractor shall premark the pavement to ensure correct location of markings and such layout work shall be incidental to the price bid for the pavement marking items. The method for premarking should be as recommended by the manufacturer. A thin layer of paint as a premarking is not recommended. Particular care shall be taken to ensure that the leading edges of the markings are secured to the pavement.

General application rules:

- The Air and surface temperature shall be a minimum of 40°F.
- The pavement must be clean and dry. 24 hours of dry weather where no rain is expected.
- When not placed by inlaid method a surface preparation adhesive shall be used.
- Do not overlap tape - use butt splice.
- Do not apply tape on longitudinal seams or joints or cracks.
- Do not apply tape on deteriorating pavement surfaces.
- Existing markings must be 80% removed.

After application, the markings shall be immediately ready for use by traffic.

Inlay into Fresh Bituminous Concrete:

When markings are specified in the contract for newly paved asphalt concrete surfaces, they shall be applied before public traffic is allowed on the freshly paved surface - the pavement markings shall be inlaid in the fresh surface during final rolling of the mat, in accordance with the manufacturer's recommendations unless otherwise directed by Engineer.

The Contractor shall show how the pavement mats will be placed to avoid applying the tape on longitudinal seams or joints or cracks and maintain correct marking location.

The Contractor shall employ a sufficient number of workers to premark the pavement and install the markings such that all markings are inlaid into the hot pavement prior to the finish rolling. No paving shall be permitted unless the striping crew and materials are on the project site.

* General procedure for inlay application on fresh asphalt surfaces:

* Tape is applied after the compaction roller and before the finish roller using minimum water, slow speed and no vibration.

* Tape shall be applied using equipment recommended by manufacturer

* Tamping shall be done by the finish roller and in the same direction the tape was applied. A separate roller of a size approved by the tape manufacturer may be required to meet the manufacturer's requirements.

* Roller shall use minimum speed to prevent wrinkling the tape.

* Asphalt temperatures shall be between 180°F (66°C) and 120°F (49°C) when tape is applied.

NOTE: Even though the tape will stand these high temperatures the contractor is to use caution to assure the asphalt is firm enough to walk on above 140°F (60°C).

Placement on new P.C. Concrete Pavement:

When markings are specified in the contract for new P.C. concrete pavement surfaces they shall be applied after the concrete has adequately cured as determined by the Engineer and prior to opening to traffic.

1. When a membrane curing compound has been applied to the concrete surface, it shall be removed by sandblasting prior to applying the markings. Cost for such sandblasting shall be incidental to the price bid for the pavement marking item. The road shall be cleaned by sweeping and with high pressure air.

2. The manufacturer shall specify a primer/solvent for the pavement surface.

3. The tape shall be applied with an approved applicator.

4. The tape shall be tamped with a roller tamper cart with a minimum 200 lb (90 kg) load or by slowly (2-3 mph [3-5 km/hr]) driving over the tape with a vehicle tire. Do not twist or turn on the tape. A minimum of three passes back and forth over the tape will be required. All edges of the tape shall be thoroughly tamped.

Placement on Existing Pavement:

When markings are specified in the contract for existing pavement, the pavement surface shall be free of any existing markings.

1. The road shall be cleaned by sweeping and with high pressure air.

Steps 2 through 4 are the same as for new P.C. C. pavement.

Method of Measurement:

This work shall be measured for payment by the number of linear feet of line or square foot of symbol/legend of Retroreflective Preformed Patterned Markings installed on the pavement and accepted in accordance with the plans. All Arrows, School Legends, R X R Legends shall be paid for as Each.

Basis of Payment:

This work shall be paid for at the contract unit price bid per linear foot of line or square foot of symbol/legend as measured for item "Retroreflective Preformed Patterned Markings" of the type specified. All Arrows, School Legends, R X R Legends shall be paid for as Each. This price shall include cleaning and preparing the pavement surface, furnishing and placing all materials, supplying maintenance of traffic, for all labor, tools, equipment and incidentals necessary to complete the work.

1/5/12

748691 – THERMOPLASTIC LINE, 4”
748692 - THERMOPLASTIC LINE - LONG, 4"
748693 - THERMOPLASTIC LINE, 6"
748694 - THERMOPLASTIC LINE - LONG, 6"
748695 - THERMOPLASTIC TRANSVERSE LINE, 8"
748696 - THERMOPLASTIC TRANSVERSE LINE, 12"
748697 - THERMOPLASTIC TRANSVERSE LINE, 16"
748698 - STRAIGHT ARROW THERMOPLASTIC
748699 - LEFT OR RIGHT THERMOPLASTIC ARROW
748700 - COMBINATION ARROW THERMOPLASTIC
748701 -YELLOW THERMOPLASTIC ON SPEED HUMPS, 4"
748702 - SYMBOL - THERMOPLASTIC
748732 - THERMOPLASTIC LINE, 5"
748733 - THERMOPLASTIC LINE - LONG, 5"
748734 - THERMOPLASTIC LINE, 10"

Section 748 shall apply except as modified below.

Subsection 748.09 Application.

Add the following at the end of this subsection:

(d) Reflectivity for Alkyd Type Thermoplastic Material.

After satisfactory completion of all striping work and written notification from the Contractor, the Department test the striping to ensure it has the minimum reflectivity. The testing will be completed within 30 calendar days from notification. The Contractor shall accept lower average readings derived from late testing due to the Contractor's failure to notify te Engineer. The Contractor may request that tests be conducted on completed phases or portions of the work. Approval of such a request will be at the discretion of the Engineer. Testing will be done using a Delta LTL-X Retrometer (30 meter geometry). Five readings will be taken per line per mile (1.6 kilometer). Projects less than 1 mile (1.6 kilometer) in length will have a minimum of five readings per line.

The required minimum initial reflectivity reading in millicandellas shall be:

White 300
Yellow 200

For striping below these minimums and above 125 millicandellas payment will be reduced as described under Basis of Payment.

Striping with an average reflectivity below 125 millicandellas shall be removed and replaced at the sole expense of the Contractor.

(e) Guarantee for Alkyd Type Thermoplastic Material.

Acceptance of this project will be contingent upon successful completion of a 180 day observation period under traffic beginning upon the satisfactory completion of all striping work required by the Contract.

During the 180 day observation period the thermoplastic Pavement Marking Material furnished and installed under this Contract shall be warranted against failure due to blistering, excessive cracking,

bleeding, staining, discoloration, oil content of the pavement materials, smearing and spreading under heat, deterioration due to contact with grease deposits, oil, diesel fuel, or gasoline drippings, chipping, spalling, poor adhesion to the pavement materials, vehicular damage, and wear. Any markings that have not performed satisfactorily during the 180 day observation shall be replaced by the Contractor at no expense to the Department.

Marking replacement shall be performed in accordance with the requirements specified herein for the initial application, including but not limited to possible surface cleaning, pavement marking removal, seasonal and weather limitations, etc.

The Contractor shall replace or renew, entirely at his/her expense, the amount of pavement markings deemed by the Engineer to have failed to perform useful service during the period noted above. The replacement material installed under this guarantee shall be the same as the original material.

Subsection 748.11 Basis of Payment.

Delete the first paragraph and insert the following:

The quantity of permanent pavement marking (alkyd thermoplastic) 4", 5", 6", 8", 10", 12" or 16" line will be paid for at the Contract unit price per linear foot of line and the Contract unit price per square foot of symbol. All arrows shall be paid for as each unless payment is reduced due to below minimum reflectivity as described below:

For pavement markings with reflectivity readings of 125 millicandellas or above but below 300 millicandellas for white or 200 millicandellas for yellow payment will be pro-rated based on the following formula:

$$\frac{\mathbf{A \times B}}{\mathbf{C}}$$

A = Average measured reflectivity readings*
B = Contract bid price for striping **
C = Required minimum initial reading

* = Must be greater than or equal to 125 millicandellas
** = Item bid price; not material cost

2/13/12

748703 – SYMBOL - PREFORMED THERMOPLASTIC MARKINGS

Description:

This work consists of furnishing and installing preformed retroreflective thermoplastic pavement marking with a preapplied Federal Specification Type IV glass bead coating at the locations and in accordance with the patterns on the Plans, or as directed by the Engineer.

The preformed retroreflective marking material shall consist of a resilient polymer thermoplastic with uniformly distributed glass beads throughout its entire cross section. Preformed retroreflective markings shall be available conforming to the current edition of the Manual on Uniform Traffic Control Devices for Streets and Highways as issued by the U.S. Department of Transportation Federal Highway Administration.

Materials:

General: The preformed retroreflective markings shall be fusible to asphalt and Portland Cement Concrete pavements by means of the normal heat of a propane type of torch. Adhesives, primers or sealers are not necessary prior to the preformed retroreflective markings application on asphalt and Portland Cement Concrete pavements.

The preformed retroreflective markings shall conform to pavement contours, breaks and faults through the action of traffic at normal pavement temperatures. The markings shall have resealing characteristics and be capable of fusing to itself and previously applied worn hydrocarbon and/or alkyd thermoplastic pavement markings.

The preformed retroreflective markings shall be capable of application on new, dense and open graded asphalt concrete wearing courses during the paving operation in accordance with the manufacturer's instructions. After application the markings shall be immediately ready for traffic. The preformed retroreflective markings shall be suitable for use for one year after the date of receipt when stored in accordance with the manufacturer's recommendations.

The preformed retroreflective thermoplastic markings shall not be brittle and must be sufficiently cohesive and flexible at temperatures exceeding 50ºF (10ºC) for one person to carry without the danger of fracturing the material prior to application.

Composition: The retroreflective pliant rosin ester thermoplastic pavement markings shall consist of a homogeneous mixture of high quality polymeric thermoplastic binders, pigments, fillers and glass beads. The thermoplastic material must conform to AASHTO M249-79(86) with the exception of the relevant differences due to the material being preformed, and identified herein.

Intermix Glass Beads: The preformed retroreflective material shall contain a minimum of 30% glass spheres which shall conform to AASHTO M247-81 Type 1. Glass spheres shall have a minimum of 80% true spheres overall.

Top Beads: To provide the required retroreflectivity, the preapplied factory top coating of glass beads shall be a combination of both Federal Spec. Type IV and AASHTO M247-81 Type I beads. Federal Spec. Type IV beads shall be evenly disbursed across the entire surface of the product at a minimum rate of 4 lb. (1.8 kg) per 100 ft^2 (9.3 m^2) and the AASHTO at 3 lb.(1.4 kg) per 100 ft^2 (9.3 m^2). In combination, the total glass bead coverage shall be 7-8 lb. (3.2-3.6 kg) per 100 ft^2 (9.3 m^2).

The AASHTO M247-81 Type I beads shall have a minimum of 80% true spheres overall and the Federal Spec. Type IV beads shall be 80% true spheres on the 12 and 14 sieves and shall be no less than 75% true spheres on the remaining sieves.

Retroreflectivity: After satisfactory completion of all striping work and written notification from the contractor, the Department shall test the striping to ensure it has the minimum reflectivity. The testing will be completed within 30 calendar days from notification. Testing will be done using a Delta LTL-X Retrometer (30 meter geometry). The required minimum intial reflectivity reading in millicandellas shall be:

White 300
Yellow 200

Skid Resistance: The surface of the preformed retroreflective thermoplastic markings shall provide a pre-applied minimum skid resistance value of 45-51 BPN and a post-applied minimum skid resistance value of 45-55 BPN when tested according to ASTM E303-74.

Thickness: The thickness of the supplied material shall have a minimum average thickness of .090" (90 mils) for all Longitudinal lines and a thickness of .125" (125 mils) for all transverse lines and symbols/legends.

Tensile Strength and Elongation: The preformed retroreflective thermoplastic material shall have a minimum tensile strength of 150 lb. per square inch (1054 kg per square mm) of cross section, at .002" (2.28 mil) thickness, when tested according to ASTM D638-76 except that a sample 6" by 1" (150 mm by 25 mm) shall be tested at a temperature between 70ºF and 80ºF (21ºC and 27ºC) using a jaw speed of 10" to 12" (250 mm to 300 mm) per minute. The sample shall have a maximum elongation of 20% at break when tested by this method.

Flexibility: The preformed retroreflective thermoplastic marking material shall have flexibility at 50º such that when a 1" by 6" (25 mm by 150 mm) sample is bent through an arc of 90º at a uniform rate in 10 seconds (9º per second) over a 1" (25 mm) mandrel, no cracking occurs in the test sample. The sample must be conditioned prior to testing at 50ºF±2º (10ºC) for a minimum of four hours. At least two specimens tested must meet the flexibility requirements at 50ºF (10ºC) for a passing result.

Environmental Resistance: The applied markings shall be resistance to deterioration due to exposure to sunlight, water, oil, diesel fuels, gasoline, pavement oil content, salt and adverse weather conditions.

Effective Performance Life: When properly applied, in accordance with manufacturer's instructions, the preformed retroreflective pavement markings shall be neat and durable. The markings shall remain skid resistant and show no lifting, shrinkage, tearing, roll back or other signs of poor adhesion.

Oil/grease Resistant Test: The preformed retroreflective thermoplastic material shall not dissolve or smear after rubbing a small amount of motor oil on a small piece of the thermoplastic material for two minutes.

Bond Strength: The material shall exhibit a bond strength to Portland Cement Concrete (PCC) equal or exceed 180 psi when tested at room temperature (73.4±3ºF) (23ºC) in accordance to ASTM Standard Test Method for Bond Strength of thermoplastic marking Material D4796-88. Place a coarse brick in a 400ºF (204ºC) oven for 5 minutes. Prepare a 4 square inch test specimen. Place the test specimen on the brick and further heat in the 400ºF (204ºC) oven for 15 minutes. The test specimen is then allowed to cool to room temperature and prepared for testing.

Low Temperature Cracking (Stress) Resistance for Extended Period: The material shall be tested according to AASHTO T250 Section 7 with Section 7.2.3 modified for and extended cold temperature 15º ±3 º F (-9.4 º 2±2 ºC) exposure period 72 hours. Any cracking shall constitute failure of the material for PCC road surfaces.

Impact Resistance (Gardner Falling Weight): A 2" by 7.5" (50 by 190 mm) specimen shall be applied on a course concrete brick. Using a Gardner Impact Tester, a 2 lb (.91 kg) weight is dropped from a height of 80" (2032 mm). The specimen when tested at room temperature 73.4±3ºF (23ºC) should show no sign of cracking. (Test procedure is in accordance with ASTM D5420-93).

Packaging: The flexible preformed retroreflective thermoplastic marking materials, for use as tranverse or longitudinal markings as well as legends, arrows and symbols shall be available in flat form material or in rolls. Flat material shall be supplied in maximum of 4' (1.2 m) lengths up to 2' (.6 m) in width. The material shall be packed in suitable cartons clearly labeled for ease of identifying the contents.

Construction Methods:

The markings shall be applied in accordance with the manufacturer's recommendations on clean and dry surfaces. New Portland concrete cement surfaces must be sandblasted to entirely remove curing compound. Marking configuration shall be in accordance with the "Manual on Uniform Traffic Control Devices," where applicable.

The preformed retroreflective thermoplastic material shall be fusible to the pavement by means of a propane torch recommended by the manufacturer.

The supplier shall provide technical services as may be required.

Method of Measurement:

The quantity of pavement symbols shall be measured by the number of square feet of symbol/legend installed on the pavement and accepted in accordance with the Plans.

Basis of Payment:

The quantity of payment symbol shall be paid for at the contract unit price per square foot of symbol/legend. Price and payment shall include cleaning and preparing the pavement surface, placing all materials and supplying maintenance of traffic, for all labor, tools, equipment and incidentals necessary to complete the work.

2/13/2012

748704 – REMOVAL OF EXISTING PAVEMENT MARKINGS

Description:

This work consists of removing pavement markings of all kinds including paint, tape, etc., in accordance with this special provision, notes on Plans and/or as directed by the Engineer. The Contractor shall coordinate with the Engineer for maintaining traffic during the operation, prior to starting the work.

Materials and Construction Methods:

Paint and Epoxy Resins:

Shot/abrasive grit blasting or water blasting equipment shall be used for removal of markings from pavement surfaces. Grinding may be allowed at the discretion of the engineer.

Alkyd Thermoplastic:

In addition to the removal techniques discussed for paint and epoxy, burning or grinding (erasing machines) equipment may also be used for removal of markings from pavement surfaces.

The removal operation shall be performed in a manner that will not damage the pavement surface.

The Contractor shall collect and dispose of all shot/abrasive grit and pavement marking materials removed from the pavement surface. Washing or sweeping such material to the roadside will not be permitted.

Method of Measurement:

The quantity of pavement striping removal will be measured as the number of square feet of pavement striping removed and accepted. The area of lines will be calculated by multiplying the nominal width of line times the length and the area of symbols will be as specified in Subsection 748.10 of the Standard Specifications.

Basis of Payment:

The quantity of pavement striping removal will be paid for at the Contract unit price per square foot for "Removal of Pavement Striping". Price and payment shall be full compensation for furnishing all materials, removing the pavement markings, disposing of the removed marking material, supplying maintenance of traffic, and for all labor, equipment, tools and incidentals necessary to complete the work.

Note:

There will be no measurement and payment for removal of pavement markings placed incorrectly by the Contractor.

03/06/09

763563 - PERFORMANCE AND PAYMENT BOND

Description:

Performance and Payment Bond shall be paid to compensate the cost of bonding the Contract in accordance with Subsection 103.05 of the Standard Specification.

Method of Measurement:

The Contractor shall be paid the total cost of bond necessary for the contract once the Contract is executed.

Basis of Payment:

The payment for the item shall be made for at the Contract unit price per Lump Sum bid for "Performance and Payment Bond", which price and payment shall be full compensation. The payment for the Performance and Payment Bond will be included on the first estimate following the Contractor's submission of acceptable verification of actual cost.

6/12/98

PROJECT NOTES

CONTRACT: DOT1422-PAVEMARK_LONGLN

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION SOLUTIONS
PAVEMENT MARKING PROGRAM
SHORT LINE

Contract NO. DOT1423-PAVEMRK_SRTLN

GENERAL DESCRIPTION:

This contract provides for the furnishing and installation of pavement marking materials at various locations in the State. The pavement marking materials to be used are paint with surface applied glass spheres, thermoplastic with surface applied glass spheres, preformed thermoplastic and permanent pavement marking tape.

CONTRACT TERM:

The period of this contract is from the date of "execution" for three (3) calendar years**.**

PRICE ADJUSTMENT:

The bid prices in the contract must be guaranteed for the first year of the contract, after which the Department or vendor may request a change in unit prices for the second or third year of the contract. If the difference requested exceeds the change in the Nationwide All Urban Consumer Price Index (CPI-U), U.S. city average for the same period, approval of any price adjustment offered the vendor above the CPI-U will be at the discretion of the Department. The Department retains the right to cancel the contract if an acceptable pricing agreement cannot be reached with the vendor.

LOCATION OF WORK SITES:

District I lies North of the Chesapeake and Delaware Canal.
District II lies South of the Chesapeake and Delaware Canal.

The work sites assigned under this contract will be in both District I & District II. The actual sites will be determined throughout the duration of the contract.

A FULL MARKINGS TEAM IS REQUIRED IN EACH DISTRICT FROM THE FIRST DAY OF WORK IN EACH DISTRICT UNTIL ALL WORK HAS BEEN COMPLETED IN THAT DISTRICT.

The contractor may not consolidate both crews in one District or change work crews between or within Districts without written permission.

ALTERATION OF PLANS OR CHARACTER OF WORK:

The Department reserves the right to increase or decrease any or all of the quantities as shown in the bid schedule. The quantities given in the proposal are approximate only and will be the basis for comparing bids.

Any increase or decrease in quantities and/or any additions or omissions of placement sites on this contract shall not be cause for any increase or decrease of contract unit prices bid. Subsection 109.05 and 109.06 of the Standard Specifications does not apply.

EXEMPT FROM TAXES:

Articles covered by the proposal are exempt from all Federal and State Taxes, if any are applicable, and such taxes shall not be included in the prices quoted. The successful bidder will be required to furnish necessary or applicable tax exemption forms with his invoices.

SUBLETTING OR ASSIGNMENT OF CONTRACT:

The vendor shall give his personal attention to the faithful prosecution of the work; shall keep the same under his personal control and shall not assign by power of attorney or otherwise sublet the work or any part thereof without the previous written consent of the Department. The vendor shall not either legally or equitably assign any of the monies payable under this agreement or his claim thereto unless by and with the written consent of said Department.

PRODUCTS BY NAME:

The products to be used on this contract which are specified by name and type based upon an area wide testing program shall be the specified products only. Substitutions for those products are not permitted.

Substitution of products for those named, which are not specified based upon an area wide testing program, may be considered, provided the substitute offered is in the opinion of the Department, equal or superior in quality, workmanship, finish, function and approximate characteristics to that specified in the Department's specifications.

CONTRACT AWARD:

The award of the contracts will be made to the lowest responsive and responsible bidder.

RIGHTS TO TERMINATE THE CONTRACT:

The Department reserves the right to terminate the contract(s) subject to legislative appropriations, breach of contract, or at any time with sixty (60) days' notice to the vendor.

WARRANTY:

The successful bidder shall be required to extend any policy guarantee usually offered to the general public on article(s) and/or service(s) against defective material and workmanship.

MANDATORY INSURANCE REQUIREMENTS

As a part of the contract requirements, the contractor must obtain at its own cost and expense and keep in force and effect during the term of this contract, including all extensions, the minimum coverage limits specified below with a carrier satisfactory to the State. All contractors must carry the following coverage depending on the type of service or product being delivered.

a. Commercial General Liability - $1,000,000.00 per person/$3,000,000 per occurrence.

and

b. Automotive Liability Insurance covering all automotive units used in the work with limits of not less than $250,000 each person and $500,000 each accident as to bodily injury and $250,000 as to property damage to others.

and

c. The vendor shall maintain such insurance as will protect against claims under Worker's Compensation Act and from any other claims for damages for personal injury, including death, which may arise from operations under this contract. The vendor is an independent contractor and is not an employee of the State of Delaware.

Before any work is done with the State, a Certificate of Insurance referencing the name and contract number stated herein, shall be filed with the State. The certificate holder is as follows:

Delaware Department of Transportation
Contract No. NUMBER
Send to Attention of:
Contract Administration
800 Bay Road, Dover, DE 19901

Note: The State of Delaware shall <u>not</u> be named as an additional insured.

Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

<u>MAINTENANCE OF TRAFFIC</u>:

No separate payments will be made for maintenance of traffic cost. For the purpose of this contract, these are considered incidental to the bid work orders.

Traffic shall be maintained at all times in accordance with Subsections 109.09, 107.07, and 104.02 of the Standard Specifications.

All work shall be performed in a manner that will reasonably provide the least practicable obstruction to all road users, including vehicular, pedestrian, and bicycle traffic, and shall conform to the requirements of the Delaware Manual on Uniform Traffic Control Devices, Part 6, including all revisions up to the date of advertisement for bids.

All crewmembers shall wear, at all times, a Class Three safety vest that meets the ANSI 107 – 2004 standard requirements.

The Department's District Safety Officer or an authorized representative of the Department, prior to the start of work must approve all vehicles, equipment, and traffic control devices and allowable work hours used on this contract.

The contractor shall be responsible for furnishing, placing and relocating portable signs and devices to safely protect workers, equipment and fresh (wet) markings from traffic. The contractor will be held fully liable for paint getting on vehicles when the line has not been protected correctly.

For the purposes of this contract, "dry" is defined as no tracking of a painted line when an automobile crosses the line.

Three working days will be allowed for equipment approval after which time Liquidated Damages for Failure to Pursue the Work will be assessed. (See Liquidated Damages.)

The required signs and warning devices for this contract shall be on the site prior to the beginning of the work.

All traffic control devices will remain the property of the contractor.

Flaggers shall be governed by and familiar with the Delaware Manual on Uniform Traffic Control Devices (MUTCD) Part 6, latest edition and updates in effect at the time of advertisement for bids. Flaggers shall have completed flagger training and testing within the last three (3) years as offered by American Traffic Safety Services Association (ATSSA). The contractor shall provide appropriate documents showing the flagger certification status throughout the duration of the contract.

Flaggers shall be completely covered (clothed) from neck to feet. The minimum clothing requirements for flagger shall be long pants and a standard T-shirt with sleeves along with appropriate footwear (no open-toe shoes). The Flagger shall wear a Class Three safety vest that meets the ANSI 107 – 2004 standard requirements.

The contractor must plan the work so that no lanes of traffic are closed or seriously hindered from Friday noon to Monday noon, or from noon on the last working day before a holiday until noon of the first working day after a holiday, unless previously approved by the Project Coordinator.

Some signs and devices may be carried on mobile equipment.

One-way traffic will be permitted for limited distances only at the discretion of the Engineer.

All vehicles shall display flashing or rotating yellow lights, which are visible in all directions. All arrow boards must have controls so that the arrow may be switched without stopping the vehicle.

Normal rush hour traffic conditions prohibit the placement of traffic markings from 6:00 to 9:00 AM and 3:00 to 7:00 PM on certain high volume roads. Work performed during these times will be restricted to those roads not subject to great rush hour peaks as determined by the Project Coordinator.

Night work is defined as any roadwork occurring between 9:00 PM and 5:00 AM

For night work:

Additional traffic control devices are required.

A minimum of six 3000-watt lights shall be used to illuminate the work area. These lights shall be positioned so they do not interfere with the traveling public. 1,000 watt Halogen or Quartz lights may be used in place of the 3,000 watt bulbs at the Project Coordinator's discretion.

The Department, at its discretion, may require night work on some major high volume roadways. The Department will consider night work on other roadways at its discretion.

AUTHORIZATION OF WORK:

All work assigned under this contract shall be authorized only by written notice. Any work not authorized by written notice shall not be performed. Written notice shall be available only after the equipment, materials, and traffic control devices have been inspected and approved.

CONTROL AND INSPECTION:

The Departments Pavement Marking Section will assign areas of work and the order in which the work must be undertaken.

Upon receipt of the "award letter" the contractor must submit a list of required materials that he/she needs to order prior to the receipt of a Purchase Order, such as tape and thermoplastic, to insure that the application of pavement markings begin on the scheduled date. The Department will send written confirmation of those items that the contractor is authorized to purchase.

The contractor will be reimbursed for the approved materials that have been purchased, up to 20% of the total bid price of the contract, with the approval of the Engineer in charge should the contract be terminated by the State of Delaware.

An authorized representative of the Department shall be assigned as Project Coordinator and shall be present during each application of the material. Payment will not be made for any work done when said coordinator is not present.

The provisions of Failure to Pursue the Work shall apply when the contractor does not perform the work in the order required by the Department.

The contractor shall begin work on the assigned units of work on or before the fifth (5th) working day (weather permitting) after notification to begin work, subject to the limitations set forth herein. Failure to begin work with the specified time shall be regarded as Failure to Pursue the Work. (See Liquidated Damages).

The contractor may work in no more than one (1) area in each District at any one time.

The contractor shall pursue the work within each District at a rate of at least $10,000 per month during any period when work is assigned. After $10,000 of work is completed in a District in any month and assigned work remains to be completed, work must continue at a rate of, at least, $500 per day.
Failure to comply with this paragraph is a Failure to Pursue the Work. (See Liquidated Damages).

Work completed in excess of $10,000 is not cumulative and may not be carried over to the next month. Should it be necessary to halt the work because of incorrect or unsatisfactorily applied pavement marking under the terms of this contract, Failure to Pursue the Work shall have been deemed to have occurred. (See Liquidated Damages.)

Should the contractor fail to provide adequate protection to the surroundings of the work site or should the operations be carried out in such a way as to allow or cause damage to any roadway, street, sidewalk, the property of any utility or other private or public property, the Liquidated Damages for Failing to Protect the Work Site may be assessed from the time the contractor is notified of the condition until he completes the repair. (See Liquidated Damages).

Should the repairs not be undertaken or should it be necessary for the Department to protect the area and/or make the repairs, the costs shall be deducted from the monies due the contractor.

Rejected pavement markings must be removed the same day that notification of rejection is given. Any rejections must be noted in the Project Coordinator's Diary. If the Project Coordinator deems that same-day removal is not critical, he/she may wave this requirement. Material must still be removed, however, not on the same day that notification is given. Any rejected material must be noted in the Project Coordinator's Diary and signed by the contractor's on-sight representative. Any wavers must also be so noted and signed. Failure to remove rejected markings as specified will be considered Failure to Pursue the Work.

The standard workday is 7 1/2 hours - 8:00 AM to 4:00 PM, 1/2 hour lunch.

The standard workday when night work is authorized and scheduled is 9:00 P.M. to 5:00 A.M. Sunday night/Monday morning through Thursday night/Friday morning.

If the contractor wishes to work a longer day, the rate of work will be increased by $200 for each hour or fraction thereof that the Projector Coordinator is at a work site.

Unless prior arrangements in writing or documented in Project Coordinator's Diary have been made between the contractor and the Project Coordinator, the Department's representative will not wait past one (1) hour from the start of the standard work day or the agreed upon time. Should the situation arise where the contractor is not available for work within that one hour the Projector Coordinator may be given a different assignment for that day and in such event no work under this contract shall be pursued for that day. For every such occurrence provisions for Failure to Pursue the Work shall apply. (See Liquidated Damages).

Authorization for longer workdays and work on non-working days shall be at the discretion of the Project Coordinator.

WORKMANSHIP:

The contractor is required to perform the work called for in this contract to a high standard of workmanship.

The contractor shall be responsible for the complete preparation of the roadway surface as necessary for the product to be applied, including the removal of dust, dirt, and other foreign matter immediately prior to the installation of the pavement marking material.

When removal of existing markings is required the designated markings must be completely (100%) removed, or to the satisfaction of the project coordinator.

When doing any type of removal the contractor shall be fully and wholly responsible for the clean up and disposal of any and all waste or residue generated from this operation to the satisfaction of the project coordinator.

Professional demeanor is required at all times. Actions toward Inspection staff or motorists including, but not limited to, intimidating or threatening gestures or words or unseemly language will be cause for requiring the permanent removal of the offending employees from this project.

Any application of marking materials which is defective or which is incorrectly located by the contractor shall be replaced at the sole expense of the contractor. The contractor at no expense to the Department shall remove any materials spilled on the pavement. The contractor shall carry a waste container so that any spilled paint or other material can be held for disposal.

OUT OF SEQUENCE WORK:

From time to time during normal working hours the contractor may be required to provide a work force at a particular work site on less than three (3) days notice or while working on a unit of work at a different work site. Compensation will not be increased for that out of sequence work unless it constitutes more than 5% of the total work assigned in any given month.

The contractor must pursue out of sequence work within one (1) working day of its being assigned or the provisions of Failure to Pursue the Work shall apply. (See Liquidated Damages).

The Department will advise the contractor of the order in which the work must be undertaken. The Department may revise the order up to two working days prior to the start of the work without penalty.

LIQUIDATED DAMAGES:

The available work must be completed and billed to the Department by the contractor at the minimum rate of $10,000 per calendar month. In any month when the contractor fails to have completed work at the required rate, Liquidated Damages in the amount of $500.00 per workday may be assessed until the required amount of work is completed and billed.

If workdays are lost due to weather or legal holidays, the required average rate of work per month will be reduced by $500.00 per workday lost.

Failure to Pursue the Work or Failure to Protect the Work Site shall cause Liquidated Damages in the amount of $1000.00 per workday to be assessed.

BASIS OF OPERATIONS:

The contractor must provide his own base of operations; he cannot store any equipment, materials, or supplies necessary for this contract on State property. Any work on any equipment or any transfer of materials among vehicles shall not take place in any highway yard. The Department will bear no responsibility for the safety of the equipment and/or supplies. The contractor is responsible for handling of all materials and shall do so in a safe and legal manner.

SUBMISSION OF INVOICE:

An invoice for each work site shall be submitted to the State of Delaware, Department of Transportation, Division of Transportation Solutions, Signs/Markings section, 14 Sign Shop Road, Dover, Delaware 19901.

Payment will be on a monthly basis for each separate unit of work complete in place and accepted.

MATERIALS:

The contractor shall supply all materials. The acceptable materials to be supplied under this contract are listed on the "Approved Material List."

Materials to be used shall be approved by the Project Coordinator as being those as listed on the Approved Materials List located elsewhere in these specifications. Proper labels and paperwork will be required as proof before any work is done, further testing may be required, and will be done by the Department's Materials and Research Section.

EQUIPMENT:

The equipment used to apply pavement markings shall meet the following requirements:

A. PAINT EQUIPMENT

1. Be able to apply double centerlines simultaneously (except temporary markings may be applied separately).

2. Capability to apply paint and glass beads to pavement at same time, leaving no more than 50 mm (2 “) of painted line without glass beads at the beginning or end of a line.

3. Capability of hand gun operation for applying special markings. (This may be a separate piece of equipment).

B. Truck Mounted Paint Equipment

1. Must apply double centerlines simultaneously.

2. Shall be capable of pneumatically applying glass beads 25 mm (1”) behind the spray pattern of the paint gun.

3. Shall have automatic electrically controlled skipline mechanism capable of retracing the existing approximate 3 m (10 ft.) stripe and 9 m (30 ft.) skip or applying a new 3 m (10 ft.) stripe and 9 m (30 ft.) skip.

PERMANENT TAPE EQUIPMENT:

Shall be specifically designed for the application of pressure sensitive adhesive coat film.

THERMOPLASTIC EQUIPMENT:

A special kettle shall be provided for melting and heating the thermoplastic material. The kettle shall be equipped with an automatic thermostatic control device and heated by controlled heat transfer liquid rather than direct flame.

Upon heating to application temperature, the material shall not exude fumes, which are toxic or injurious to persons or property. The pigment, beads and filler shall be well dispersed in the resin. The materials shall be free from all skins, dirt and foreign objects and shall be certified by the manufacturer as conforming to the requirements herein.

The equipment shall be so arranged so as to permit preheating of the pavement immediately prior to application of the thermoplastic material if the thermoplastic material manufacturer recommends preheating. The applicator shall be mobile and maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. The applicator shall be capable of containing a minimum of 55 kg (125 lbs.) of molten material. The use of a drag box is prohibited.

1. Extruded Applications

The equipment shall be constructed to provide continuous mixing and agitation of the material. Conveying parts of the equipment between the main material reservoir and the shaping die shall be so constructed so as to prevent accumulation and clogging. All parts of the equipment, which come in contact with the material, shall be so constructed so as to be easily accessible and exposable for cleaning and maintenance. The equipment shall be constructed so that all mixing and conveying parts up to and including the shaping dies, will maintain the material at the optimum plastic temperature.

The equipment shall be so constructed as to insure continuous uniformity in the dimensions of the stripe. The thickness of the material on the pavement shall be 2.28 mm (90 mils) + .13 mm (5 mils) for (longitudinal lines) lane lines, centerlines and edge lines; and shall be 3.18 mm (125 mils) + .13 mm (5 mils) for (transverse lines) crosswalks, stop bars, and all symbols.

The applicator shall provide a means for cleanly cutting off square the stripe ends. The equipment shall be so constructed so as to provide for varying die widths and to produce varying widths of traffic marking.

APPLICATION OF MATERIALS:

A. PAINT MARKINGS

1. For machine applied glass spheres, the reflective surface shall be obtained by applying glass spheres at an average rate of .84kg/ liter (7 lbs. per gallon) of paint onto and into the pigmented binder in one operation as specified under the section on equipment.

   Hand applied glass spheres must be applied at a rate no less than .48 kilograms per square meter (10 pounds per 100 sq. feet).

   The rate of beads and paint application shall be determined at the end of the work day. The number of liters of paint used and the number of kilograms of beads used shall be determined. The number of liters of paint shall be divided into the number of kilograms of beads and result shall be .84 kg/ liter (7 pounds per gallon) or greater.

   A deduction will be made from monies due the contractor for improper bead application according to the following table:

GlassBeadskg/liter (lbs./gallon)			Deduction/Meter100 mm (4") line
From		Less Than	
		.78(6.5)	Reapply
.78(6.5)	to	.80(6.7)	Deduct .015
.80(6.7)	to	.83(6.9)	Deduct .002

* Proportional rates apply to wider lines.

For hand applied glass spheres, the square meters of markings shall be determined, along with the number of kilograms of beads used. The number of square meters of paint shall be divided into the number of kilograms of beads and the result shall be .48 kg. Per square meter or greater.

Glass Beads kg/square meters (lbs./100 square feet)			Deduction/Meter (Sq. FT.)	
From		Less Than .46(9.5)		Reapply
.46(9.5)	to	.47(9.7)	Deduct	.015
.47(9.7)	to	.48(9.9)	Deduct	.002

2. The contractor according to the paint manufacturer’s recommendations shall apply pigmented binder (paint) white or yellow. The paint shall only be applied when ambient air temperature is 4 degrees C (40 degrees F or higher). The set film thickness shall be .38 mm (15 Mils) + .03 mm (1 Mil).

3. For lines over 750 m (2500 feet) in length, a truck-mounted machine shall be used.

4. For all lines over 150mm (6") in width, multiple passes of the paint machine or a stencil shall be used.

5. Minimum Reflectivity Requirements

   The Minimum Reflectivity required for Thermoplastic Markings are, White Thermoplastic 300 Millicandelas, Yellow Thermoplastic 200 Millicandelas.

   The minimum reflectivity required for paint lines are 150 Millicandelas for white and 125 millicandelas for yellow.

   If the markings due not meet the minimum reflectivity readings the contractor will be required to re-stripe the lines at their expense. All reflectivity readings will be taken with a LTL-X Reflectometer with 30-meter geometry.

B. PERMANENT TAPE

1. The surface must be clean and dry. Installation shall follow the type manufacturer's application methods. (Copy to be furnished to Projector Coordinator.)

2. On concrete the contractor shall follow the manufacturer's suggested installation procedures for preparing the surface, including the application of all necessary primers as indicated by the manufacture. Costs to provide said primer materials shall be at the sole expense of the contractor.

3. Apply markings into pavement surface roller tamper cart or by use of a roller having a

weight of 110 kg (250 pounds) and not more than 3650 kg (4 tons). The tamper cart shall be used with a minimum load of 90 kg (200 pounds).

4. Tamping shall begin immediately after each application. Care shall be taken to insure that all edges are firmly adhered. The tamping device shall not be twisted or turned while on the marking material. The roller tamper cart shall pass over the applied material with six forward passes and five backward passes.

C. THERMOPLASTIC

1. Application of Primer-Sealer: The primer-sealer shall be applied to all portland cement concrete pavement surfaces and to bituminous surfaces when recommended by the material's manufacturer, prior to the application of the marking. The rate of application shall be sufficient to cover the surface on which the marking is to be laid.

2. Application of Marking Material: Application equipment shall be so constructed so as to assure uniformity in the thickness of the marking without overspray.

   Thermoplastic pavement markings shall be applied only on clean, dry pavement and at road surface temperatures above 10 C (50 F). The contractor shall remove all dirt, debris, loose particles and heavy oil residues from the road surface application areas immediately prior to the installation of pavement markings.

   The contractor shall protect the markings until track-free by placing guarding or warning devices as necessary. In the event any vehicle should cross the molten marking, such marking shall be reapplied and the contractor shall remove any markings made by the moving vehicle.

   The marking material shall be applied at a temperature that will provide best adhesion to the pavement and shall be between 204 C-246 C (400 F-475 F) throughout and shall have uniform dispersions of binder, pigment and glass beads when applied to the surface of the pavement.

3. Rate of Application:

   a. Marking Material:

      Marking material shall be applied at the specified dimensions and at a rate to result in a marking thickness of 2.28 mm (90 mils), .13 mm (+5 mils) for longitudinal lines and 3.18 mm (125 mils), .13 mm (+5 mils) for transverse lines and symbols (not including glass bead top dressing).

      Except as otherwise specified, pavement line markings shall be 127 mm (5 inches) wide and broken line segments shall be 3 m (10 feet) in length with 9 m (30 foot) gaps. If the application rate of the thermoplastic is greater than required, there shall be no cost adjustment.

      If the application rate is less than required, the Department shall withhold 25% of the monies due the contractor for the cost of the work for each .13 mm (5 mils) or any part thereof, by which the material is too thin.

b. Glass Beads:

Glass beads applied to the surface of the complete markings shall be applied by an automatic bead dispenser attached to the applicator in such a manner that the beads are dispensed instantaneously onto the molten marking. The bead dispenser shall be equipped with a cut-off control synchronized with the cut-off of the thermoplastic material.

The rate of bead application shall be determined for each work site. The number of square meters of material applied and the number of kilograms of beads used shall be determined. The number of square meters shall be divided into the number of kilograms of beads and the result shall be .48 or greater kg/square meter (10 or greater pounds per 100 square feet).

If the application rate is less than required, the Department shall withhold 25% of the monies due the contractor for the cost of the work.

During and after material application, both daylight and nighttime inspections of the markings will be made by an authorized representative of the Division of Highway Operations, and if found to be defective or if they fail in any way to meet the specifications in this proposal, such markings will be rejected and must be replaced at no cost to the Department within the time limit specified.

D. PREFORMED THERMOPLASTIC

1. The markings shall be applied in accordance with the manufacturer's recommendations on clean and dry surfaces. New Portland concrete cement surfaces must be sandblasted to entirely remove curing compound. A copy of the manufacturer's recommendations shall be presented to the Project Coordinator.

REMOVAL OF EXISTING PAVEMENT MARKINGS:

This item consists of removing existing pavement markings in strict compliance with all applicable laws and rules. The contractor shall be fully and wholly responsible in ensuring that all environmental rules and regulations are fully complied with during this work. The means used may include sandblasting, burning, water blast and grinding, if and as may be, approved by State Environmental officials.

The contractor is required to provide all labor, materials, equipment and incidentals necessary to completely remove the designated existing words, symbols, longitudinal and transverse lines and to clean up all residue from this operation to the satisfaction of the Project Coordinator.

This work will be done in locations where markings are existing but must be altered or in locations previously marked where part of the marking is missing and the remaining portion cannot be remarked.

METHOD OF MEASUREMENT:

Longitudinal lines shall be measured in linear feet of applied line by width. Double lines shall be measured separately.

Transverse lines shall be measured in linear feet of applied line by width.

Standard width lines are (5"), (10"), (12"), and (16").

For Symbols:

1. Those separately priced are measured as each.

2. Others are priced on a square feet basis. The actual square feet of symbol applied shall be determined.

   Painted markings shall be referenced as "Paint".

   Plastic tape markings shall be referenced as “Tape” or "Type A".

   Markings of thermoplastic material shall be referenced as "Thermoplastic".

   Lines over (2500 feet) in length shall be referenced as "Long".

BASIS OF PAYMENT:

The quantity of each item completed to the satisfaction of the Project Coordinator and measured as determined under the Method of Measurement section shall be paid for at the unit price shown on the bid sheet which price shall include all materials, labor, tools, templates, stencils, equipment, clean-up, and incidentals necessary to complete the item.

Approved Pavement Marking Materials

The following list includes all pavement-marking materials currently approved:

PAINT	CODE	COLOR
ENNIS PAINT INC.	DEW-21-M-1	WHITE
ENNIS PAINT INC.	DEY-21-M-1	YELLOW
ENNIS PAINT INC.	WX08W001	WHITE
ENNIS PAINT INC.	WX08L001	YELLOW
AEXCEL CORPORATION	72W-A042	WHITE
AEXCEL CORPORATION	72Y-A080	YELLOW
SHERWIN WILLIAMS	TM2308	WHITE
SHERWIN WILLIAMS	TM2309	YELLOW

Type – Waterborne, All Paint is to be Lead - Free.

THERMOPLASTIC	CODE	COLOR
ENNIS PAINT INC.	884455 (W5E-5BX-DE)	WHITE
ENNIS PAINT INC.	884490 (W5E-5GX-DE)	WHITE
ENNIS PAINT INC.	ET4 – AK - SX - YNL – 1, LEAD FREE	YELLOW
CROWN TECHNOLOGY INC	WAX - BADA	WHITE
CROWN TECHNOLOGY INC	ECOTHERM – 01 – YAX – AADA – LEAD FREE	YELLOW
SWARCO	2633 XWARX	WHITE
SWARCO	2663 XYARX	YELLOW
DOBCO (SMART MARK)	W1X1956	WHITE
DOBCO	Y1X1906	YELLOW

Type – ALKYD RESIN - ALL THERMOPLASTIC IS TO BE LEAD – FREE.

PERMANENT TAPE	CODE	COLOR
3M COMPANY	380	WHITE TYPE - A
3M COMPANY	381	YELLOW TYPE – A

*****Type 380 and 381 is to be used for longitudinal lines only.

3M COMPANY	380 IES	WHITE TYPE – A
3M COMPANY	381 IES	YELLOW TYPE –A

* Type 380 IES and 381 IES are to be used for all transverse lines, mini skips, arrows and symbols.

Approved Pavement Marking Materials

PREFORMED THERMOPLASTIC	CODE	COLOR
ENNIS-FLINT	PREMARK	WHITE
ENNIS-FLINT	PREMARK	YELLOW

GLASS BEADS	**CODE**
POTTTERS INDUSTRIES INC.	AASHTO M-247 TYPE 1 80% ROUNDS
POTTTERS INDUSTRIES INC.	AASHTO M-247 TYPE 4 LARGE BEAD
SWARCO REFLEX	AASHTO M-247 TYPE 1 80% ROUNDS
SWARCO REFLEX	AASHTO M-247 TYPE 4 LARGE BEAD

All glass beads furnished under this contract shall be moisture proofed.

Note: The state of Delaware is a lead free state. All pavement markings used in Delaware shall be lead free.

MOT CASES

Notes for Figure 6H-17A—Typical Application 17A
Mobile Striping Operations on a Two-Lane Road with a Single Convoy
(Delaware Revision)

Standard:

1. Except as provided in Figure 6H-17B (separate cone recovery convoy), a minimum of five vehicles shall be used for the mobile striping operation convoy.

2. Flags and/or flashing lights shall be mounted on the gun carriages whenever the carriages extend 1 foot or more beyond the width of the application vehicle.

3. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.

4. Shadow and application vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.

5. If an arrow board is used, it shall be used in the caution mode.

Guidance:

6. Where drivers emerging from an intersecting roadway will not encounter a shadow vehicle prior to the work area, a stationary warning sign should be placed on the intersecting road.

7. Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.

Option:

8. The minimum distance between the shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.

9. Additional shadow vehicles to warn and reduce the speed of oncoming or opposing vehicular traffic may be used. Law enforcement vehicles may be used for this purpose.

10. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.

Support:

11. Shadow vehicles are used to warn motor vehicle traffic of the operation ahead.

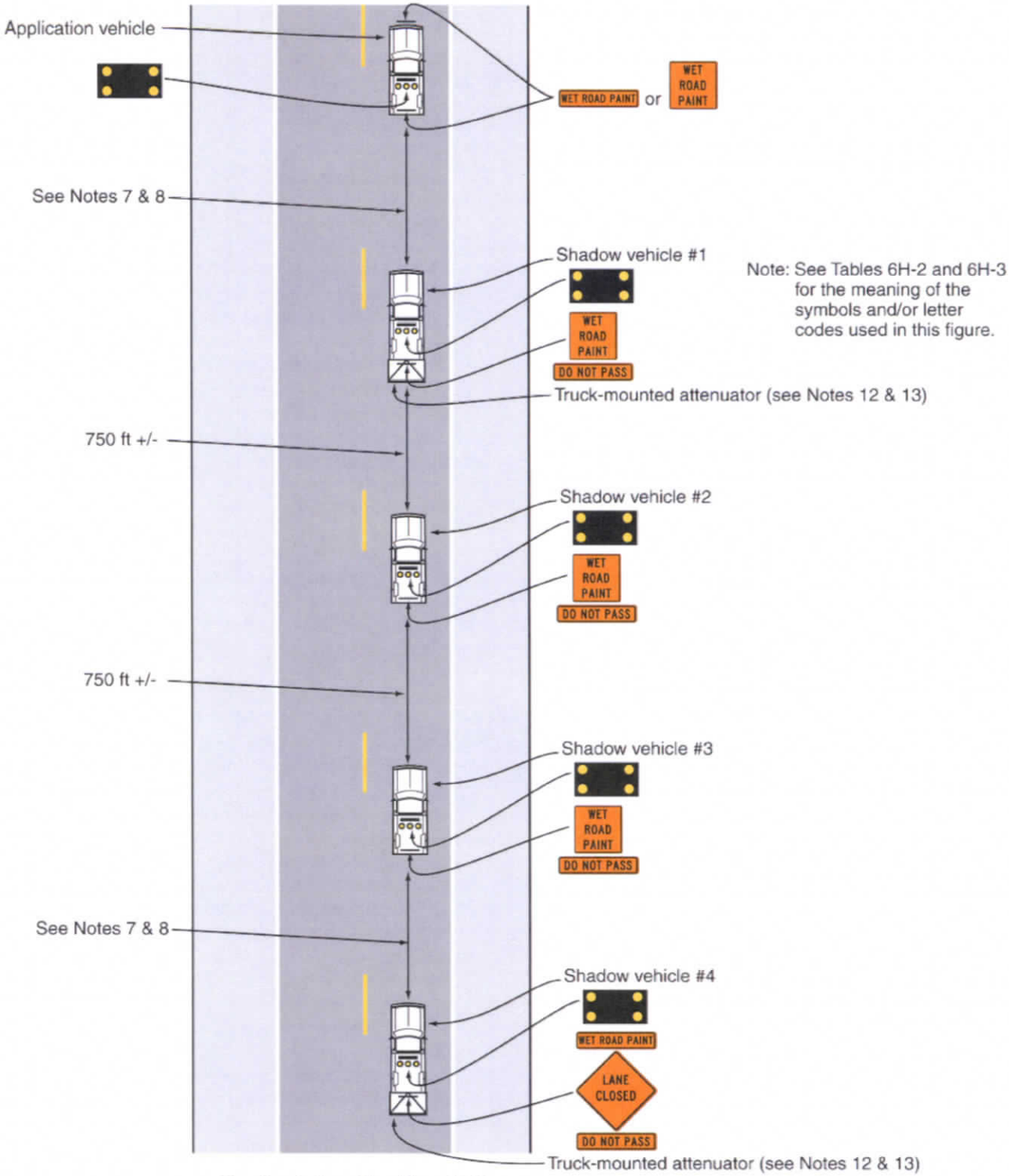
Standard:

12. Shadow Vehicles 1 and 4 shall be equipped with truck-mounted attenuators for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.

Option:

13. Truck-mounted attenuators may be used for mobile operations along roadways with a posted speed limit or 85th-percentile speed less than or equal to 40 mph.

Figure 6H-17A. Mobile Striping Operations on a Two-Lane Road with a Single Convoy (TA-17A)
(Delaware Revision)



Typical Application 17A

Notes for Figure 6H-35B—Typical Application 35B
Mobile Striping Operations on a Multi-Lane, Divided Highway with a Single Convoy
(Delaware Revision)

Standard:

1. Except as provided in Figure 6H-35C (separate cone recovery convoy), a minimum of five vehicles shall be used for the mobile striping operation convoy.

2. Arrow boards on the shadow vehicles shall, at a minimum, be Type B, with a size of 60 x 30 inches.

3. Flags and/or flashing lights shall be mounted on the gun carriages whenever the carriages extend 1 foot or more beyond the width of the application vehicle.

4. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.

5. Shadow and application vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.

6. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane.

7. When a side road or entrance ramp intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

Guidance:

8. Vehicles used for these operations should be made highly visible with appropriate equipment, such as signs or arrow boards.

9. Work should normally be accomplished during off-peak hours to the extent practical.

10. Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.

Option:

11. The minimum distance between the shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.

12. Additional shadow vehicles to warn and reduce the speed of oncoming or opposing vehicular traffic may be used. Law enforcement vehicles may be used for this purpose.

13. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.

Standard:

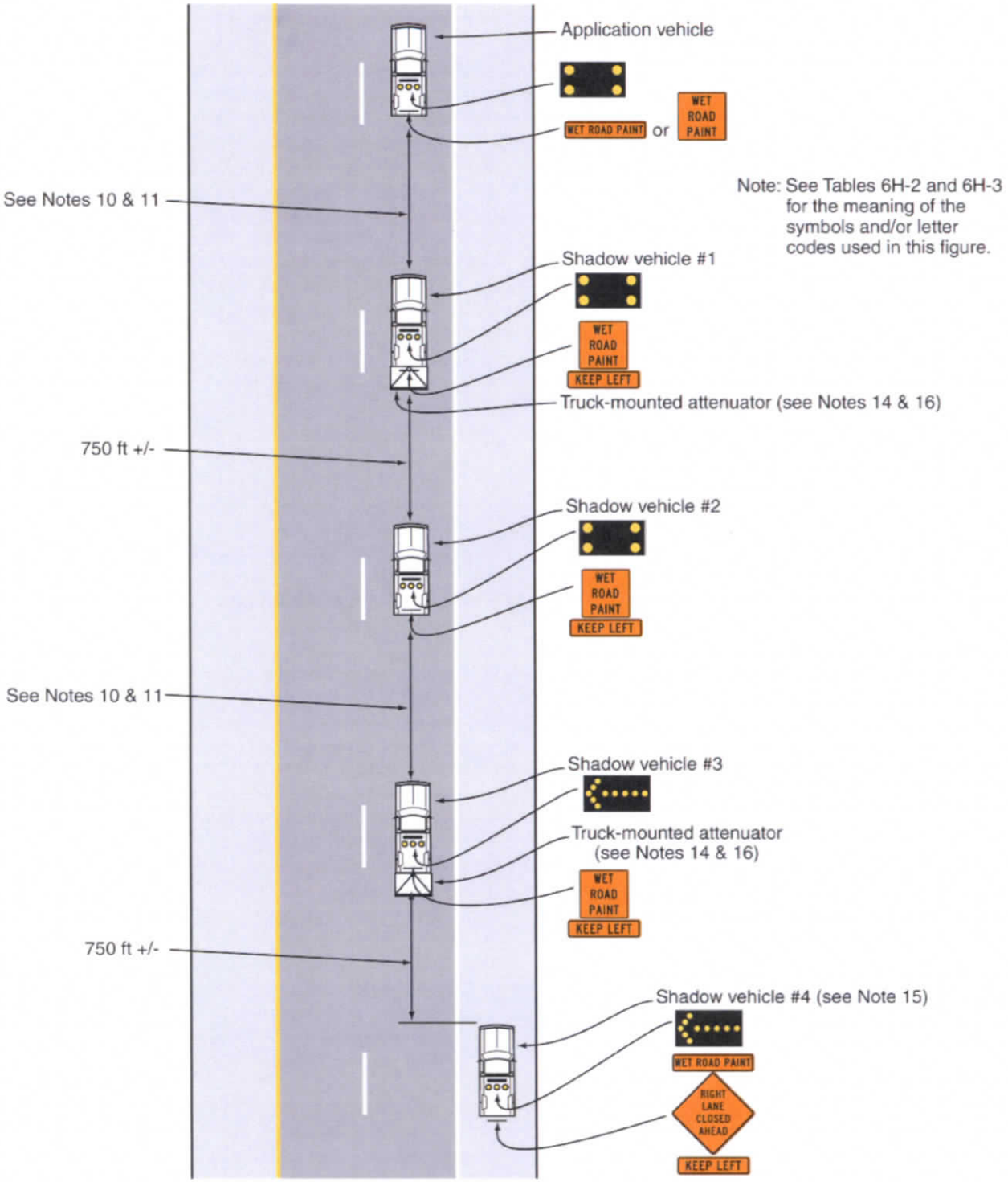
14. Shadow Vehicles 1 and 3 shall be equipped with truck-mounted attenuators for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.

15. Where the shoulder width cannot accommodate a shadow vehicle, Shadow Vehicle 4 shall be equipped with a truck-mounted attenuator and positioned in the adjacent travel lane.

Option:

16. Truck-mounted attenuators may be used for mobile operations along roadways with a posted speed limit or 85th-percentile speed less than or equal to 40 mph.

Figure 6H-35B. Mobile Striping Operations on a Multi-Lane, Divided Highway with a Single Convoy (TA-35B)
(Delaware Revision)



Typical Application 35B

Notes for Figure 6H-35D—Typical Application 35D
Mobile Striping Operations on an Interstate, Freeway, or Expressway with a Single Lane Closure and a Single Convoy
(Delaware Revision)

Standard:

1. Except as provided in Figure 6H-35E (separate cone recovery convoy), a minimum of six vehicles shall be used for the mobile striping operation convoy.

2. Arrow boards on the shadow vehicles shall, at a minimum, be Type B, with a size of 60 x 30 inches.

3. Flags and/or flashing lights shall be mounted on the gun carriages whenever the carriages extend 1 foot or more beyond the width of the application vehicle.

4. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.

5. Shadow and application vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.

6. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane.

7. When a side road or entrance ramp intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

8. A law enforcement vehicle shall supplement the convoy on interstates, freeways, and expressways.

Guidance:

9. Closing an interior lane only on a directional roadway with three or more lanes is strongly discouraged because of worker safety and driver expectancy concerns associated with permitting high-speed traffic on both sides of the work space. When an interior lane is closed, an adjacent lane should also be considered for closure.

10. Vehicles used for these operations should be made highly visible with appropriate equipment, such as signs or arrow boards.

11. Work should normally be accomplished during off-peak hours to the extent practical.

12. Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.

Option:

13. The minimum distance between the shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.

14. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.

15. Shadow Vehicle 7 may be used where adequate shoulder width is available to display a portable changeable message sign.

Guidance:

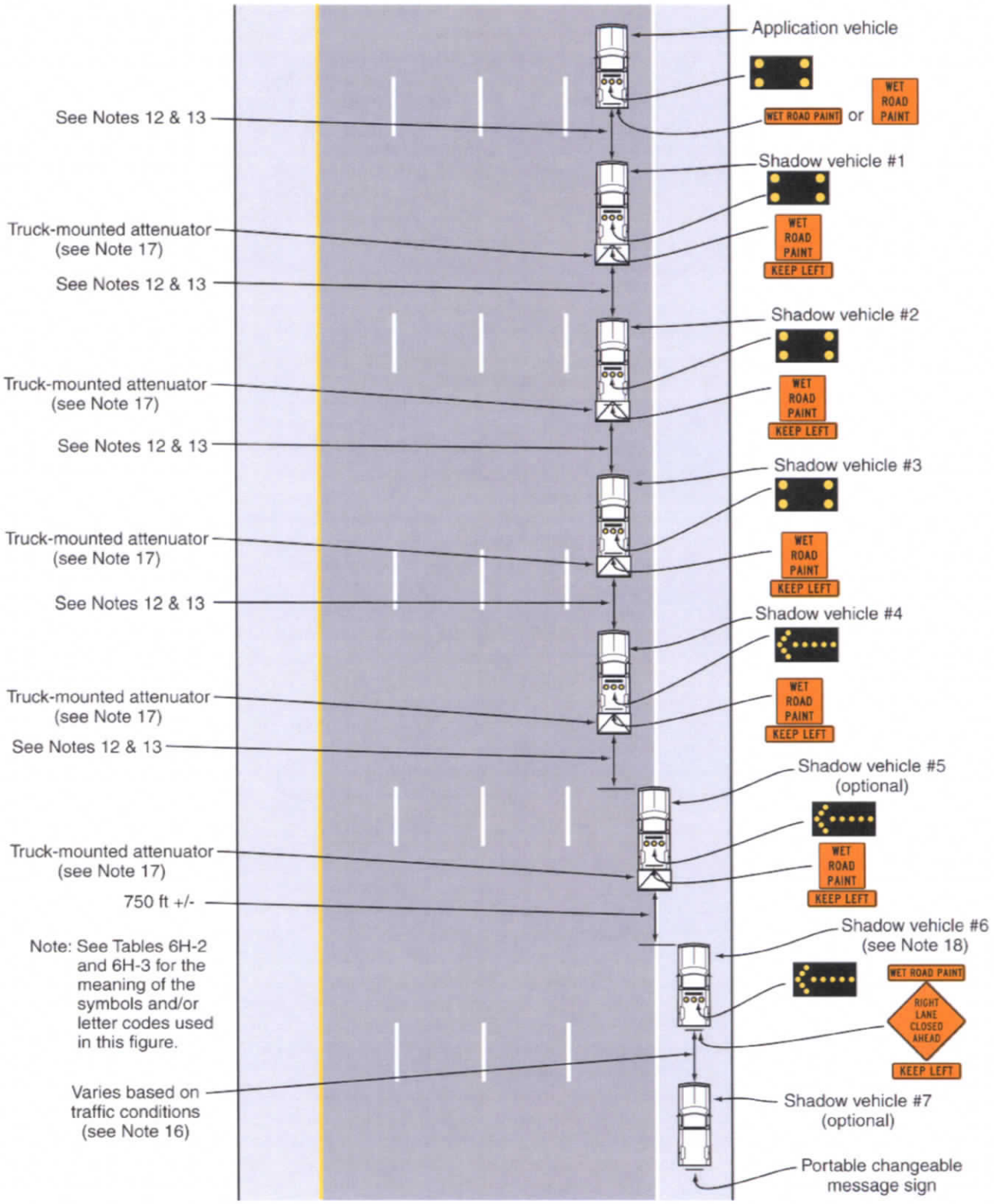
16. If used, Shadow Vehicle 7 should be located upstream of queued traffic to advise motorists of the potential for stopped vehicles.

Standard:

17. Shadow Vehicles 1, 2, 3, and 4 shall be equipped with truck-mounted attenuators for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph. If used, Shadow Vehicle 5 shall also be equipped with a truck-mounted attenuator.

18. Where the shoulder width cannot accommodate a shadow vehicle, Shadow Vehicle 6 shall be equipped with a truck-mounted attenuator and positioned in the adjacent travel lane.

Figure 6H-35D. Mobile Striping Operations on an Interstate, Freeway, or Expressway with a Single Lane Closure and a Single Convoy (TA-35D)
(Delaware Revision)



Typical Application 35D

Notes for Figure 6H-35F—Typical Application 35F
Mobile Striping Operations on an Interstate, Freeway, or Expressway with a Double Lane Closure and a Single Convoy
(Delaware Revision)

Standard:

1. Except as provided in Figure 6H-35G (separate cone recovery convoy), a minimum of six vehicles shall be used for the mobile striping operation convoy.

2. Arrow boards on the shadow vehicles shall, at a minimum, be Type B, with a size of 60 x 30 inches.

3. Flags and/or flashing lights shall be mounted on the gun carriages whenever the carriages extend 1 foot or more beyond the width of the application vehicle.

4. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.

5. Shadow and application vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.

6. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane.

7. When a side road or entrance ramp intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

8. A law enforcement vehicle shall supplement the convoy on interstates, freeways, and expressways.

Guidance:

9. Closing an interior lane only on a directional roadway with three or more lanes is strongly discouraged because of worker safety and driver expectancy concerns associated with permitting high-speed traffic on both sides of the work space. When an interior lane is closed, an adjacent lane should also be considered for closure.

10. Vehicles used for these operations should be made highly visible with appropriate equipment, such as signs or arrow boards.

11. Work should normally be accomplished during off-peak hours to the extent practical.

12. Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.

Option:

13. The minimum distance between the shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.

14. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.

15. Shadow Vehicle 7 may be used where adequate shoulder width is available to display a portable changeable message sign.

Guidance:

16. If used, Shadow Vehicle 7 should be located upstream of queued traffic to advise motorists of the potential for stopped vehicles.

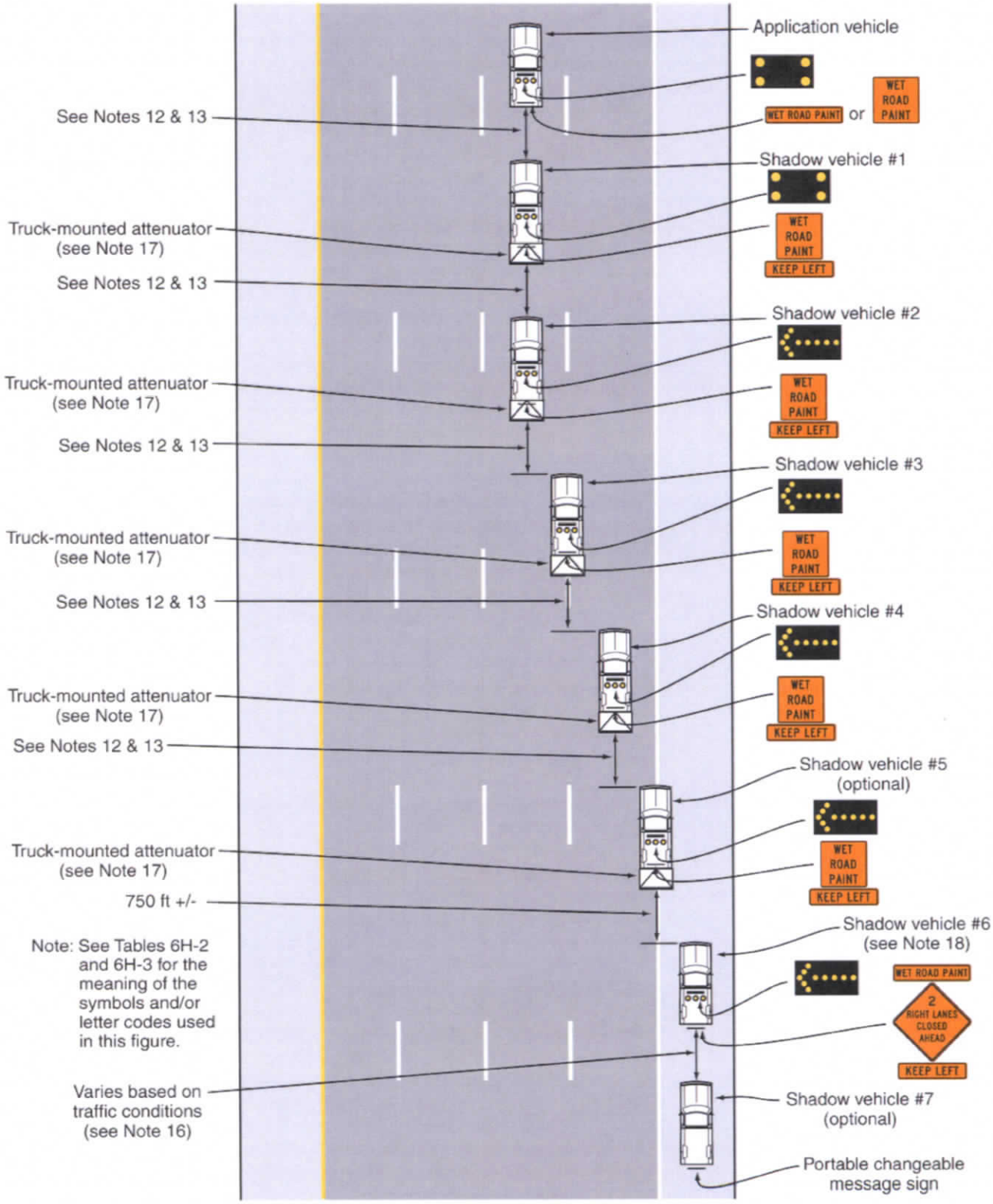
Standard:

17. Shadow Vehicles 1, 2, 3, and 4 shall be equipped with truck-mounted attenuators for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph. If used, Shadow Vehicle 5 shall also be equipped with a truck-mounted attenuator.

18. Where the shoulder width cannot accommodate a shadow vehicle, Shadow Vehicle 6 shall be equipped with a truck-mounted attenuator and positioned in the adjacent travel lane.

Figure 6H-35F. Mobile Striping Operations on an Interstate, Freeway, or Expressway with a Double Lane Closure and a Single Convoy (TA-35F)

(Delaware Revision)



Typical Application 35F

DELAWARE DEPARTMENT OF TRANSPORTATION PAGE: 1
SCHEDULE OF ITEMS DATE:

CONTRACT ID: DOT1423.01 PROJECT(S): DOT1423

All figures must be typewritten.

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 PAVEMENT MARKINGS					
0010	743003 ARROWPANELS, TYPE C	40.000 EADY				
0020	743004 FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	20.000 EADY				
0030	743005 FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	20.000 EADY				
0040	743007 TRAFFIC OFFICERS	56.000 HOUR	75.00000		4200.00	
0050	743010 FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	200.000 EADY				
0060	748665 WHITE PAINT LINE - TRANSVERSE, 12"	1000.000 LF				
0070	748666 WHITE PAINT LINE - TRANSVERSE, 16"	800.000 LF				
0080	748667 STRAIGHT ARROW - PAINT	10.000 EACH				
0090	748668 RIGHT OR LEFT ARROW - PAINT	10.000 EACH				

CANNOT BE USED FOR BIDDING

DELAWARE DEPARTMENT OF TRANSPORTATION PAGE: 2
SCHEDULE OF ITEMS DATE:

CONTRACT ID: DOT1423.01 PROJECT(S): DOT1423

All figures must be typewritten.

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0100	748669 COMBINATION ARROW - PAINT	10.000 EACH				
0110	748670 SYMBOL - PAINT	369.000 SF				
0120	748676 YELLOW PAINT LINE TRANSVERSE, 12"	500.000 LF				
0130	748677 CURB PAINT	500.000 LF				
0140	748683 TYPE "A" LINE, 12"	4350.000 LF				
0150	748684 TYPE "A" LINE, 16"	1000.000 LF				
0160	748685 STRAIGHT ARROW TYPE "A"	13.000 EACH				
0170	748686 RIGHT OR LEFT ARROW TYPE "A"	40.000 EACH				
0180	748687 COMBINATION ARROW TYPE "A"	10.000 EACH				
0190	748688 SCHOOL LEGEND TYPE "A"	6.000 EACH				

CANNOT BE USED FOR BIDDING

DELAWARE DEPARTMENT OF TRANSPORTATION PAGE: 3
SCHEDULE OF ITEMS DATE:

CONTRACT ID: DOT1423.01 PROJECT(S): DOT1423

All figures must be typewritten.

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0200	748689 R X R LEGEND TYPE "A"	8.000 EACH				
0210	748690 SYMBOL TYPE "A"	500.000 SF				
0220	748696 THERMOPLASTIC TRANSVERSE LINE, 12"	78095.000 LF				
0230	748697 THERMOPLASTIC TRANSVERSE LINE, 16"	23120.000 LF				
0240	748698 STRAIGHT ARROW THERMOPLASTIC	100.000 EACH				
0250	748699 LEFT OR RIGHT THERMOPLASTIC ARROW	575.000 EACH				
0260	748700 COMBINATION ARROW THERMOPLASTIC	100.000 EACH				
0270	748702 SYMBOL - THERMOPLASTIC	5310.000 SF				
0280	748703 SYMBOL - PREFORMED THERMOPLASTIC MARKINGS	1200.000 SF				
0290	748704 REMOVAL OF EXISTING PAVEMENT MARKINGS	42905.000 SF				

CANNOT BE USED FOR BIDDING

DELAWARE DEPARTMENT OF TRANSPORTATION PAGE: 4
SCHEDULE OF ITEMS DATE:

CONTRACT ID: DOT1423.01 PROJECT(S): DOT1423

All figures must be typewritten.

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS		UNIT PRICE DOLLARS	CTS	BID AMOUNT DOLLARS	CTS
0300	748732 THERMOPLASTIC LINE, 5"	39325.000	LF				
0310	748733 THERMOPLASTIC LINE - LONG, 5"	2600.000	LF				
0320	748734 THERMOPLASTIC LINE, 10"	10000.000	LF				
0330	748735 TYPE "A" LINE, 5"	1000.000	LF				
0340	748736 TYPE "A" LINE, LONG LINE, 5"	2600.000	LF				
0350	748737 TYPE "A" LINE, 10"	1000.000	LF				
0360	748738 TYPE "A" LINE, CONTRAST, 8"	1000.000	LF				
0370	748739 TYPE "A" LINE, CONTRAST, 13"	1000.000	LF				
0380	748740 WHITE PAINT LINE, 5"	1000.000	LF				
0390	748741 WHITE PAINT LINE, LONG LINE, 5"	2600.000	LF				

CANNOT BE USED FOR BIDDING

DELAWARE DEPARTMENT OF TRANSPORTATION PAGE: 5
SCHEDULE OF ITEMS DATE:

CONTRACT ID: DOT1423.01 PROJECT(S): DOT1423

All figures must be typewritten.

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0400	748742 YELLOW PAINT LINE, 5"	1000.000 LF				
0410	748743 YELLOW PAINT LINE, LONG LINE, 5"	2600.000 LF				
0420	748755 WHITE PAINT LINE, 10"	1001.000 LF				
0430	748756 YELLOW PAINT LINE, 10"	1000.000 LF				
0440	763563 PERFORMANCE AND PAYMENT BOND, OPEN-END MOT CONTRACT	LUMP	LUMP			
	SECTION 0001 TOTAL					
	TOTAL BID					

CANNOT BE USED FOR BIDDING

CERTIFICATION

Contract No. DOT1423-PAVEMARK_SRTLN

The undersigned bidder, _____

whose address is _____

and telephone number is _____hereby certifies the following:

I/We have carefully examined the location of the proposed work, the proposed plans and specifications, and will be bound, upon award of this contract by the Department of Transportation, to execute in accordance with such award, a contract with necessary surety bond, of which contract this proposal and said plans and specifications shall be a part, to provide all necessary machinery, tools, labor and other means of construction, and to do all the work and to furnish all the materials necessary to perform and complete the said contract within the time and as required in accordance with the requirements of the Department of Transportation, and at the unit prices for the various items as listed on the preceding pages.

Bidder's Certification Statement [US DOT Suspension and Debarment Regulation (49 CFR 29)]:

CANNOT BE USED FOR BIDDING

NOTICE: All contractors who hold prime contracts (Federal Aid) with DelDOT are advised that the prime contractor and subcontractors are required to submit to DelDOT a signed and notary attested copy of the Bidder Certification Statement for each and every subcontract that will be utilized by the prime contractor. This Certification **must** be filed with DelDOT prior to written approval being granted for each and every subcontractor. Copies of the Certification Form are available from the appropriate District Construction Office.

Under penalty of perjury under the laws of the United States, that I/We, or any person associated therewith in the capacity of (owner, partner, director, officer, principal, investigator, project director, manager, auditor, or any position involving the administration federal funds):

a. am/are not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;

b. have not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;

c. do not have a proposed debarment pending; and,

d. have not been indicted, convicted, or had a civil judgement rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate below to whom it applies, initiating agency, and dates of action. Providing false information may result in criminal prosection or administrative sanctions.

_____

_____

_____

(Insert Exceptions)

DBE Program Assurance:

NOTICE: In accordance with 49 CFR Part 26 the undersigned, a legally authorized representative of the bidder listed below, must complete this assurance. By its signature affixed hereto, assures the Department that it will attain DBE participation as indicated:

Disadvantaged Business Enterprise _____ percent (blank to be filled in by bidder)

The foregoing quantities are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the amount of any item or portion of the work as may be deemed necessary or expedient. Any such increase or decrease in the quantity for any item will not be regarded as a sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided in the contract.

Accompanying this proposal is a surety bond or a security of the bidder assigned to the Department of Transportation, for at least ten (10) percentum of total amount of the proposal, which deposit is to be forfeited as liquidated damages in case this proposal is accepted, and the undersigned shall fail to execute a contract with necessary bond, when required, for the performance of said contract with the Department of Transportation, under the conditions of this proposal, within twenty (20) days after date of official notice of the award of the contract as provided in the requirement and specifications hereto attached; otherwise said deposit is to be returned to the undersigned.

I/We are licensed, or have initiated the license application as required by Section 2502, Chapter 25, Title 30, of the Delaware Code.

By submission of this proposal, each person signing on behalf of the bidder, certifies as to its own organization, under penalty of perjury, that to the best of each signer's knowledge and belief:

1. The prices in this proposal have been arrived at independently without collusion, consultation, communication, or Agreement with any other bidder or with any competitor for the purpose of restricting competition.
2. Unless required by law, the prices which have been quoted in this proposal have not been knowingly disclosed and will not knowingly be disclosed by the bidder, directly or indirectly, to any other bidder or competitor prior to the opening of proposals.
3. No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a proposal for the purpose of restricting competition.

CANNOT BE USED FOR BIDDING

==========

I/We acknowledge receipt and incorporation of addenda to this proposal as follows:

No.	Date	No.	Date	No.	Date	No.	Date	No.	Date

BIDDERS MUST ACKNOWLEDGE RECEIPT OF ALL ADDENDA

MUST INSERT DATE OF FINAL QUESTIONS AND ANSWERS ON WEBSITE: _____

==========

Sealed and dated this _____ day of _____ in the year of our Lord two thousand_____ (20___).

_____
Name of Bidder (Organization)

Corporate Seal

By: _____
Authorized Signature

Attest _____

_____
Title

SWORN TO AND SUBSCRIBED BEFORE ME this ____ day of _____, 20____.

Notary Seal

_____
Notary

BID BOND

TO ACCOMPANY PROPOSAL
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That:_____

of_____ in the County of _____and State of _____ as

Principal, and _____ of _____ in the County of

_____ and State of _____ as **Surety**, legally authorized to do business in the State of

Delaware ("**State**"), are held and firmly unto the **State** in the sum of _____

_____Dollars ($_____), or _____ percent not to exceed _____

_____ Dollars ($_____) of amount of bid on Contract No. DOT1423-PAVEMARK_SRTLN , to be paid to the **State** for the use and benefit of its Department of Transportation ("**DelDOT**") for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden **Principal** who has submitted to the **DelDOT** a certain proposal to enter into this contract for the furnishing of certain materiel and/or services within the **State**, shall be awarded this Contract, and if said **Principal** shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by the **DelDOT**, this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____ seal and dated this _____ day of _____ in the year of our Lord

two thousand and _____(20___).

SEALED, AND DELIVERED IN THE
presence of

_____
Name of Bidder (Organization)

Corporate Seal

By: _____
Authorized Signature

Attest _____

_____
Title

_____
Name of **Surety**

Witness:_____

By: _____

_____
Title

CANNOT BE USED FOR BIDDING