

**THIS COPY IS FOR
INFORMATION ONLY.
YOU MUST PURCHASE
THE PROPOSAL IN ORDER
TO SUBMIT A BID.**



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

JACK MARKELL
GOVERNOR

CAROLANN WICKS
SECRETARY

VIA OVERNIGHT DELIVERY

(302) 760-2030
FAX (302) 739-2254

March 10, 2011

Contract No. T201106803.01
MICROSURFACING CENTRAL AND SOUTH, FY 2011
Kent County

Ladies and Gentlemen:

Enclosed is Addendum No. 3 for the referenced contract consisting of the following:

1. Two (2) pages, Table of Contents, pages iii and iv, revised, to be substituted for the same page in the Proposal.
2. Standard Specifications 743003, 743004, and 743051 has been added to the Proposal.
3. Special Provision, 763609, has been added to the Proposal.
4. Three (3) pages, Special Provisions, 401754 - Fog Seal, pages 12A through 12C, new, to be added to the Proposal.
5. Three (3) pages, Special Provisions, 743501 - Warning Lights, Type B, pages 18 through 20, **DELETED**, to be removed from the Proposal.
6. Two (2) pages, Special Provisions, 743537 - Furnish and Maintain Truck-Mounted Attenuator, Type II, pages 20A through 20B, new, to be added the Proposal.
7. Special Provision, 763606, the quantities have been changed.
8. Two (2) pages, Bid Proposal Forms, pages 1 through 2, revised, to be substituted for the same pages in the Proposal and one (1) page, 3, new to be added to the Proposal.
9. Seven (7) sheets, Construction Plans, sheets 3, 13, 14, 15, 16, 24, and 47, revised, to be

substituted for the same sheets in the Plan Set and four (4) sheets, 3A, 15A, 46A, and 46B, new, to be added to the Proposal..

10. For proposal holders with the electronic bid option only, Amendment Disk No. 1.

Please note the revisions listed above and submit your bid based upon this information.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott S. Gottfried". The signature is fluid and cursive, with a large initial "S" and "G".

Scott S. Gottfried
Competitively Bid Contracts Coordinator
:ssg
Enclosures

LOCATION [i](#)

DESCRIPTION [i](#)

CONSTRUCTION ITEMS UNITS OF MEASURE [ii](#)

GENERAL NOTICES [1](#)

 SPECIFICATIONS [1](#)

 CLARIFICATIONS [1](#)

 ATTESTING TO NON-COLLUSION [1](#)

 DEPARTMENT OF LABOR FOR SWORN PAYROLL INFORMATION [1](#)

 PREFERENCE FOR DELAWARE LABOR [2](#)

 EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS [2](#)

 TAX CLEARANCE [2](#)

 LICENSE [2](#)

 DIFFERING SITE CONDITIONS [2](#)

 PREVAILING WAGES [3](#)

 PREVAILING WAGE DETERMINATION - Highway Construction [5](#)

SUPPLEMENTAL SPECIFICATIONS [7](#)

SPECIAL PROVISIONS [9](#)

 CONSTRUCTION ITEM NUMBERS [11](#)

 401502 - ASPHALT CEMENT COST ADJUSTMENT [12](#)

 401754 – FOG SEAL [12A](#)

 403510 - POLYMER-MODIFIED EMULSION MICRO-SURFACING (SQUARE YARDS)
 [13](#)

 403511 - POLYMER-MODIFIED EMULSION MICRO-SURFACING (TON) [13](#)

 403512 - POLYMER-MODIFIED EMULSION MICRO-SURFACING, ROLLED (SQUARE
 YARDS) [13](#)

 743537 - FURNISH AND MAINTAIN TRUCK-MOUNTED ATTENUATOR, TYPE II .. [20A](#)

 748502 - RAISED/RECESSED PAVEMENT MARKER [21](#)

 748506 - PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 4"
 [22](#)

 748553 - PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT
 MARKINGS, BIKE SYMBOL [32](#)

 763606 - MAINTENANCE OF TRAFFIC, TWO LANE, TWO WAY WITH LANE CLOSURE
 [36](#)

 763609 - MAINTENANCE OF TRAFFIC, MULTILANE LIMITED CONTROL FOR
 INTERSTATES AND HIGHWAYS WITH SHOULDER CLOSURE [36](#)

 763632 – REMOVAL OF RAISED PAVEMENT MARKER [39](#)

 UTILITY STATEMENT [41](#)

 CERTIFICATE OF RIGHT-OF-WAY STATUS [43](#)

 ENVIRONMENTAL STATEMENT [45](#)

BID PROPOSAL FORMS [47](#)

401754 – FOG SEAL**Description:**

This work consists of preparing the surface, furnishing and applying an emulsified asphalt and water mixture as a surface seal.

Materials:

Materials for fog seal shall be a 1:1 mixture CSS-1h, which conforms to Section 811 of the Standard Specifications, and water, which conforms to Section 803 of the Standard Specifications. A Certificate of Analysis shall be submitted for each lot of CSS-1h for approval. The percentage of residual asphalt of the CSS-1h shall be no less than 57 percent. The emulsion should be diluted no more than 24 hours before its intended use. This is to avoid settlement of the diluted emulsion. The emulsion may be circulated using a centrifugal or other suitable pump to ensure uniformity.

Equipment:

Distributors. The distributors used shall be capable of uniformly applying the bituminous material in liquid form. Devices to control the pressure, volume, and temperature shall be provided. Each distributor shall have an approved calibration chart, be equipped with an approved sampling device, and conform to the following:

- a. *Pressure.* The pressure shall be supplied by a positive displacement pump or air compressor. The pressure shall be uniform throughout the entire width of spray. If pressure is supplied by an air compressor, automatic controls must be provided to maintain sufficient and even pressure throughout the application of an entire load.
- b. *Temperature.* The distributor shall be equipped with a heating system that applies heat uniformly across the width of the tank. Provisions shall be made for circulating or agitating the material whenever necessary while heating. The distributor shall be equipped with a thermometer marked in degrees Fahrenheit (Celsius) of sufficient range to determine the actual temperature of the material.
- c. *Tachometer.* All distributors shall be provided with an approved tachometer recording feet (meters) per minute with a tabulation of feet (meters) per load with adjustments. Each load tabulation shall start at zero. There shall also be a totaling tabulation of this instrument.
- d. *Volume.* A tachometer shall give correct readings of the speed, and the volumetric efficiency of the distributor shall ensure the correct volume at various speeds. Tests shall be required to prove the volumetric efficiency of the distributor at various speeds as directed by the Engineer.
- e. *Circulating System.* All pump distributors shall be equipped with a circulating system designed to maintain a homogenous liquid while circulating in the distributor tank. This circulating system shall also be arranged to circulate the material in the tank truck before application.

Air distributors shall be equipped with a device for agitating the bituminous material in the tank trucks when necessary.

- f. *Tests.* Necessary tests shall be made to determine the accuracy of all pressure gauges,

tachometers, and pump efficiencies. The tests shall be made by the Contractor when and as required by the Engineer.

- g. *Spray Bars.* Each distributor shall be equipped with spray bars capable of applying material uniformly throughout the entire length of the spray bars when they are extended. Spray bar extensions shall be provided for applying up to a 12' (7.3 m) width in one operation. Spray bars shall be equipped with a cleaning device and a shut-off valve to prevent dribbling, dripping, or streaking.
- h. *Tank Capacity Gauge.* A float or other approved type tank capacity gauge shall be furnished to indicate the volume in the tank in not less than 25 gal (100 L) units. The gauge shall have adjustments for correction.

Tanks shall have a minimum capacity of 750 gal (2800 L).

The rate of application of the distributor shall be calibrated by an approved method determined by the Engineer.

If the Engineer deems that the equipment applying the material is inadequate or fails to comply with all regulations, the Engineer will order the equipment to be removed from the job and require that another unit be placed on the work.

Application of Fog Seal Material:

The fog seal shall be applied in one application at the rates specified using the pressure distributor for the full width of the sealing operation, unless otherwise directed. Apply at the temperature that is recommended by the manufacture.

The nozzles of the spray bar shall be kept clean at all times. If one or more nozzles becomes blocked during the application of bituminous materials, the distributor shall be stopped immediately, and the nozzles shall be cleaned. The streaked areas shall be made uniform using a hand hose or other approved methods.

If the Contractor is unable to keep the application uniform, the operation shall be discontinued until a more experienced operator or a better distributor, or both, can be provided; or, the Contractor shall take such other precautions as may be necessary to keep the application within specified limits.

When applying bituminous materials adjacent to structures or curbs, the Contractor shall furnish and use effective means of protecting the structures or curbs from discoloration.

Construction Methods:

The surface upon which the fog seal is to be placed shall be cleaned thoroughly to the satisfaction of the Engineer. The fog seal shall be applied at a rate of 0.05 to 0.17 gal/yd² at ambient temperature. The application rate appropriate for the surface being sealed shall be determined by the Engineer. This rate will be determined by test strip. Apply the fog seal when the air and surface temperature is 60°F and above. Measure the air and surface temperature in the shade away from artificial heat. The application shall not begin if rain or high winds are eminent. The Engineer will determine when weather conditions are suitable for application. The fog seal should be a thin, uniform coating sufficient to seal the underlying pavement. The fog seal shall be applied using pressurized distributing equipment with a spray bar or other approved distribution system. During the application of the fog seal, care shall be taken to prevent splattering of adjacent pavement, curb and gutter and structures. Surface preparation shall be completed by removing all vegetation prior to sweeping with a power broom followed by a final sweeping with a approved vacuum

truck. The preparation shall be done just prior to the application of the fog seal and be approved by the Engineer.

Method of Measurement:

The quantity of Emulsified Asphalt fog seal will be measured as the actual number of gallons of fog seal applied. The quantity will be determined by any or all of the following methods and should be verified for accuracy by computations based on field measurements taken on and along the completed finished surfaces. Multiple layers will not be measured separately.

1. **Truck Measurement:** If bituminous materials are delivered to the Project in tank trucks, distributor tanks, or drums, the Contractor shall not remove any bituminous material from the transporting vehicle or container until necessary measurements have been made, nor shall the transporting vehicle or container be released until final outage has been measured. If weighing is not convenient, the Contractor shall furnish the Engineer with a certified chart showing the dimensions and volume of each container together with a gauge or calibrated measuring rod which will permit the volume of the material to be determined by vertical measurement.
2. **Metering:** The volume may be determined by metering, in which case the metering device used and the method of using it shall be subject to the approval of the Engineer.
3. **Time of Deliveries:** The arrival and departure of vehicles delivering bituminous materials to the Project site shall be so scheduled that the Engineer is afforded proper time for the measurements of delivered volume and final outage. The Engineer will make the necessary measurements only during the Contractor's normal daily working hours.

Basis of Payment:

The quantity of the fog seal will be paid for at the Contract unit price per gallon of diluted CSS-1h. Price and payment will constitute full compensation for preparing the surface, mobilizing and furnishing all equipment, materials, and labor; placing the material; and for all labor, equipment, tools and incidentals necessary to complete the work.

2/1/11

THIS PAGE IS INTENTIONALLY LEFT BLANK

THIS PAGE IS LEFT BLANK FOR SEQUENCING PURPOSES.

THIS PAGE IS LEFT BLANK FOR SEQUENCING PURPOSES.

THIS PAGE IS LEFT BLANK FOR SEQUENCING PURPOSES.

743512 - FURNISH AND MAINTAIN TRUCK-MOUNTED ATTENUATOR, TYPE I
743537 - FURNISH AND MAINTAIN TRUCK-MOUNTED ATTENUATOR, TYPE II

Description:

The item shall consist of furnishing, positioning, and maintaining truck mounted attenuator(s) (TMA), Type I and/or Type II at the project site(s) as required and specified on the Plans and as directed by the Engineer.

The Contractor shall be responsible for keeping the TMA in effective crashworthy condition for which it is designed throughout the life of the contract. Should the TMA be damaged at any time throughout the life of the project, repairs and/or replacement, if necessary, shall be the responsibility of the Contractor with cost to be incidental to this pay item.

The Contractor shall supply the manufacturer's roll ahead distances information of the TMA to be used. This information along with NCHRP Report certification shall be given to the inspection staff at least 7 calendar days prior to arrival of the unit at the project site and a copy shall be kept in the truck at all times. No payment for the TMA will be made if the information is not supplied.

At the completion of its usage, the TMA with the service truck shall remain the property of the Contractor and shall be removed from the site as part of this item.

Materials and Construction Methods:

The Truck Mounted Attenuator, Type I shall meet the requirements of NCHRP Report 350 Test Level 2. The TMA, Type I is to be used on highways with prior to construction posted speed up to and including 45 mph (70 km/h).

The Truck Mounted Attenuator, Type II shall meet the requirements of NCHRP Report 350 Test Level 3. The TMA, Type II is to be used on highways with prior to construction posted speed greater than 45 mph (70 km/h). The TMA Type II shall be used for the Delaware Turnpike and Interstate Mainline regardless of the construction zone posted speed.

The entire height and width of the TMA end shall be covered with 6" (150 mm) diagonal, inverted "V" stripes of retroreflective material placed 6" (150 mm) apart. A large rotating amber beacon or strobe light shall be mounted on the TMA vehicle in such a manner as to be clearly visible for a distance of not less than 500' (150 m) in all directions from the vehicle. The TMA vehicle shall also be equipped with a Type C arrow panel, complete with W1-6 arrow sign.

The TMA shall be attached to the back of a truck in accordance with the manufacturer's recommendations. The weight of the truck shall also be in accordance with the manufacturer's recommendations. The truck upon which the TMA is mounted must be in good operating condition. The truck must have a valid registration, registration number plate, current inspection documentation, weight verification, and proof of insurance.

The Contractor shall make arrangements with his supplier to have replacement components for the TMA readily available for immediate repair.

Basis of Payment:

The payment for furnishing and maintaining the truck mounted attenuator shall be made for at the contract unit price per Each-Day bid for "743512 - Furnish and Maintain Truck Mounted Attenuator, Type I" and/or "743537 - Furnish and Maintain Truck Mounted Attenuator, Type II", which price and payment shall constitute full compensation for furnishing and maintaining the unit, including the truck with Type C Arrow Panel, W1-6 sign, and the driver, the necessary repairs or replacement of the unit during its need on the job after damage, removal when no longer required, roll ahead distance information and for all labor, tools, equipment and necessary incidentals to complete the job.

Payment will only be made for those TMA units in place on the roadway and protecting active construction operations. No payment will be made for TMA units available or in storage but not in use.

2/28/09

CONTRACT ID: T201106803.01 PROJECT(S): T201106803

All figures must be typewritten.

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

SECTION 0001 Category 0001

0010	403510 POLYMER-MODIFIED EMULSION MICRO-SURFACING	697010.000				
	SY					
0020	403511 POLYMER-MODIFIED EMULSION MICRO-SURFACING	500.000				
	TON					
0030	403512 POLYMER-MODIFIED EMULSION MICRO-SURFACING, ROLLED	392137.000				
	SY					
0040	743051 FLAGGER, KENT COUNTY, STATE	3294.000	41.81000		137722.14	
	HOUR					
0050	743052 FLAGGER, SUSSEX COUNTY, STATE	1082.000	41.53000		44935.46	
	HOUR					
0060	743063 FLAGGER, KENT COUNTY, STATE, OVERTIME	497.000	60.62000		30128.14	
	HOUR					
0070	743064 FLAGGER, SUSSEX COUNTY, STATE, OVERTIME	193.000	60.22000		11622.46	
	HOUR					
0090	748015 PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND	2750.500				
	ALKYD-THERMOPLAST IC SF					
0100	748016 PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 8"	7600.000				
	LF					

DELAWARE DEPARTMENT OF TRANSPORTATION
SCHEDULE OF ITEMS

PAGE: 2
DATE:

CONTRACT ID: T201106803.01 PROJECT(S): T201106803

All figures must be typewritten.

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	748019 TEMPORARY MARKINGS, PAINT, 4"	2271221.000 LF				
0120	748026 TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	2862.500 SF				
0130	748502 RAISED/RECESSED PAVEMENT MARKER	1272.000 EACH				
0140	748506 PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, 4"	1123013.000 LF				
0150	748553 PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS, BIKE SYMBOL	4.000 EACH				
0160	763000 INITIAL EXPENSE	LUMP	LUMP			
0170	763606 MAINTENANCE OF TRAFFIC, TWO LANE, TWO WAY WITH LANE CLOSURE	32.000 EACH				
0180	763632 REMOVAL OF RAISED PAVEMENT MARKER	1272.000 EACH				
0181	401754 FOG SEAL	24000.000 GAL				
0182	743003 ARROWPANELS, TYPE C	16.000 EADY				

DELAWARE DEPARTMENT OF TRANSPORTATION
SCHEDULE OF ITEMS

PAGE: 3
DATE:

CONTRACT ID: T201106803.01 PROJECT(S): T201106803

All figures must be typewritten.

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0183	743004 FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EADY 16.000				
0184	743537 FURNISH AND MAINTAIN TRUCK-MOUNTED ATTENUATOR, TYPE II	EADY 80.000				
0185	763609 MAINTENANCE OF TRAFFIC, MULTILANE LIMITED CONTROL FOR INTERSTATES AND HIGHWAYS WITH SHOULDER CLOSURE	EACH 16.000				
	SECTION 0001 TOTAL					
	TOTAL BID					

CANNOT BE
USED FOR
BIDDING

DEPARTMENT OF TRANSPORTATION

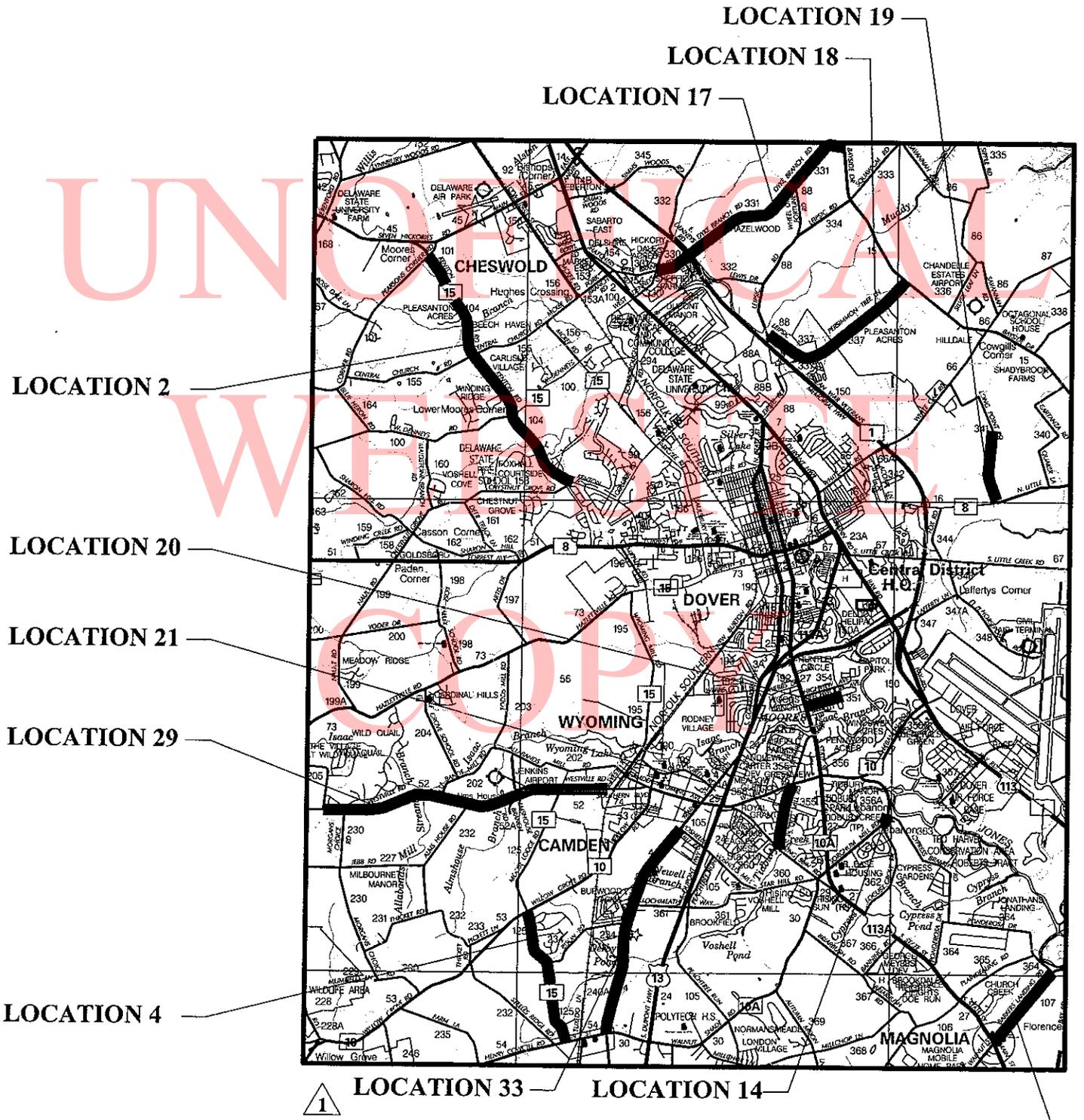
CONTRACT T201106803

CENTRAL MAINTENANCE

PAGE 3 OF 47

MICROSURFACING CENTRAL AND SOUTH, FY 2011

LOCATION MAP



ADDENDUM 1 - ADDED NEW LOCATION 33. RDG 2/2/11

LOCATION 3

DEPARTMENT OF TRANSPORTATION

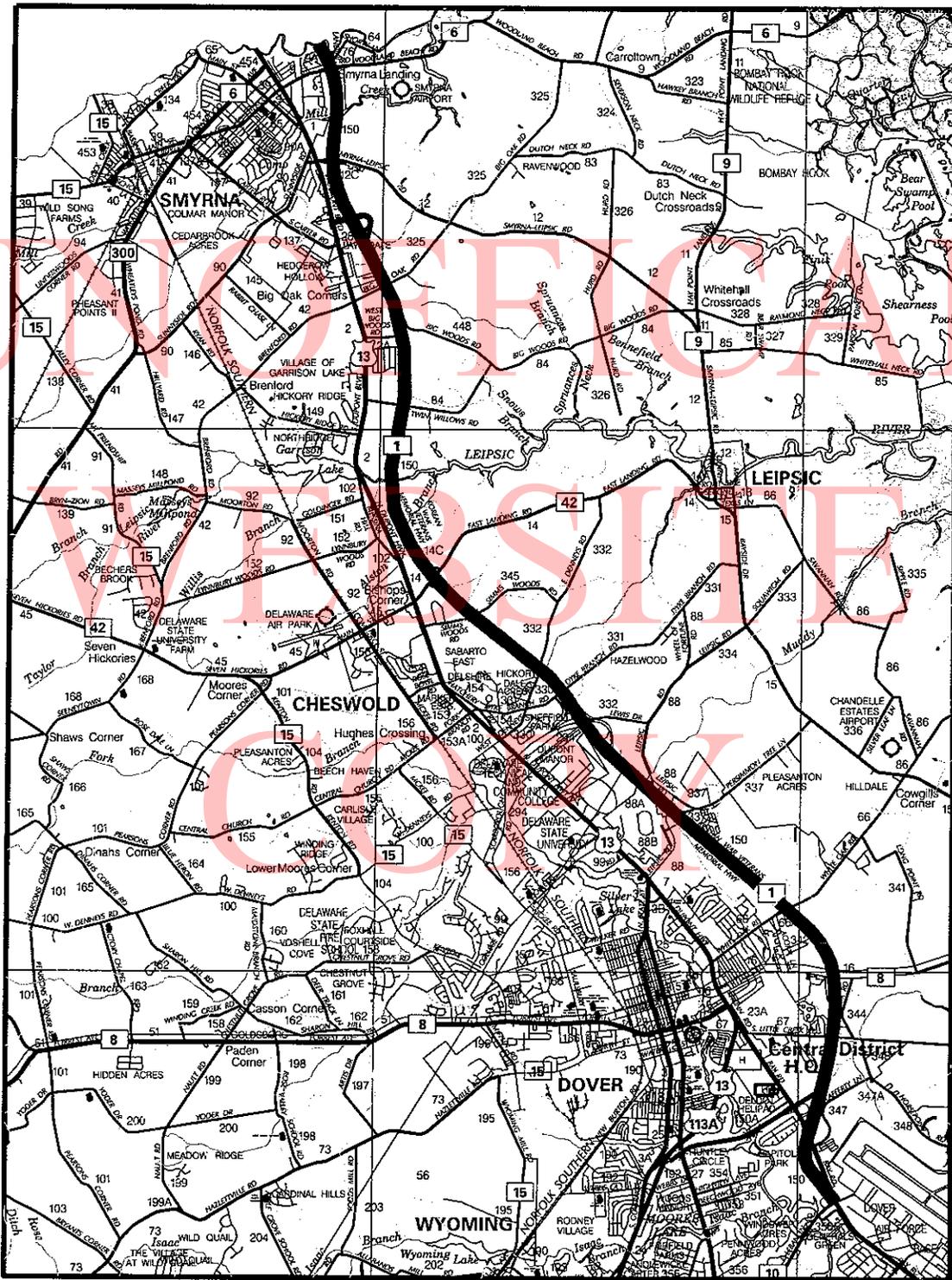
CONTRACT T201106803

CENTRAL MAINTENANCE

PAGE 3A OF 47

MICROSURFACING CENTRAL AND SOUTH, FY 2011

LOCATION MAP



1 LOCATION 32

ADDENDUM 1 - ADDED NEW LOCATION 32 AND PAGE. RDG 2/2/11

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201106803

CENTRAL MAINTENANCE

PAGE 13 OF 47

MICROSURFACING CENTRAL AND SOUTH, FY 2011

NOTES

THE PAVEMENT CAUSED BY REMOVAL OF ERRONEOUS MARKINGS SHALL BE REPAIRED / REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTORS EXPENSE.

8. AT THE END OF EACH DAY'S OPERATION AND BEFORE TRAFFIC IS RETURNED TO UNRESTRICTED ROADWAY USE, TEMPORARY STRIPING SHALL BE UTILIZED AT LOCATIONS THAT REQUIRE PERMANENT STRIPING. TEMPORARY PAVEMENT STRIPING MUST MATCH PERMANENT PAVEMENT STRIPING IN ALL REGARDS. TEMPORARY PAVEMENT MARKINGS SHALL BE PAID AT THE APPLICABLE CONTRACT UNIT PRICE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE TEMPORARY MARKINGS IN GOOD CONDITION SUCH THAT THE PAVEMENT IS PROPERLY DELINEATED AT ALL TIMES. ANY REFRESHING OF THE TEMPORARY MARKINGS WILL BE AT THE CONTRACTORS EXPENSE.

9. 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.

10. ALL TEMPORARY TRAFFIC CONTROL DEVICES USED ON ALL HIGHWAYS OPEN TO THE PUBLIC IN THIS STATE SHALL CONFORM TO THE REQUIREMENTS OF THE DELAWARE MUTCD AND THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 AS DEFINED IN SECTION 6A OF THE DELAWARE MUTCD. THE CONTRACTOR SHALL SUBMIT CERTIFICATION FOR TRAFFIC CONTROL DEVICES USED SPECIFICALLY ON THIS PROJECT PRIOR TO THE PRECONSTRUCTION MEETING. THE DEVICES SHALL BE APPROVED BY THE DISTRICT SAFETY OFFICER PRIOR TO USE AND SHALL BE MAINTAINED IN GOOD CONDITION FOR THE DURATION OF THE CONTRACT.

11. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, INCLUDING THE NECESSARY NCHRP 350 CERTIFICATIONS FOR ALL DEVICES THAT WILL BE UTILIZED INCLUDING DEVICES UTILIZED BY SUBCONTRACTORS, FOR EACH TRAFFIC CONTROL CASE ANTICIPATED BEFORE THE START OF THE PRE-CONSTRUCTION MEETING. WRITTEN APPROVAL MUST BE RECEIVED BEFORE THE START OF WORK AT EACH AND EVERY LOCATION.

AN ADDITIONAL PLAN DETAILING THE NUMBER OF ANTICIPATED FLAGGERS AND THEIR PROPOSED LOCATIONS MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING WORK AT EACH LOCATION.

CASE 6 IN THE TRAFFIC CONTROL MANUAL SHALL PRIMARILY BE USED FOR PREPARATION OF THE ROADWAY AND PLACEMENT OF THE MICROSURFACING OR  FOG SEALING. USE OF A TRUCK MOUNTED ATTENUATOR (TMA) MAY BE REQUIRED FOR THIS CASE. THE COST OF FURNISHING THE TMA SHALL BE INCIDENTAL TO THE PRICE BID FOR ITEM 763606. NO SEPARATE PAYMENT SHALL BE MADE FOR THE TMA.

CASE 17A IN THE TRAFFIC CONTROL MANUAL SHALL APPLY WHEN WORKING IN THE PRESENCE OF A RAILROAD CROSSING. USE OF A TRUCK MOUNTED ATTENUATOR MAY BE REQUIRED FOR THIS CASE. THE COST OF FURNISHING THE TMA SHALL BE INCIDENTAL TO OTHER CONTRACT ITEMS. NO SEPARATE PAYMENT SHALL BE MADE FOR THE TMA.

ADDENDUM  - ADDED FOG SEALING TO CASE 6 IN NOTE #11. RDG 2/2/11

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201106803

CENTRAL MAINTENANCE

PAGE 14 OF 47

MICROSURFACING CENTRAL AND SOUTH, FY 2011

NOTES

CASE 23A IN THE TRAFFIC CONTROL MANUAL SHALL APPLY FOR ALL STRIPING OPERATIONS. TMA'S REQUIRED FOR THIS OPERATION SHALL BE INCIDENTAL TO THE PRICE BID FOR THE RESPECTIVE STRIPING ITEM.

ITEM 763606 MAINTENANCE OF TRAFFIC TWO LANE TWO WAY WITH LANE CLOSURE SHALL ONLY BE PAID ONE TIME PER ROADWAY LOCATION REGARDLESS OF CASE AND WHETHER OR NOT BOTH LANES WILL HAVE TO BE SEQUENCED FOR CLOSURE OR REGARDLESS OF THE NUMBER OF TRAFFIC CASES REQUIRED TO PERFORM THE WORK. MAINTENANCE OF TRAFFIC WILL BE PAID FOR AT EACH AND EVERY LOCATION UNLESS; IF MAINTENANCE OF TRAFFIC IS DEEMED NOT NECESSARY BY THE ENGINEER AND IS NOT UTILIZED AT THAT PARTICULAR LOCATION. NO PAYMENT WILL BE MADE FOR THAT LOCATION IN THE CASE OF A PARTICULAR OPEN-END PATCHING LOCATION.

1 CASE 23B (AS MAY BE MODIFIED BY TRAFFIC SAFETY) IN THE TRAFFIC CONTROL MANUAL SHALL ONLY APPLY TO CLEANING THE ROADWAY, APPLYING THE FOG SEALING, AND PLACING THE TRAFFIC CONES ON SR-1, KOREAN WAR VETERANS MEMORIAL HIGHWAY, AFTER THE APPLICATION OF FOG SEALING. THE COST OF FURNISHING THE TRUCK MOUNTED ATTENUATORS SHALL BE PAID AT THE UNIT PRICE BID FOR THE TMA ITEM 743537.

1 CASE 21 (AS MAY BE MODIFIED BY TRAFFIC SAFETY) IN THE TRAFFIC CONTROL MANUAL SHALL ONLY BE FOR REMOVING THE TRAFFIC CONES ON SR-1, KOREAN WAR VETERANS MEMORIAL HIGHWAY, AFTER APPLICATION OF FOG SEALING. THE COST OF FURNISHING TRUCK MOUNTED ATTENUATORS SHALL BE INCIDENTAL BECAUSE THIS COST IS INCLUDED IN CASE 23B. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS CASE NUMBER.

1 ITEM 763609 MAINTENANCE OF TRAFFIC, MULTILANE LIMITED CONTROL FOR INTERSTATES AND HIGHWAYS WITH SHOULDER CLOSURE ONLY APPLIES ON SR-1, KOREAN WAR VETERANS MEMORIAL HIGHWAY, AND SHALL BE PAID ONE TIME PER DAY REGARDLESS OF THE DISTANCE OF ROAD COMPLETED DURING ONE SHIFT. MULTIPLE SETUPS MAY BE NECESSARY EACH DAY AND, IF SO, IS INCIDENTAL TO THIS PAY ITEM.

12. THE CONTRACTOR SHALL MAINTAIN ACCESS TO AND ALONG PEDESTRIAN FACILITIES AT ALL TIMES DURING CONSTRUCTION. EARTH, STONE, AND GRAVEL SURFACES ARE NOT ACCEPTABLE FOR PROVIDING PEDESTRIAN ACCESS. WHERE PEDESTRIAN ROUTES ARE CLOSED OR BLOCKED, ALTERNATE PEDESTRIAN ACCESS SHALL BE PROVIDED USING CASE 16 OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR TO THE SATISFACTION OF THE ENGINEER. PEDESTRIAN DETOUR ROUTES OR ALTERNATE PEDESTRIAN FACILITIES SHALL CONSIST OF ADA COMPLIANT FACILITIES TO THE LEVEL OF WHICH EXIST ON THE EXISTING PEDESTRIAN ROUTE. THE COSTS FOR ANY PROVISIONS SHALL BE INCIDENTAL TO ITEM 763606.

1 13. FOG SEAL OPERATION WILL BE SUBJECT TO TRAFFIC SAFETY APPROVAL FOR DATES AND TIMES WHEN WORKING ON SR-1, KOREAN WAR VETERANS MEMORIAL HIGHWAY.

ADDENDUM 1 - ADDED TRAFFIC CASES 21 AND 23B AND PAY ITEMS 743537 AND 763609 IN NOTE #11. ADDED NEW NOTE NUMBER 13 AND RENUMBERED NOTES 14 - 23. RDG 2/2/11

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201106803

CENTRAL MAINTENANCE

PAGE 15 OF 47

MICROSURFACING CENTRAL AND SOUTH, FY 2011

NOTES

PROJECT

14. UNLESS SPECIFIED, OVERLAY WIDTHS SHALL MATCH EXISTING WIDTHS.
15. ITEM 403511 HAS BEEN ADDED TO SOME LOCATIONS AS A CONTINGENCY ITEM AND MAY OR MAY NOT BE USED FOR THAT ACTUAL LOCATION. IT IS ANTICIPATED THAT THE ITEM SHALL BE NECESSARY FOR USE IN LOCATIONS WHERE AN EXISTING UNEVEN PAVEMENT REQUIRES A LEVELING COURSE PRIOR TO PLACEMENT OF ITEM 403510 OR 403512.
16. THE DEPARTMENT RESERVES THE RIGHT TO SUBSTITUTE EITHER OF THE PROPOSED QUANTITIES FOR ITEMS 403510 AND 403512 IN LIEU OF EACH OTHER OR, ALL LOCATIONS MAY UTILIZE ITEM 403510 IN WHICH CASE THERE WILL BE NO USE OF ITEM 403512 IN THE CONTRACT OR VICE VERSA.
17. THE COST OF CLIPPING THE EDGES BACK, PICKING UP AND DISPOSING OF EXCESS SOD AND SWEEPING AND CLEANING EXISTING PAVEMENT PRIOR TO OVERLAYS SHALL BE INCIDENTAL TO THE PRICE BID FOR ITEMS 403510, 403511, OR 403512.
18. IF THE CONTRACTOR ELECTS TO UTILIZE A CONTINUOUS FEED MACHINE (SUBJECT TO PRIOR APPROVAL FOR THAT PARTICULAR LOCATION BY THE DEPARTMENT), THE MACHINE MUST FIRST BE CALIBRATED TO THE SATISFACTION OF THE ENGINEER AND A TEST STRIP SHALL THEN BE APPLIED TO DETERMINE THE ACTUAL MAXIMUM ALLOWABLE SPEED OF THE MACHINE DURING MATERIAL APPLICATION.
19. THE CONTRACTOR SHALL SUPPLY THE PROJECT MANAGER WITH CERTIFIED WEIGHT TICKETS FOR ALL AGGREGATE, MINERAL FILLER, AND EMULSION DELIVERED TO THE JOB SITE. THESE TICKETS WILL BE CHECKED AGAINST THE AS MEASURED YIELDS TO ENSURE FINAL YIELDS MEET THOSE AS STATED IN THE SPECIFICATION.
20. THE ENGINEER MAY DETERMINE THAT A SINGLE 20 POUND PER SQUARE YARD LIFT WILL SUFFICE FOR A PARTICULAR ROADWAY SECTION. IN THIS CASE, MEASUREMENT FOR PAYMENT SHALL BE MADE AT A 2 TO 3 RATIO (67%) OF THE ACTUAL SQUARE YARDS PLACED.
21. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 105.09 UTILITIES, DELAWARE STANDARD SPECIFICATIONS, AUGUST 2001. THE CONTRACTOR SHALL CONTACT MISS UTILITY (1-800-282-8555) TWO WORKING DAYS PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR THE SUPPORT AND PROTECTION OF ALL UTILITIES WHEN EXCAVATING. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER CLEARANCES, INCLUDING SAFELY CLEARANCES, FROM OVERHEAD UTILITIES FOR CONSTRUCTION EQUIPMENT. THE CONTRACTOR IS ADVISED TO CHECK THE SITE FOR ACCESS PURPOSES FOR HIS EQUIPMENT AND, IF NECESSARY, MAKE ARRANGEMENTS DIRECTLY WITH THE UTILITY COMPANIES FOR FIELD ADJUSTMENTS FOR ADEQUATE CLEARANCES.
22. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS CONSIDERED IN HIS BID ALL PERMANENT AND TEMPORARY UTILITY APPURTENANCES IN THEIR PRESENT AND RELOCATED POSITIONS AS SHOWN ON THE PLANS OR DESCRIBED IN THE UTILITY STATEMENT OR ARE READILY DISCERNIBLE AND THAT NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS, INCONVENIENCE, OR DAMAGE DUE TO ANY INTERFERENCE FROM THE UTILITY FACILITIES AND

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201106803

CENTRAL MAINTENANCE

PAGE 15A OF 47

MICROSURFACING CENTRAL AND SOUTH, FY 2011

NOTES

APPURTENANCES OR THE OPERATION OF MOVING THEM, EXCEPT THAT THE CONTRACTOR MAY BE GRANTED AN EQUITABLE EXTENSION OF TIME.

23. COORDINATION AND COOPERATION AMONG THE UTILITY COMPANIES AND THE STATE'S CONTRACTOR ARE OF PRIME IMPORTANCE. THEREFORE, THE CONTRACTOR IS DIRECTED TO CONTACT THE FOLLOWING UTILITY COMPANY REPRESENTATIVES WITH ANY QUESTIONS REGARDING THIS WORK PRIOR TO SUBMITTING BIDS AND WORK SCHEDULES. PROPOSED WORK SCHEDULES SHOULD REFLECT THE UTILITY COMPANIES' PROPOSED RELOCATIONS. THE UTILITY COMPANIES DO NOT WORK ON WEEKENDS OR LEGAL HOLIDAYS.

① 24. EQUIPMENT CALIBRATION – A CALIBRATION STRIP FOR ITEM 401754 SHALL BE APPLIED AT THE LOCATION TO BE DESIGNATED BY THE DEPARTMENT. THE APPROVED DISTRIBUTOR TRUCK SHALL BE TESTED TO CONFIRM THE DISTRIBUTION RATE OF THE FOG SEAL MEETS THE VEHICLES DOCUMENTED CALIBRATION. BASED ON THIS FIELD TESTING, THE CONTRACTOR AND THE ENGINEER SHALL FORMALLY AGREE ON ANY CORRECTIONS THAT SHALL APPLY FOR THAT PARTICULAR VEHICLE. IF MULTIPLE VEHICLES ARE TO BE UTILIZED, THEN TESTING SHALL BE APPLIED TO THE ADDITIONAL VEHICLES AS WELL. THE COST OF CALIBRATING THE EQUIPMENT IS INCIDENTAL TO THE FOG SEAL PAY ITEM 401754.

① 25. TESTING - ONE DAY PRIOR TO FOG SEALING APPLICATION, CALCULATE ITS RATE FOR EACH LOCATION SEPARATELY OR AS NECESSARY, USING THE FOLLOWING PROCEDURE:

TO ESTIMATE THE APPLICATION RATE, TAKE A ONE-GALLON CAN OF DILUTED EMULSION (1:1 DILUTION RATE) AND POUR EVENLY OVER AN AREA OF 10 SY. THIS REPRESENTS A DILUTED APPLICATION RATE OF 0.10 G/SY. IF THE EMULSION IS NOT ABSORBED INTO THE SURFACE AFTER 2-3 MINUTES, DECREASE THE APPLICATION RATE OF THE EMULSION AND APPLY TO A NEW 10 SY AREA AND REPEAT UNTIL THE APPROXIMATE APPLICATION RATE IS FOUND. IF, AFTER THE FIRST TEST, THE SURFACE LOOKS LIKE IT CAN ABSORB MORE EMULSION, INCREASE THE APPLICATION RATE OF THE EMULSION AND SPREAD IT OVER A NEW 10 SY AREA. REPEAT UNTIL THE APPROXIMATE APPLICATION RATE IS FOUND.

THE COST OF DETERMINING THE APPLICATION RATE IS INCIDENTAL TO THE FOG SEAL PAY ITEM 401754

① 26. EXTREME CARE IS PERTINENT IN PREVENTING ANY FOG SEAL MATERIAL, OR ITS SPRAY OR MIST, FROM ADHERING TO CONCRETE, STRIPING, GRATES, OR ANY ELEMENTS ADJACENT, NEAR, OR WITHIN THE ASPHALT SHOULDERS. THE COST FOR ANY METHODS NECESSARY TO PREVENT THE MATERIAL FROM GETTING ON ANYTHING BUT THE ASPHALT SHOULDERS OR THE MATERIAL, TIME, AND LABOR IN REMOVING THE MATERIAL ANYWHERE THE ENGINEER INDICATES, IS INCIDENTAL TO THE FOG SEAL PAY ITEM 401754.

ADDENDUM ① – ADDED NEW NOTE NUMBERS 24, 25, AND 26. RDG 2/2/11

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201106803

PAGE 16 OF 47

CENTRAL
MAINTENANCE

MICROSURFACING CENTRAL AND SOUTH, FY 2011

LOCATION 1 103(HOURGLASS RD) FROM RD 50 TO RD 47, DE 11

LENGTH 3910.584 m 12830 L.F.

GENERAL IMPROVEMENTS
MICROSURFACE

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 1

403512	POLYMER-MODIFIED EMULSION MICRO-SURFACING, ROLLED	28,512.00 S.Y.
743051	** FLAGGER, KENT COUNTY, STATE	109.00 HOUR
743063	** FLAGGER, KENT COUNTY, STATE, OVERTIME	16.00 HOUR
748019	TEMPORARY MARKINGS, PAINT, 4"	51,320.00 L.F.
748506	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, 4"	25,660.00 L.F.
763606	 MAINTENANCE OF TRAFFIC, TWO LANE, TWO WAY WITH LANE CLOSURE	1.00 EACH

** DENOTES FIXED PRICE ITEM

COPY

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201106803

PAGE 24 OF 47

CENTRAL
MAINTENANCE

MICROSURFACING CENTRAL AND SOUTH, FY 2011

LOCATION 9 182(SLAUGHTER STATION RD) FROM RD 50, DE 8 TO RD 49, DE 44, MAIN STREET

LENGTH 4345.2288 m 14256 L.F.

GENERAL IMPROVEMENTS
MICROSURFACE

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 9

403511	POLYMER-MODIFIED EMULSION MICRO-SURFACING	500.00 TON
403512	POLYMER-MODIFIED EMULSION MICRO-SURFACING, ROLLED	34,848.00 S.Y.
743051 	** FLAGGER, KENT COUNTY, STATE	175.00 HOUR
743063	** FLAGGER, KENT COUNTY, STATE, OVERTIME	26.00 HOUR
748019	TEMPORARY MARKINGS, PAINT, 4"	56,390.00 L.F.
748506	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, 4"	28,195.00 L.F.
763606	MAINTENANCE OF TRAFFIC, TWO LANE, TWO WAY WITH LANE CLOSURE	1.00 EACH

** DENOTES FIXED PRICE ITEM

ADDENDUM  - CHANGED ITEM 743501 LIGHTS TO 743051 FLAGGER. RDG 2/2/11

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201106803

PAGE 46A OF 47

CENTRAL
MAINTENANCE

MICROSURFACING CENTRAL AND SOUTH, FY 2011

LOCATION 32 150(KOREAN WAR VETERANS MEM. HWY.) FROM DUCK CREEK TO RD 356

LENGTH m L.F.
GENERAL IMPROVEMENTS
FOG SEAL

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 32

401754	FOG SEAL	20,800.00 GAL
743003	ARROWPANELS, TYPE C	16.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	16.00 EA-DY
743537	FURNISH AND MAINTAIN TRUCK-MOUNTED ATTENUATOR, TYPE II	80.00 EA-DY
763609	MAINTENANCE OF TRAFFIC, MULTILANE LIMITED CONTROL FOR INTERSTATES AND HIGHWAYS WITH SHOULDER CLOSURE	16.00 EACH

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201106803

PAGE 46B OF 47

CENTRAL
MAINTENANCE

MICROSURFACING CENTRAL AND SOUTH, FY 2011

LOCATION 33 4(UPPER KING RD) FROM RD 30 TO RD 105

LENGTH m L.F.
GENERAL IMPROVEMENTS
FOG SEAL

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 33

401754	FOG SEAL	3,200.00 GAL
763606	MAINTENANCE OF TRAFFIC, TWO LANE, TWO WAY WITH LANE CLOSURE	1.00 EACH

UNOFFICIAL

WEBSITE

COPY

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201106803

PAGE 47 OF 47

CENTRAL MAINTENANCE MICROSURFACING CENTRAL AND SOUTH, FY 2011

CONTRACT QUANTITIES SUMMARY SHEET

	401754	FOG SEAL	24,000.00 GAL
	403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	697,010.00 S.Y.
	403511	POLYMER-MODIFIED EMULSION MICRO-SURFACING	500.00 TON
	403512	POLYMER-MODIFIED EMULSION MICRO-SURFACING, ROLLED	392,137.00 S.Y.
1	743003	ARROWPANELS, TYPE C	16.00 EA-DY
1	743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	16.00 EA-DY
	743051	** FLAGGER, KENT COUNTY, STATE	3,294.00 HOUR
	743052	** FLAGGER, SUSSEX COUNTY, STATE	1,082.00 HOUR
	743063	** FLAGGER, KENT COUNTY, STATE, OVERTIME	497.00 HOUR
	743064	** FLAGGER, SUSSEX COUNTY, STATE, OVERTIME	193.00 HOUR
1	743537	FURNISH AND MAINTAIN TRUCK-MOUNTED ATTENUATOR, TYPE II	80.00 EA-DY
	748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	2,750.50 S.F.
	748016	PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 8"	7,600.00 L.F.
	748019	TEMPORARY MARKINGS, PAINT, 4"	2,271,221.00 L.F.
	748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	2,862.50 S.F.
	748502	RAISED/RECESSED PAVEMENT MARKER	1,272.00 EACH
	748506	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, 4"	1,123,013.00 L.F.
	748553	PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS, BIKE SYMBOL	4.00 EACH
	763000	INITIAL EXPENSE	LUMP SUM
1	763606	MAINTENANCE OF TRAFFIC, TWO LANE, TWO WAY WITH LANE CLOSURE	32.00 EACH
1	763609	MAINTENANCE OF TRAFFIC, MULTILANE LIMITED CONTROL FOR INTERSTATES AND HIGHWAYS WITH SHOULDER CLOSURE	16.00 EACH
	763632	REMOVAL OF RAISED PAVEMENT MARKER	1,272.00 EACH

** DENOTES FIXED PRICE ITEM

ADDENDUM 1 - ADDED NEW ITEMS 743003, 743004, 743537, & 763606. REMOVED ITEMS 763500 & 763605. CHANGED QUANTITY FOR ITEM 763606. RDG 2/2/11