



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

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GOVERNOR

SHAILEN BHATT  
SECRETARY

**VIA OVERNIGHT DELIVERY**

(302) 760-2030  
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June 27, 2013

Contract No. T200800901.01  
Federal Aid Project No. ESTP-S999(88)  
HSIP SUSSEX COUNTY - US 9 PROJECTS  
Sussex County

Ladies and Gentlemen:

Enclosed is Addendum No. 1 for the referenced contract consisting of the following:

**NOTE: The date for the receipt of bids has been moved to Tuesday, July 16, 2013.**

1. One (1) page, Bid Proposal Cover, revised, to be substituted for the same page in the Proposal.
2. Four (4) pages, Special Provisions, 746518 - Aluminum Lighting Standard with Single Davit Arm, 35' Pole, pages 87 through 90, revised, to be substituted for the same pages in the Proposal.
3. Quantities have been revised for the following items:  
713002
4. Twelve (12) pages, Utility Statement, pages 149 through 160 , revised, to be substituted for the same pages in the Proposal.
5. One (1) page, Bid Proposal Form, page 7, revised, to be substituted for the same page in the Proposal.
6. Three (3) sheets, Construction Plans, sheets 5, 28 and 65, revised, to be substituted for the same sheets in the Plan Set.
7. 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,

*signature on file*

James H. Hoagland  
Contract Services Administrator  
;jhh  
Enclosures

STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION

BID PROPOSAL

for

CONTRACT T200800901.01

FEDERAL AID PROJECT NO. ESTP-S999(88)

HSIP SUSSEX COUNTY - US 9 PROJECTS

SUSSEX COUNTY

ADVERTISEMENT DATE: June 3, 2013

Completion Date 334 Calendar Days

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

Bids will be received in the Bidder's Room, Transportation Administration Center, 800 Bay Road, Dover, Delaware until 2:00 P.M. local time July 2, July 16, 2013



**746517 - ALUMINUM LIGHTING STANDARD WITH SINGLE DAVIT ARM, 30' POLE**  
**746518 - ALUMINUM LIGHTING STANDARD WITH SINGLE DAVIT ARM, 35' POLE**  
**746519 - ALUMINUM LIGHTING STANDARD WITH SINGLE DAVIT ARM, 40' POLE**  
**746520 - ALUMINUM LIGHTING STANDARD WITH DOUBLE DAVIT ARM, 30' POLE**  
**746521 - ALUMINUM LIGHTING STANDARD WITH DOUBLE DAVIT ARM, 35' POLE**  
**746522 - ALUMINUM LIGHTING STANDARD WITH DOUBLE DAVIT ARM, 40' POLE**  
**746618 - ALUMINUM LIGHTING STANDARD WITH SINGLE DAVIT ARM, 45' POLE**

### **Description:**

The work consists of furnishing and installing Aluminum Lighting Standard with Single Davit Arm and/or Aluminum Lighting Standard Pole with Double Davit Arms, breakaway transformer base, luminaires, in accordance with the details on the Plans, and/or as directed by the Engineer to make a functional street lighting system. The foundation will be provided under other items in the contract.

### **Materials and Construction Methods:**

All materials shall be of the best quality and free from all defects. No materials shall be installed until approved by the Engineer. Any material not specifically covered in these specifications shall be in accordance with accepted standards and as directed by the Engineer. Any materials deemed unsatisfactory by the Engineer, shall be replaced by the Contractor.

Lighting standards shall meet or exceed the requirements of the latest edition of AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals" based on 90 mph (145 km/hr) wind loads, luminaire weight of 70 lb (32 kg) and luminaire projected area of 3 ft<sup>2</sup> (0.3m<sup>2</sup>). Computations confirming conformance with AASHTO Specifications, with the year of the edition specified, shall be submitted to the Delaware Department of Transportation.

All electrical materials shall conform to the requirements of the National Electrical Code of the national Fire Protection Association, and shall conform to all local and special laws and/or ordinances governing such installations. Where these requirements do not govern, and where not otherwise specified, electrical materials shall conform to the Standardization Rules of the Institute of Electrical and Electronic Engineers.

Shop drawings and catalog cuts for all electrical and related materials shall be submitted by the Contractor for approval.

The bolts are to be supplied by the Contractor. The bolts will be installed using a template, and set so that luminaire arm is perpendicular to the roadway.

Anchor bolts, nuts, couplings, washers, and cap screws shall be of carbon steel conforming to the requirements of ASTM A307, and hot-dip galvanized in accordance with AASHTO M 232/M 232M..

New aluminum lighting standards shall consist of a tapered aluminum shaft having a base welded to the lower end. The pole shaft, pole extensions, and davit arms shall each be spun from one piece of seamless tubing, the strut and arm plates shall be extruded, all of which conform to the requirements of ASTM B221 aluminum alloy 6063-T6. The shaft shall have no circumferential welds, except at the lower end joining the shaft to the base and shall conform to the dimensions listed in the chart below. The shaft shall contain an internal vibration dampening device positioned approximately 2/3 the height of the pole. The top of the lighting standard shaft shall be drilled for two 1/2" (13 mm) lockbolts to secure the davit bracket to the lighting standard shaft. If the pole is not placed on a transformer base, it will have one 3" x 5" (75 mm x 125 mm) handhole which after pole is set should face so that maintainer may view oncoming traffic.

HEIGHT OF POLE	DAVIT ARM LENGTH	OUTER DIAMETER	WALL THICKNESS
30' (9 m)	10' (3.0 m)	10" (250 mm)	0.156" (3.96 mm)
	12' (3.6 m)	10" (250 mm)	0.156" (3.96 mm)
	15' (4.6 m)	10" (250 mm)	0.156" (3.96 mm)
	20' (6.1 m)	10" (250 mm)	0.156" (3.96 mm)
35' (10.5 m)	10' (3.0 m)	10" (250 mm)	0.156" (3.96 mm)
	12' (3.6 m)	10" (250 mm)	0.156" (3.96 mm)
	15' (4.6 m)	10" (250 mm)	0.156" (3.96 mm)
	20' (6.1 m)	10" (250 mm)	0.188" (4.78 mm)
40' (12 m)	10' (3.0 m)	10" (250 mm)	0.188" (4.78 mm)
	12' (3.6 m)	10" (250 mm)	0.188" (4.78 mm)
	15' (4.6 m)	10" (250 mm)	0.188" (4.78 mm)
	20' (6.1 m)	10" (250 mm)	0.219" (5.56 mm)
45' (13.5 m)	10' (3.0 m)	10" (250 mm)	0.188" (4.78 mm)
	12' (3.6 m)	10" (250 mm)	0.188" (4.78 mm)
	15' (4.6 m)	10" (250 mm)	0.188" (4.78 mm)
	20' (6.1 m)	10" (250 mm)	0.250" (6.35 mm)

Bracket arms shall be of the davit type consisting of an aluminum shaft having the outer diameter and wall thickness as listed in the table above. The davit arm shall be designed to slip over the top of the lighting standard shaft for a distance of at least 12" (300 mm). The luminaire end of the davit arm shall be fitted with a 2" (50 mm) NPS aluminum pipe not less than 6" (150 mm) long. The height of the lighting standards will be determined by the Contractor to provide a nominal mounting height as shown on the Plans. The length of the davit arm will be as shown on the Plans or 12' (3.6 m) if not specified elsewhere. Davit arm less than 10' (3.0 m) long shall not be used without written permission from the Chief Traffic Engineer.

Each lighting standard shall be provided with a permanent tag which shall be 2" x 4" (50 mm by 100 mm) fabricated from clear anodized 1/16" (1.6 mm) thick aluminum. The edge shall be smooth and corners rounded and the tag shall be curved to fit the light standard shaft. Tags shall be secured to shafts by means of four (4) 1/8" (3 mm) diameter 18-8 stainless steel round head drive screws of self-tapping screws. The embossed identifying letters and/or numerals shall be not less than 3/4" (19 mm) high with stroke of not less than 3/16" (4.8 mm). Identifying letters and/or numerals shall be designated on the Plans.

**Transformer Base:** Transformer bases, when required, shall conform to the latest edition of AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaire and Traffic Signals".

Before any work, begins the Contractor shall submit documents showing that the breakaway device meets the current AASHTO Breakaway Design.

For breakaway installations, the standard shall electrically disconnect from the supply wire at the foundation when knocked down by an errant vehicle or from some other cause.

**Luminaire:** The luminaire shall have a precision die cast aluminum housing with an optical assembly, a removable mounting door and of wattage and type as specified on the Plans. The luminaire shall be of the multi-voltage ballast regulator type.

The refractor of the optical assembly shall be attached to the luminaire housing thru a hinge and latch arrangement. The optical assembly shall consist of a highly polished aluminum reflector, and a heat resistant shatter resistant borosilicate glass refractor. The refractor door shall be tightly sealed with an appropriate gasket. The latch for the refractor door shall be of sufficient size to enable easy handling and constructed of rust resistant materials; the latch shall produce an audible click when it is properly locked.

The luminaire shall be equipped with a porcelain, corrosion resistant socket. The socket shall be easily adjustable to give one of twelve different light distributions; such adjustments shall be accomplished through adjusting not more than two screws within the optical assembly. The socket in this installation shall be preset to provide a distribution pattern as indicated on the Plans or type III distribution pattern of luminaire if not indicated.

The luminaire shall have a 2 bolt slipfitting suitable for mounting on 1/2" to 2" (13 mm to 50 mm) pipe. The luminaire shall be designed with a leveling pad and capable of being adjusted  $\pm 5$  degrees for proper leveling.

The luminaire shall be completely wired so that it shall require only the connection of the power supply cables to a terminal block for energizing the entire fixture.

In order to provide for normal exchange of air between the inside and outside of the optical system, a ventilating channel shall be provided. The channel shall contain a charcoal filter which will prevent the entrance of flying insects and other small animal life forms, as well as provide a cleaning action on the air to remove smoke and dust particles.

All major electrical components, including ballast and the photoelectric control, shall be mounted on a removable door assembly and connected to the fixture electrically through a quick disconnect plug. The removal of the door shall be accomplished by loosening the captive screw and unplugging the quick disconnect plug. The luminaire shall employ solderless push-on type connectors for all wiring connections to facilitate the replacement of any component.

The unit shall contain an integral ballast capable of maintaining the wattage of the H.P.S. lamp throughout the life of the lamp. The ballast and the photoelectric control shall be suitable for operating the units in the wattage as shown on the Plans. The wattage of the luminaires for this Contract are listed on the quantity sheet.

No luminaire shall be installed until the lamp socket position has been inspected and approved by the Engineer. If no light distribution pattern is given the socket position shall produce a light pattern as indicated on the Plans, then type III as designated in the specification for the luminaire. All luminaires shall be adjusted up or down on the slipfitter to provide maximum light on the roadway to be lighted. The connections between the luminaire and service cable shall be made with a connector kit using #10 AWG single wire. Installation of the connector kit shall be in accordance with the manufacturers recommendations.

The Contractor shall furnish and install one or more of the following luminaires or an approved equal as specified on the Plans and/or as required by the Utility owner.

## **STANDARD MATERIALS**

**LUMINAIRE 400 Watt High Pressure Sodium Roadway**, with Photo Cell Receptacle and Field Replaceable 9110-60-25 Regulated Multi-voltage Ballast, Type III Light Pattern, or as shown on Plans, 1 1/2" - 2" (38 mm - 50 mm) Slipfitter

Cooper/Crouse Hinds OVY Swing-down  
GE M-400A Power/Door

Cat. #OVY40SWW3ET4  
Cat. #M4AR40S0A2GMN32

LUMINAIRE 250 Watt High Pressure Sodium Roadway, with Photo Cell Receptacle and Field Replaceable 9110-60-26 Regulated Multi-Voltage Ballast, Type III Light Pattern, or as shown on Plans, 38 mm - 50 mm Slipfitter

Cooper/Crouse-Hinds OVY Swing-down  
GE M-250 A2 Power/Door

Cat. #OVY25SWW3ET4  
Cat. #M2AR25S0A2GMS32

LUMINAIRE 100 Watt High Pressure Sodium Roadway, with Photo Cell Receptacle and Field Replaceable 9110-60-27 120V Regulator Ballast, Type II Light Pattern, or as shown on Plans, 1 1/4" - 2" (32 mm - 50 mm) Slipfitter

Cooper/Crouse-Hinds OVX Swing-down  
GE M-250A2 Power/Door

Cat. #OVX10SK22ET4  
Cat. #M24R10S1M1AMS21

LUMINAIRE 70 Watt High Pressure Sodium Alley/Security, 120V with Normal Power Factor Ballast, Photo Cell, 9110-60-28 Lamp and Type II Acrylic Lens for Mounting on 1 1/4" - 2" (32 mm or 50 mm) Bracket (Not Included)

Cooper/Crouse Hinds RMA  
(Specify Less Bracket w/Type II Lens)  
GE Type 201 SA  
(Specify Less Bracket w/Type II Lens)

Cat. #RMA70SR222LV5  
Cat. #SAM07S1N5S4LV5ALC

LUMINAIRE 70 Watt High Pressure Sodium Black Colonial, with 120V Photo Cell Receptacle, 120V Reactor 9110-69-34 Ballast, Type III Acrylic Lens, Black Finish with 3" (75 mm) Slipfitter

Cooper/Crouse-Hinds  
GE TC 100  
ITT American Rev.

Cat. #LXF70SR2334  
Cat. #T10R07S1N2AMS3BL  
Cat. #47-570E3-6

Installations of Lighting Standards: Lighting Standards shall be installed and located in accordance with the Plans, to provide continuously aligned lighting.

The bracket arms shall be set perpendicular to the edge of the roadway unless otherwise ordered or specified. If necessary aluminum shims may be used to plumb the pole.

**Method of Measurement:**

The quantity of aluminum lighting standards with single or double davit arms of the size(s) specified will be measured as the actual number installed and accepted.

**Basis of Payment:**

The quantity of aluminum lighting standards with single or double davit arms will be paid for at the Contract unit price per each. Price and payment will constitute full compensation for furnishing all materials including concrete, labor, equipment, hardware, anchor bolts, washers, shims and nuts, supply and installation of the transformer base, supply and installation of poles and davit arm(s), and supply and installation of the luminaires. This price will also include all miscellaneous hardware, connector kits, and wiring from the supply cables to the luminaire(s), labor, tools, equipment, and incidentals necessary to complete the work.

6/25/13

**UTILITY STATEMENT**  
**State Contract No. T200800901**  
**Project ID No. 07-00044**  
**F.A.P. No. ESTP-S999(88)**  
**HSIP Sussex County – US 9 Projects**  
**Sussex County**  
*Revised April 23, 2013*

The following utility companies maintain facilities within the project limits:

**Delaware Electric Cooperative**  
**Delmarva Power (Electric - Distribution)**  
**Delmarva Power (Electric - Transmission)**  
**Verizon – Delaware, LLC**  
**Comcast Cable**  
**Artesian Water Company (Water)**  
**Artesian Water Company (Sewer)**  
**Sussex County (Sewer)**

The following is a breakdown of the utilities involved, adjustments and/or relocations as required (all stations, offsets, lengths and calendar days are approximate):

**Delaware Electric Cooperative**

Delaware Electric Cooperative (DEC) maintains underground and aerial facilities within the project limits.

DEC proposes to remove the following poles:

- No Pole # – Sta. 700+93, Rt.
- 24328 – Sta. 703+19, Rt.
- 24327 – Sta. 705+09, Rt.
- 24326 – Sta. 800+77, Rt.
- 24323 – Sta. 801+65, Rt.
- 24325 – Sta. 802+43, Lt.
- 24324 – Sta. 802+47, Rt.
- 23184 – Sta. 803+37, Lt.
- 87167 – Sta. 803+48, Rt.
- 23185 – Sta. 805+27, Lt.
- 87168 – Sta. 807+10, Lt.
- 87169 – Sta. 808+93, Lt.
- 23865 – Sta. 900+26, Lt.
- 23863 – Sta. 902+99, Lt.

DEC proposes to install new poles at the following locations:

- Sta. 700+93, 33' Rt.
- Sta. 800+83, 55' Rt.
- Sta. 801+65, 48' Rt.
- Sta. 802+43, 55' Lt.
- Sta. 802+40, 48' Rt.
- Sta. 803+37, 60' Lt.
- Sta. 803+51, 48' Rt.
- Sta. 805+27, 52' Lt.
- Sta. 807+10, 40' Lt.
- Sta. 808+93, 38.5' Lt.
- Sta. 902+10, 40' Lt.
- Sta. 903+66, 40' Lt.
- Sta. 905+00, 34' Rt.

All DEC pole relocations will be performed in advance of the contract.

DEC will install underground facilities at the following locations:

US 9/Dairy Farm Road/Sweetbriar Road

- From relocated pole at Sta. 801+65, 48' Rt. crossing under US 9 to the southeast corner of the intersection and then along the east side of Dairy Farm Road to relocated pole at Sta. 700+93, 33' Rt..

DEC will perform underground relocation outlined above in advance of the contract.

DEC proposes to relocate conduit vertically 20' to 30' either side of proposed cross pipe at Sta. 705+43 to provide a 1' minimum clearance below pipe. This work is anticipated to require four (4) days to complete and will occur during Phase 7 in conjunction with the pipe placement by DelDOT's contractor.

**For exact location of electrical utilities, please contact Miss Utility at (800) 282-8555. Please note 16 Del. C. § 7405B – Overhead High-Voltage Line Safety requires notification to and mutually agreeable measures from the public utility from any person intending to carry on any function, activity, work or operation within dangerous proximity of any high voltage overhead line. All contractors/other utilities must also maintain a distance of 10'-0" from all energized lines.**

#### **Delmarva Power (Electric - Distribution)**

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

DP-E-D proposes to remove the following poles:

#### US 9/SR 30 (Gravel Hill Road)

- 54949/05770 – Sta. 103+75, Lt.
- 54960/05788 – Sta. 106+80, Lt.
- 54994/05798 – Sta. 109+47, Rt.
- 54995/05854 – Sta. 109+79, Lt.
- 55014/05813 – Sta. 111+89, Lt.
- 55031/05822 – Sta. 113+74, Lt.
- 55037/05219 – Sta. 114+14, Rt.
- 55045/05829 – Sta. 115+27, Lt.
- 55050/05824 – Sta. 115+47, Rt.
- 55058/05836 – Sta. 116+88, Lt.
- 55071/05842 – Sta. 118+26, Lt.
- 55622/05762 – Sta. 402+02, Rt.
- 55014/05781 – Sta. 404+12, Rt.
- 55088/05799 – Sta. 405+97, Rt.
- 54993/05820 – Sta. 408+21, Lt.
- 54997/05845 – Sta. 410+68, Lt.

#### US 9/Hudson Road/Fisher Road

- No Pole # – Sta. 205+34, Rt.
- 56576/06353 – Sta. 215+10, Rt.
- 56577/06364 – Sta. 215+38, Lt.
- 56625/06327 – Sta. 501+78, Lt.
- 56597/06336 – Sta. 504+50, Lt.
- 56571/06388 – Sta. 510+38, Lt.
- 56575/06408 – Sta. 512+32, Lt.

#### US 9/Dairy Farm Road/Sweetbriar Road

- No Pole # – Sta. 309+70, Lt.
- 57798/06606 – Sta. 310+95, Rt.

DP-E-D proposes to install new poles at the following locations:

#### US 9/SR 30 (Gravel Hill Road)

- Sta. 102+00, 30' Lt.
- Sta. 102+40, 37' Lt.
- Sta. 104+20, 38' Lt.
- Sta. 106+00, 39' Lt.
- Sta. 107+75, 40' Lt.
- Sta. 107+75, 44' Rt.
- Sta. 109+70, 50' Lt.
- Sta. 111+89, 49' Lt.
- Sta. 113+74, 39' Lt.
- Sta. 113+74, 41' Rt.
- Sta. 114+14, 41' Rt.
- Sta. 115+27, 41' Lt.
- Sta. 115+47, 38.5' Rt.
- Sta. 117+00, 40' Lt.
- Sta. 118+26, 38' Lt.
- Sta. 118+70, 33' Lt.
- ~~Sta. 405+75, 48' Rt.~~ △
- ~~Sta. 402+02, 35' Lt.~~ △
- Sta. 408+10, 43' Lt.
- Sta. 410+68, 38.5' Lt.

US 9/Hudson Road/Fisher Road

- Sta. 502+00, 33' Lt.
- ~~Sta. 508+55, 70' Lt.~~ △
- ~~Sta. 509+37, 48' Lt.~~ △
- ~~Sta. 510+00, 42' Lt.~~ △
- Sta. 510+38, 34.5' Lt.
- Sta. 512+32, 31' Lt.

US 9/Dairy Farm Road/Sweetbriar Road

- Sta. 310+95, 40' Rt.

All DP-E-D pole relocations will be performed in advance of the contract.

High voltage overhead utilities shall be no lower than 47 ft. above grade to avoid conflicts with the proposed signal and roadway lighting at the following locations:

US 9/SR 30 (Gravel Hill Road)

- Sta. 106+00 to Sta. 114+00
- Sta. 405+00 to Sta. 409+00

US 9/Hudson Road/Fisher Road

- Sta. 214+00 to Sta. 218+00
- Sta. 508+00 to Sta. 509+00

US 9/Dairy Farm Road/Sweetbriar Road

- Sta. 308+00 to Sta. 312+00

DP-E-D will relocate affected aerial facilities as needed to new Delmarva Power Electric (Transmission) poles as well as Verizon utility poles.

DP-E-D will install underground facilities at the following locations:

US 9/SR 30 (Gravel Hill Road)

- From relocated pole at ~~Sta. 405+75, 48' Rt. along the east side of Gravel Hill Road to existing pole south of project limits.~~ Sta. 109+70, 50' Lt., crossing under US 9, to Sta. 405+85, 60' Lt.,

then under Gravel Hill Road to Sta. 405+85, 40' Rt. and then running south along the east side of Gravel Hill Road to relocated pole at Sta. 402+02, 35' Rt. △

US 9/Hudson Road/Fisher Road

- From relocated pole at Sta. 214+44, 47' Lt. crossing under US 9 to the southwest corner of the intersection and then running along the west side of Fisher Road to relocated pole at Sta. 502+00, 33' Lt.

DP-E\_D will perform underground relocations outlined above in advance of the contract.

DP-E-D will provide 120v/240v power feeds at the following locations:

- Proposed pole at Sta. 109+70, Lt. – install two (2) 120v/240v power feed for the proposed signal and roadway lighting cabinets located on the northwest corner of US 9/SR 30 (Gravel Hill Road) intersection. It is anticipated to take two (2) days to complete during Phase 1.
  - DelDOT's Traffic Section shall be notified a minimum of five (5) business days in advance of the traffic signal power feed relocation to establish a temporary power feed for the existing traffic signal equipment.
- Proposed pole at Sta. 508+55, Lt. – install two (2) 120v/240v power feeds for the proposed signal and roadway lighting cabinets located on the northwest corner of US 9/Hudson Road/Fisher Road intersection. It is anticipated to take two (2) days to complete during Phase 5A.
- Proposed pole at Sta. 308+85, Lt. – install two (2) 120v/240v power feeds for the proposed signal and roadway lighting cabinets located on the northwest corner of US 9/Dairy Farm Road/Sweetbriar Road intersection. It is anticipated to take two (2) days to complete during Phase 6.
  - DelDOT's Traffic Section shall be notified a minimum of five (5) business days in advance of the traffic signal power feed relocation to establish a temporary power feed for the existing traffic signal equipment.

**For exact location of electrical utilities, please contact Miss Utility at (800) 282-8555. Please note 16 Del. C. § 7405B – Overhead High-Voltage Line Safety requires notification to and mutually agreeable measures from the public utility from any person intending to carry on any function, activity, work or operation within dangerous proximity of any high voltage overhead line. All contractors/other utilities must also maintain a distance of 10'-0" from all energized lines.**

Delmarva Power (Electric - Transmission)

Delmarva Power Electric Transmission (DP-E-T) maintains aerial facilities within the project limits.

DP-E-T proposes to remove the following poles:

US 9/Hudson Road/Fisher Road

- 675318 – Sta. 202+37, Lt.
- 675319 – Sta. 205+35, Lt.
- 6751534 – Sta. 211+42, Lt.
- 6751535 – Sta. 214+44, Lt.
- 6751536 – Sta. 217+27, Lt.
- 6751537 – Sta. 220+13, Lt.
- 6751538 – Sta. 223+00, Lt.
- 6751539 – Sta. 225+86, Lt.

US 9/Dairy Farm Road/Sweetbriar Road

- 6751572 – Sta. 301+68, Lt.
- 6751573 – Sta. 304+06, Lt.
- 6751573A – Sta. 306+25, Lt.
- 6751573CX – Sta. 306+19, Rt.
- 6751574 – Sta. 308+20, Lt.
- 6751575/57704/06647 – Sta. 311+45, Lt.
- 6751576/57729/06622 – Sta. 314+64, Lt.
- 6751577/57755/06628 – Sta. 317+03, Lt.

DP-E-T proposes to install new poles at the following locations:

US 9/Hudson Road/Fisher Road

- Sta. 202+37, 36' Lt.
- Sta. 205+39, 39' Lt. ~~205+35, 46' Lt.~~ △
- Sta. 211+42, 46.5' Lt. ~~211+42, 52' Lt.~~ △
- Sta. 214+44, 47' Lt.
- Sta. 217+26, 46' Lt.
- Sta. 220+12, 47' Lt.
- Sta. 222+99, 39.5 Lt.
- Sta. 225+87, 34' Lt. ~~225+86, 34' Lt.~~ △

US 9/Dairy Farm Road/Sweetbriar Road

- Sta. 301+68, 39' Lt.
- Sta. 304+05, 43' Lt.
- Sta. 306+21, 47' Lt.
- Sta. 308+85, 54' Lt.
- Sta. 311+37, 61' Lt.
- Sta. 314+58, 58' Lt. ~~314+59, 61' Lt.~~ △
- Sta. 316+97, 49' Lt.

DP-E-T proposes to relocate the guy wire anchor at Sta. 208+10, 39' Lt. outside of proposed construction.

All DP-E-T pole relocations will be performed in advance of the contract.

High voltage overhead utilities shall be no lower than 47 ft. above grade to avoid conflicts with the proposed signal and roadway lighting at the following locations:

US 9/Hudson Road/Fisher Road

- Sta. 214+00 to Sta. 218+00

US 9/Dairy Farm Road/Sweetbriar Road

- Sta. 308+00 to Sta. 312+00

**For exact location of electrical utilities, please contact Miss Utility at (800) 282-8555. Please note 16 Del. C. § 7405B – Overhead High-Voltage Line Safety requires notification to and mutually agreeable measures from the public utility from any person intending to carry on any function, activity, work or operation within dangerous proximity of any high voltage overhead line. All contractors/other utilities must also maintain a distance of 10'-0" from all energized lines.**

## Verizon-Delaware, LLC

Verizon maintains overhead and underground facilities within the project limits of the above referenced project.

Verizon proposes to remove the following poles:

- **Pole #82 – Sta. 111+53, Rt.**
- **Pole #85 – Sta. 112+40, Rt.**
- **Pole #84 – Sta. 113+34, Rt.**

Verizon proposes to install new poles at the following locations:

- **Sta. 111+53, 43' Rt.**
- **Sta. 112+40, 43' Rt.**
- **Sta. 113+33, 42' Rt.**

All Verizon pole relocations will be performed in advance of the contract.

Verizon will relocate affected aerial facilities as needed to new Delmarva Power and Delaware Electric Cooperative utility poles.

Verizon will remove the telephone pedestal at Sta. 314+53, Rt.

Verizon will install underground facilities at the following locations:

### US 9/SR 30 (Gravel Hill Road)

- Sta. 106+85, Rt to new telephone pedestal at Sta. 109+43, 44.5' Rt.
- From new telephone pedestal at Sta. 109+43, 44.5' south to Sta. 405+76 where underground facility will cross SR 30 (Gravel Hill Road) to new telephone pedestal at 405+76, 60' Rt.
- From new telephone pedestal at Sta. 405+76, 60' Rt. to tie into existing facility running along SR 30 (Gravel Hill Road) at Sta. 405+62, Rt.
- From new telephone pedestal at Sta. 405+76, 60' Rt. north east to run along the south side of US 9 to new telephone pedestal at Sta. 116+71, 37' Rt. including tie-in to existing underground facility.
- From new telephone pedestal at Sta. 116+71, 37' Rt. crossing under US 9 to north side of US 9.
- From new telephone pedestal at Sta. 109+43, 44.5' crossing under US 9 to new telephone pedestal on north side of US 9 at Sta. 109+50, 65' Lt.
- From new telephone pedestal at Sta. 109+50, 65' Lt. north along SR 30 (Gravel Hill Road) to new telephone pedestal at Sta. 408+06, 42' Lt. including tie-in to existing underground facility.

### US 9/Hudson Road/Fisher Road

- Crossing under US 9 at Sta. 214+05 from new telephone pedestal at Sta. 214+05, 46.5' Lt. to new telephone pedestal at Sta. 214+05, 37.5' Rt. including tie-ins to existing underground facilities at each new telephone pedestal.
- From new telephone pedestal at Sta. 214+05, 37.5' Rt. south along US 9 to crossing under Fisher Road to new telephone pedestal at Sta. 216+85, 60' Rt.
- From new telephone pedestal at Sta. 216+85, 60' Rt. south along the east side of Fisher Road to existing telephone pedestal at Sta. 501+15, 20' Rt.

- From existing telephone pedestal at Sta. 501+15, 20' Rt. north along the east side of Fisher Road to Sta. 501+76 crossing under US 9 to proposed Delmarva Power utility pole at Sta. 502+00, 33' Lt.
- From new telephone pedestal at Sta. 216+85, 60' Rt. east along the south side of US 9 to existing telephone pedestal at Sta. 219+35, 32' Rt.
- From new telephone pedestal at Sta. 216+85, 60' Rt. crossing under US 9 and running north along the east side of Hudson Road to new telephone pedestal at Sta. 511+40, 43' Rt. including tie-in to existing underground facility.

#### US 9/Dairy Farm Road/Sweetbriar Road

- From new telephone pedestal at Sta. 303+84, 38' Rt. running east along the south side of US 9 to new telephone pedestal at Sta. 308+12, 40.5' Rt. including tie-in to existing underground facility.
- From new telephone pedestal at Sta. 308+12, 40.5' Rt. running east along the south side of US 9 to Sta. 308+97, Rt and then running south to existing house.
- From new telephone pedestal at Sta. 308+12, 40.5' Rt. crossing under US 9 to new telephone pedestal at Sta. 308+12, 57' Lt.
- From new telephone pedestal at Sta. 308+12, 57' Lt. running east along the north side of US 9 and then running north along the west side of Sweetbriar Road to new telephone pedestal at Sta. 801+43, 57' Lt.
- From new telephone pedestal at Sta. 801+43, 57' Lt. crossing under Sweetbriar Road to new telephone pedestal at Sta. 801+43, 55' Rt. including tie-in to existing underground facility.
- From new telephone pedestal at Sta. 801+43, 55' Rt. running south east toward US 9 and then running east along the north side of US 9 to proposed Delmarva Power utility pole at Sta. ~~314+59, 61' Lt.~~ 314+58, 58', Lt. 
- From new telephone pedestal at Sta. 801+43, 57' Lt. running north along the west side of Sweetbriar Road to proposed Delaware Electric Cooperative utility pole at Sta. 802+43, 55' Lt.

Verizon will perform underground relocations outlined above at US 9/SR 30 (Gravel Hill Road) and US 9/Dairy Farm Road/Sweetbriar Road in advance of the contract. Verizon will perform relocations at US 9/Hudson Road/Fisher Road immediately following clearing and grubbing operations in Phase 4.

#### Comcast Cable of New Castle County

##### US 9/SR 30 (Gravel Hill Road)

Comcast currently maintains aerial facilities on Delmarva Power utility poles along the north side of US 9 on Delmarva Power utility poles from Sta. 102+00 to Sta. 117+75. Comcast will attach to both new Delmarva Power and Verizon poles.

Comcast currently maintains aerial facilities on Delmarva Power utility poles along the west side of SR 30 (Gravel Hill Road) between the intersection with US 9 and Sta. 413+00. Comcast facilities cross to the east side of SR 30 (Gravel Hill Road) through the intersection and are located on the east side of SR 30 (Gravel Hill Road) to Sta. 401+00. Comcast will attach to new Delmarva Power poles.

Comcast has underground facilities that are service lines and would need to be located by Miss Utility.

##### US 9/Hudson Road/Fisher Road

Comcast currently maintains aerial facilities on Delmarva Power utility poles along the north side of US 9 from Sta. 202+00 to Sta. 226+25. Comcast will attach to new Delmarva Power poles.

Comcast currently maintains aerial facilities on Delmarva Power utility poles along the west side of Hudson Road and Fisher Road from Sta. 501+68 on Fisher Road across the US 9 intersection to Sta. 513+54 on Hudson Road to Sta. 226+25. Comcast will attach to new Delmarva Power poles.

US 9/Dairy Farm Road/Sweetbriar Road

Comcast currently maintains aerial facilities on Delmarva Power utility poles and underground facilities along the north side of US 9 from Sta. 301+25 to Sta. 317+60. Comcast will attach to new Delmarva Power poles.

Comcast currently maintains aerial facilities on DEC utility poles along the west side of Sweetbriar Road from the US 9 intersection to Sta. 811+48. Comcast will attach to new DEC poles.

Comcast does not maintain facilities on Dairy Farm Road.

Comcast currently maintains aerial facilities on DEC utility poles along the north side of Log Cabin Hill Road from Sta. 900+56 to the Sweetbriar Road intersection. Comcast will attach to new DEC poles.

Comcast will remove the pole attachment at DEC pole # 24325 (Sta. 802+43, Lt.) and anchor at DEC pole # 23184 (803+37, Lt.).

Comcast maintains underground coaxial facilities along the north side of existing Log Cabin Hill Road from just west of our project limits at 900+00 heading west to the intersection with Sweetbriar Road and continuing under Sweetbriar Road and running along the north side of US 9 to DPL Pole # 576 57755 06228 at Sta. 317+00. Comcast also maintains underground coaxial facilities along the west side of Sweetbriar Road from the intersection of existing Log Cabin Hill Road and Sweetbriar Road north to DEC Pole #23184 at Sta. 803+37.

Comcast will relocate the above described underground coaxial facility vertically along existing Log Cabin Hill Road and under Sweetbriar Road and then tie in to DPL's relocated Pole # 675 57704 06647 at Sta. 311+37 and abandon the remainder of their underground coaxial facility along the north side of US 9 down to DPL Pole # 576 57755 06228 at Sta. 317+00. Comcast will also relocate the underground coaxial facility along the west side of Sweetbriar Road from its intersection with existing Log Cabin Hill Road to DEC Pole #24325 at Sta. 802+43.

Comcast maintains underground fiber facilities along the west side of Sweetbriar Road from the intersection of existing Log Cabin Hill Road and Sweetbriar Road north to DEC Pole #23184 at Sta. 803+37.

Comcast will relocate the above described underground fiber facilities by crossing under Sweetbriar Road from DEC Pole #24325 at Sta. 802+43 and continuing down the east side of Sweetbriar Road to DPL Pole # 675 57704 06647 at Sta. 311+40.

Comcast Cable Co. proposed changes to the aerial facilities include but are not limited to:

Comcast aerial facilities will be relocated to the Delmarva / DEC poles once the pole line is set. Comcast Cable Co. will complete these changes. These relocations/adjustments are expected to take approximately 14 calendar days to complete after Delmarva's/DEC relocation work is completed which will be done in advance of the contract.

**Comcast Cablevision of Delmarva** will complete the underground relocations in advance of the contract. These relocations / adjustments are expected to take approximately 21 calendar days to complete. Once the company has been given a minimum of 21 calendar days advance notice that work shall begin. The right-of-way and proposed work will need to be laid out in the field by DELDOT.

#### **Artesian Water Company (Water)**

Artesian Water Company, Inc. maintains a 12" DIP transmission main within the project limits. Artesian anticipates performing the necessary adjustments as follows:

- 1) Relocate fire hydrant at Sta. 203+75, 30' Lt, to Sta. 203+75, 37' Lt. It is anticipated that this work will take one day and will occur during Phase 4.
- 2) Adjust vertically two (2) water valves at Sta. 203+80, 23' Lt. to match proposed grade. It is anticipated that this work will take one day and will occur during Phase 4.
- 3) Adjust vertically water valve at Sta. 207+08, 39' Lt. to match proposed grade. It is anticipated that this work will take one day and will occur during Phase 4.
- 4) Adjust vertically water valve at Sta. 207+21, 36' Lt. to match proposed grade. It is anticipated that this work will take one day and will occur during Phase 4.
- 5) Adjust vertically water valve at Sta. 214+40, 55' Lt. to match proposed grade. It is anticipated that this work will take one day and will occur during Phase 4.

Items are reimbursable items to be accomplished by Artesian Water Company representatives or assigned contractor. PS&E to be submitted to DelDOT Utilities Engineer.

Artesian anticipates that our construction can start 20 business days after receiving notification and after necessary survey layout has been completed.

#### **Artesian Water Company (Sewer)**

Artesian Water Company, Inc. does not anticipate any impacts to their sewer facility within the project limits.

#### **Sussex County (Sewer)**

The County maintains sewer facilities within the project limits with no apparent conflicts. Numerous sanitary manholes within the project construction footprint will require vertical adjustment to proposed grade. Any adjustments and/or relocations to the County's existing facilities will be done by the State's Contractor in accordance with the Standard Specifications of Sussex County and the notes on the Plans.

#### **GENERAL NOTES**

1. The Utility Companies and their contractors do not normally work on weekends or legal holidays.
2. The Contractor's attention is directed to Section 105.09 Utilities, Delaware Standard Specifications, dated August 2001. The Contractor shall contact Miss Utility (1-800-282-8555) two working days prior to any excavation. The Contractor is responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The State's Contractor is advised to check the site for access purposes for his equipment and, if necessary make arrangements directly with utility companies for field adjustments for adequate clearances.
3. It is understood and agreed that the State's Contractor has considered in his bid all permanent and temporary utility appurtenances in their present or 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 sustained by him/her due to any interference from the said utility facilities and appurtenances or the operation of moving them, except that the State's Contractor may be granted an equitable extension of time. The State's Contractor is responsible for the support and protection of all utilities when excavating.
4. The State's Contractor is responsible for rough grading as required by the roadway construction prior to the Utility Company's placing their proposed facilities, unless indicated on the plans and/or outlined elsewhere in these specifications.
5. Coordination and cooperation among the Utility Companies and the State's Contractor are of prime importance. Therefore, the State's 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.

Mr. Tom Wright	Delaware Electric Cooperative	(302) 349-3130
Mr. Robert Weigner	Delmarva Power (Electric-Distribution)	(302) 934-3354
Mr. Matt Savage	Delmarva Power (Electric-Transmission)	(302) 454-4475
Mr. George Zang	Verizon – Delaware, LLC	(302) 422-1238
Mr. Marty Scott	Comcast	(302) 841-6305
Mr. Carmen Hunter	Artesian Water Company (Water & Sewer)	(302) 453-7153
Mr. Brad Hawkes	Sussex County (Sanitary Sewer)	(302) 855-7717

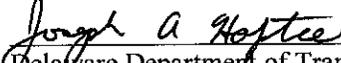
6. The information shown in the Contract Documents, including this Utility Statement and the Utility Schedule contained herein, concerning the location, type and size of existing and proposed utilities locations, and timing has been compiled by the Preparer based on information furnished by each of the involved Utility Companies. It shall be the responsibility of the State's Contractor to verify all information and coordinate with the Utility Companies prior to and during construction, as specified in section 105.09 of the standard specifications.
7. In conjunction with bid preparation and prior to starting work, the State's Contractor shall confirm with all respective utility companies noted in this Utility Statement to have advance utility relocations that the advance relocations have in fact been accomplished as summarized herein.

**PREPARED AND RECOMMENDED BY:**

  
Whitman, Requardt & Associates, LLP  
Consulting Engineers

Date 6/21/13

**APPROVED AS TO FORM:**

  
\_\_\_\_\_  
Delaware Department of Transportation  
Utility Coordinator

Date 6/27/13

### Utility Schedule

		CY 2013									CY 2014									CY 2015										
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
<b>Utility Relocation</b>	Delaware Electric Cooperative	[Utility]								[Utility]																				
	Delmarva Power - Electric Distribution	[Utility]						[Utility]											[Utility]	[Utility]										
	Delmarva Power - Electric Transmission	[Utility]																												
	Verizon - Delaware, LLC	[Utility]													[Utility]															
	Comcast Cable	[Utility]																												
	Artesian Water Company - Water														[Utility]															
	Sussex County Sewer (Contractor)																			[Utility]	[Utility]	[Utility]								
<b>Construction</b>	US 9/SR 30 (Gravel Hill) Road Intersection																													
	Phase 1							[Construction]	[Construction]																					
	Phase 2								[Construction]	[Construction]	[Construction]	[Construction]	[Construction]																	
	Phase 3												[Construction]																	
	US 9/Hudson Road/Fisher Road Intersection																													
	Phase 4													[Construction]	[Construction]															
	Phase 4A														[Construction]															
	Phase 5															[Construction]														
	Phase 5A																[Construction]													
	US 9/Dairy Farm Road/Sweetbriar Road Intersection																													
	Phase 6																		[Construction]	[Construction]	[Construction]									
Phase 7																				[Construction]										
Phase 8																											[Construction]	[Construction]		

**Activity**

Construction

Utility

CONTRACT ID: T200800901.01 PROJECT(S): ESTP-S999(88)/T200800901

All figures must be typewritten.

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0580	708589 JUNCTION BOX, 66" X 66"	1.000 EACH				
0590	710506 ADJUST AND REPAIR EXISTING SANITARY MANHOLE	4.000 EACH				
0600	712006 RIPRAP, R-5	455.000 SY				
0610	713002 GEOTEXTILES, SEPARATION	700.000 SY				
0620	713003 GEOTEXTILES, RIPRAP	501.000 SY				
0630	720533 PERMANENT WOOD BARRICADE	2.000 EACH				
0640	727007 CHAIN-LINK FENCE, 8' HIGH	1333.000 LF				
0650	727014 CONSTRUCTION SAFETY FENCE	500.000 LF				
0660	727015 MONUMENTS	15.000 EACH				
0670	727555 RIGHT-OF-WAY MARKER, CAPPED REBAR	89.000 EACH				

# GENERAL NOTES

- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2001 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2001, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.
- THE CONTRACTOR SHALL GIVE TWO (2) WEEKS NOTICE TO THE PROPERTY OWNER WHEN ANY FIXTURE, SHRUB OR OTHER OBJECT MUST BE REMOVED FROM THE RIGHT OF WAY OR EASEMENT AREA. IF THE OWNER HAS NOT ATTEMPTED TO SALVAGE THIS PROPERTY, THE CONTRACTOR SHALL REMOVE IT WITHOUT OBLIGATION. COMPENSATION SHALL BE INCIDENTAL TO THE CONTRACT.
- THE ENDS OF ALL CURBS SHALL BE DEPRESSED FLUSH WITH THE PAVEMENT AT A RATIO OF TWELVE TO ONE (12:1) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL PVC SLEEVES (4" INSIDE MINIMUM DIAMETER, 6" INSIDE MAXIMUM DIAMETER) IN PROPOSED CONCRETE SIDEWALKS, ISLANDS, AND MEDIANS FOR FUTURE TRAFFIC SIGN POSTS AS DIRECTED BY THE ENGINEER. THE LOWER END OF THE SLEEVE SHALL SIT ON THE TOP OF THE SUBBASE MATERIAL. THE COST SHALL BE INCIDENTAL TO THE CONTRACT.
- STAGING AREAS - PROPER EROSION AND SEDIMENT CONTROL MEASURES AS DETERMINED BY THE ENGINEER SHALL BE INSTALLED IN ALL STAGING AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE CONTRACT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDING AND MULCHED IN ACCORDANCE WITH DELAWARE STANDARD SPECIFICATIONS 732, 734 AND 735, FOR TOPSOIL, SEED AND MULCH RESPECTIVELY, TO THE SATISFACTION OF THE ENGINEER. THE SEED SHALL ADHERE TO THE SPECIFICATIONS OF SECTION 734 FOR PERMANENT GRASS SEEDING - DRY GROUND. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH REESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- SITE REVIEWER - AN EROSION CONTROL SITE REVIEWER SHALL BE A PERSON FROM THE CONTRACTOR'S STAFF ASSIGNED TO EROSION AND SEDIMENT CONTROL IMPLEMENTATION AND MAINTENANCE AND SHALL BE REQUIRED ON SPECIFIC PROJECTS. THE NAME AND DNREC CERTIFICATION NUMBER OF EACH SITE REVIEWER SO REQUIRED SHALL BE SUBMITTED TO THE DEPARTMENT. THE NAME OF THE DELAWARE REGISTERED PROFESSIONAL ENGINEER PROVIDING DIRECTION AND SUPERVISION OF THE SITE REVIEWER, AS REQUIRED IN SECTION 12.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, SHALL ALSO BE SUBMITTED TO THE DEPARTMENT. THE SITE REVIEWER REQUIREMENTS IN EFFECT ON THIS PROJECT SHALL BE MARKED WITH AN "X" BELOW:

EROSION POTENTIAL FOR THIS PROJECT	SITE REVIEWER REQUIREMENT
( ) INSIGNIFICANT	NONE
( ) MINOR	CONTRACTOR CERTIFICATION COURSE TRAINING ONLY, AS DEFINED IN SECTION 13 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
( X ) MEDIUM	AT THE TIME OF BID OF THE CONTRACT, EITHER THE SUPERINTENDENT OR A SEPARATE INDIVIDUAL FROM THE CONTRACTOR'S STAFF SHALL BE A CERTIFIED CONSTRUCTION REVIEWER (CCR), AS DEFINED IN SECTION 12 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
( ) MAJOR	SUPERINTENDENT AND AN INDIVIDUAL FROM CONTRACTOR'S STAFF SHALL BE CCR. ONE INDIVIDUAL FROM THE CONTRACTOR'S STAFF MUST BE A CCR AT THE TIME OF BID OF THE CONTRACT. THE SUPERINTENDENT MUST BECOME A CCR WITHIN ONE YEAR AFTER THE AWARD OF CONTRACT.

- ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE CONTRACTOR INCLUDE:

( )	NONE
( X )	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
( X )	RASTER FILES, IN .CAL FILE FORMAT, FOR ALL PLAN SHEETS.
( )	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	DESIGN FILE, IN .DGN FILE FORMAT, CONTAINING ONLY THE PROPOSED 3D TRIANGLES OF THE PROPOSED DIGITAL TERRAIN MODEL (DTM).

NOTE: THE DOCUMENT ENTITLED "RELEASE FOR DELIVERY OF DOCUMENTS IN ELECTRONIC FORM TO A CONTRACTOR" MUST BE SIGNED BY ALL PARTIES PRIOR TO THE DELIVERY OF ANY ELECTRONIC PROJECT FILES.

- AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED TRAFFIC CONTROL SUPERVISOR REQUIREMENT FOR THIS PROJECT.

( )	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
( )	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 743000.
( X )	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE ATSSA SUPERVISOR'S SOLE JOB SHALL BE SUPERVISION OF THE INSTALLATION, OPERATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES FOR THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT SHALL NOT BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR SHALL BE PAID FOR UNDER ITEM 743031.

- THE DISTURBED AREA FOR THIS PROJECT IS 25.35 ACRES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE CONSTRUCTION SITE POLLUTION PREVENTION SPECIFICATIONS AS DETAILED IN SECTION 3.6 OF THE "DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK". ALL COSTS ASSOCIATED WITH ADHERING TO THE STANDARDS SHALL BE INCIDENTAL TO THE OVERALL CONTRACT COSTS.
- THE EROSION AND SEDIMENT CONTROL PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE EROSION AND SEDIMENT CONTROL PLANS ARE VALID FOR A THREE YEAR PERIOD. BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE THREE YEARS, THE CONTRACTOR SHALL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE EROSION AND SEDIMENT CONTROL PLAN APPROVAL. DELDOT WILL REVIEW THE CURRENT EROSION AND SEDIMENT CONTROL PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

# PROJECT NOTES

## SECTION 100

- PROPOSED UTILITY RELOCATIONS ARE SHOWN ON THE PLANS AND SHALL BE INSTALLED BY THE RESPECTIVE UTILITY COMPANY, UNLESS OTHERWISE NOTED. REFER TO UTILITY STATEMENT FOR DETAILED SCOPE AND TIMING OF UTILITY WORK.
- ANY DAMAGE TO ITEMS NOTED TO BE RELOCATED OR RESET BY THE CONTRACTOR, AT THE DISCRETION OF THE ENGINEER, SHALL BE REPAIRED AND/OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUST SHALL BE CONTROLLED EXCLUSIVELY THROUGH THE USE OF WATER. COSTS ASSOCIATED WITH THE FURNISHING AND APPLICATION OF WATER FOR DUST CONTROL SHALL BE INCIDENTAL TO THE CONTRACT BID ITEMS.

## SECTION 200

- THIS PROJECT IS COVERED UNDER AN NPDES GENERAL PERMIT FOR CONSTRUCTION. UNDER THE GENERAL PERMIT, COMPLIANCE WITH DELDOT'S APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS WILL CONSTITUTE COMPLIANCE WITH THE NPDES INDUSTRIAL PERMITTING REQUIREMENTS FOR THIS CONSTRUCTION PROJECT. A COPY OF THE NPDES GENERAL PERMIT AND NOI IS KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S TEAM SUPPORT SECTION. A COPY OF THE GENERAL PERMIT OR THE NOI CAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.
- THE ENGINEER MAY REQUIRE THE CONTRACTOR TO EXCAVATE TEST PITS ALONG PROPOSED DRAINAGE RUNS, AT POINTS OF POSSIBLE UTILITY CONFLICTS, TO DETERMINE IF A CONFLICT EXISTS. ANY CONFLICTS SHALL BE COORDINATED BY THE CONTRACTOR, WITH THE ENGINEER AND THE UTILITY COMPANY INVOLVED. THE ENGINEER SHALL ULTIMATELY DETERMINE THE SOLUTION TO THE UTILITY CONFLICT. TEST HOLES SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 208000 - EXCAVATION AND BACKFILL FOR PIPE TRENCHES, BUT ONLY TO THE ACTUAL DEPTH EXCAVATED.
- THE CONTRACTOR SHALL REMOVE AND RESET ALL MAILBOXES TO MAINTAIN MAIL SERVICE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RELOCATE MAILBOXES AS REQUIRED BY THE PROPOSED GEOMETRICS AND AS DIRECTED BY THE ENGINEER. WHEN RELOCATING MAILBOXES IN CURBED SECTIONS, THE FACE OF THE MAILBOX SHALL BE FLUSH WITH THE BACK EDGE OF CURB. WHEN RELOCATING MAILBOXES IN OPEN SECTIONS, THE FACE OF THE MAILBOX SHALL SET BACK 8 INCHES FROM THE EDGE OF THE PAVED SHOULDER. THE BOTTOM OF THE MAILBOX SHALL BE SET 46 INCHES ABOVE THE ROADWAY SURFACE. MAILBOXES LOCATED AT DRIVEWAY ENTRANCES SHALL BE PLACED ON THE FAR SIDE OF THE DRIVEWAY IN THE DIRECTION OF TRAVEL. POSTS BEING RESET IN CONCRETE SIDEWALK SHALL BE PLACED IN AN APPROPRIATE SIZE PVC SLEEVE. COST FOR ALL WORK AND MATERIALS SHALL BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.
- ITEMS TO BE REMOVED UNDER ITEM 21000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
  - CONCRETE SUPPORT FOUNDATIONS FOR MISCELLANEOUS SMALL STRUCTURES NOT COVERED UNDER OTHER PAY ITEMS
  - DRAINAGE STRUCTURES:
    - STA. 114+07, 27' LT.
    - STA. 115+08, 27' LT.
    - STA. 309+59, 31' LT.
    - STA. 309+87, 21' RT.
    - STA. 405+71, 35' LT.
- ALL EXISTING PIPES TO BE ABANDONED WHERE NO EXCAVATION WILL TAKE PLACE, INCLUDING BELOW EXISTING TRAVEL LANES, TURN LANES, AND SHOULDERS, SHALL BE FILLED WITH ITEM 208001 - FLOWABLE FILL, ALL EXISTING PIPES TO BE ABANDONED WITHIN OR BELOW THE PROPOSED FULL DEPTH PAVEMENT BOX SHALL BE ENTIRELY REMOVED OR FILLED WITH ITEM 208001 - FLOWABLE FILL AS INDICATED ON THE PLANS. PAYMENT FOR PIPE REMOVAL SHALL BE INCLUDED UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT.
- ALL EXISTING STORM DRAIN STRUCTURES AND PIPES LOCATED WITHIN LIMIT OF CONSTRUCTION TO BE REMOVED UNLESS IDENTIFIED BY "DND" OR AS DESCRIBED IN SECTION 200, NOTE 5.

## SECTION 300

- THE CONTRACTOR MAY ELECT TO USE ANY OF THE FOLLOWING MATERIALS TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B':
    - CRUSHED STONE (PER STANDARD SPECIFICATION 821)
    - CRUSHED CONCRETE (PER STANDARD SPECIFICATION 821)
    - HOT-MIX MILLINGS (PER SPECIAL PROVISION 302514 MILLED HOT-MIX BASE COURSE)

THE CONTRACTOR WILL NOT BE ALLOWED TO MIX DIFFERENT MATERIALS (OR SIMILAR MATERIALS FROM DIFFERENT SOURCES) TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.

ALL OF THE ABOVE LISTED MATERIALS ARE PERMITTED FOR USE ON THE JOB, PROVIDED THEY ARE SEPARATED INTO APPROVED AREAS. EACH AREA OF BASE COURSE MUST BE CONSTRUCTED USING MATERIALS FROM A SINGLE SOURCE, FULL DEPTH, IN ORDER THAT PROPER TESTING MAY BE ACCOMPLISHED. THE CONTRACTOR AND DELDOT'S PROJECT ENGINEER SHALL AGREE ON THE LIMITS OF EACH SOURCE OF MATERIAL PRIOR TO PLACEMENT.
  - THE QUANTITY USED FOR BASE OF EACH OF THE ABOVE LISTED MATERIALS WILL BE THE CONTRACTOR'S CHOICE, WITH THE TOTAL MEETING THE ADVERTISED QUANTITY OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.
  - THE CONTRACTOR MAY ALSO ELECT TO RECYCLE MILLINGS FOR USE IN HOT-MIX AS PERMITTED BY THE STANDARD SPECIFICATIONS. THE CHOICE OF THE QUANTITY OF MILLINGS USED FOR THIS PURPOSE, OR FOR BASE COURSE, LIES WITH THE CONTRACTOR. ALL MILLING MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR.
  - HOT-MIX MILLINGS MAY BE GENERATED FROM THE FOLLOWING SOURCES:
    - MATERIAL MADE AVAILABLE WHEN MILLED ON THIS CONTRACT UNDER ITEM 760507.
    - MATERIAL MILLED ON THIS CONTRACT AT THE CONTRACTOR'S CHOICE UNDER ITEM 202000.
    - MILLED MATERIAL FURNISHED ON THE JOB FROM THE CONTRACTOR'S YARD OR OTHER OUTSIDE SOURCE. ALL MILLED MATERIALS SHALL MEET THE MATERIAL REQUIREMENTS OF ITEM 302514 - MILLED HOT-MIX BASE COURSE.
- PAYMENT CLARIFICATION:
  - SHOULD THE CONTRACTOR ELECT TO MILL PORTIONS OF HOT-MIX SHOWN ON THE PLANS TO BE REMOVED UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT THE COST OF MILLING THIS HOT-MIX WILL BE PAID AS ITEM 202000 - EXCAVATION AND EMBANKMENT. THE MILLINGS GENERATED MAY BE RECYCLED INTO HOT-MIX, UTILIZED FOR BASE COURSE, OR DISPOSED OF TO AN APPROVED SITE. HAULING COSTS FOR DISPOSAL AND/OR RECYCLING ARE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.
  - MILLINGS GENERATED UNDER ITEM 760507 - PROFILE MILLING, HOT-MIX MAY BE RECYCLED INTO HOT-MIX, UTILIZED FOR BASE COURSE OR DISPOSED OF BY THE CONTRACTOR TO AN APPROVED SITE. NO SEPARATE PAYMENT WILL BE MADE FOR TRANSPORTING MILLINGS ON SITE OR TO AN APPROVED DISPOSAL SITE.
  - SHOULD THE CONTRACTOR ELECT TO TEMPORARILY STOCKPILE MILLINGS ON THE JOB SITE FOR LATER USE, ALL COSTS FOR STOCKPIILING AND SUBSEQUENT REHANDLING SHALL BE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.
  - MILLINGS USED FOR BASE COURSE SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE. NO SEPARATE PAYMENT WILL BE MADE TO FURNISH MILLINGS FROM AN OUTSIDE SOURCE OR TRANSPORT MILLINGS WITHIN THE PROJECT LIMITS. MILLINGS USED FOR BASE COURSE WILL BE PAID IN PLACE AT THE UNIT BID PRICE FOR ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.
  - ALL COSTS TO UTILIZE MILLINGS IN RECYCLED HOT-MIX WILL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE HOT-MIX ITEM USING THE RECYCLED MATERIAL.
  - SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE IS PROVIDED TO SPECIFY THE MEANS OF LAY DOWN AND COMPACTION AS WELL AS THE MATERIAL REQUIREMENTS FOR MILLINGS USED AS BASE COURSE. ALL COSTS TO BRING THE MILLINGS INTO COMPLIANCE WITH THE REQUIREMENTS OF ITEM - 302514 MILLED HOT-MIX BASE COURSE ARE INCIDENTAL TO ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'. NO PAYMENT WILL BE MADE FOR ITEM 302514 - MILLED HOT-MIX BASE COURSE. THE QUANTITY OF MILLINGS USED FOR BASE COURSE WILL BE PAID FOR UNDER ITEM 302007 - GRADED AGGREGATE BASE COURSE.

- PAYMENT FOR FURNISHING AND PLACING 6" PVC OBSERVATION WELLS IN INFILTRATION TRENCHES SHALL BE INCIDENTAL TO ITEM 302011 - DELAWARE NO. 3 STONE.

## SECTION 400

- THE PAVEMENT SECTION FOR HOT-MIX RESIDENTIAL DRIVEWAYS SHALL BE 2" SUPERPAVE, TYPE C HOT-MIX, 160 GYRATIONS, PG 64-22 OVER 8" GRADED AGGREGATE BASE COURSE, TYPE 'B' UNLESS OTHERWISE NOTED ON THE PLANS.

## SECTION 600

- THE DEPARTMENT AND THE CONTRACTOR SHALL INSPECT ALL EXISTING PIPES AND DRAINAGE STRUCTURES TO BE USED IN THE FINAL DRAINAGE SYSTEM AND AGREE ON THE CONDITION PRIOR TO THE START OF CONSTRUCTION. EXISTING PIPES AND DRAINAGE STRUCTURES DAMAGED DUE TO CONTRACTOR OPERATIONS SHALL BE REPAIRED OR REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE. THE DEPARTMENT WILL VIDEO INSPECT NEW PIPE RUNS TO CONFIRM CONDITION PRIOR TO ACCEPTANCE. PIPE CLEANING PRIOR TO VIDEO INSPECTION AND MAINTENANCE OF TRAFFIC DURING THE VIDEO INSPECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND INCIDENTAL TO THE PIPE ITEM THAT IS BEING VIDEO INSPECTED.
- NO ALTERNATE PIPE MATERIALS WILL BE ACCEPTED AND THE PIPE BID ITEM SHALL BE FOR THE SPECIFIC TYPE OF PIPE MATERIAL.

### ADDENDUMS / REVISIONS

△ ADDED NOTE: RRR/GS 06/25/13

NOT TO SCALE

HSIP SUSSEX COUNTY  
US 9 PROJECTS

CONTRACT	BRIDGE NO.	N/A	NOTES SHEET	SHEET NO.
T200800901	DESIGNED BY:	J.L.R.		5
COUNTY	CHECKED BY:	R.R.W.		TOTAL SHTS.
SUSSEX				161

 **DELAWARE**  
**DEPARTMENT OF TRANSPORTATION**

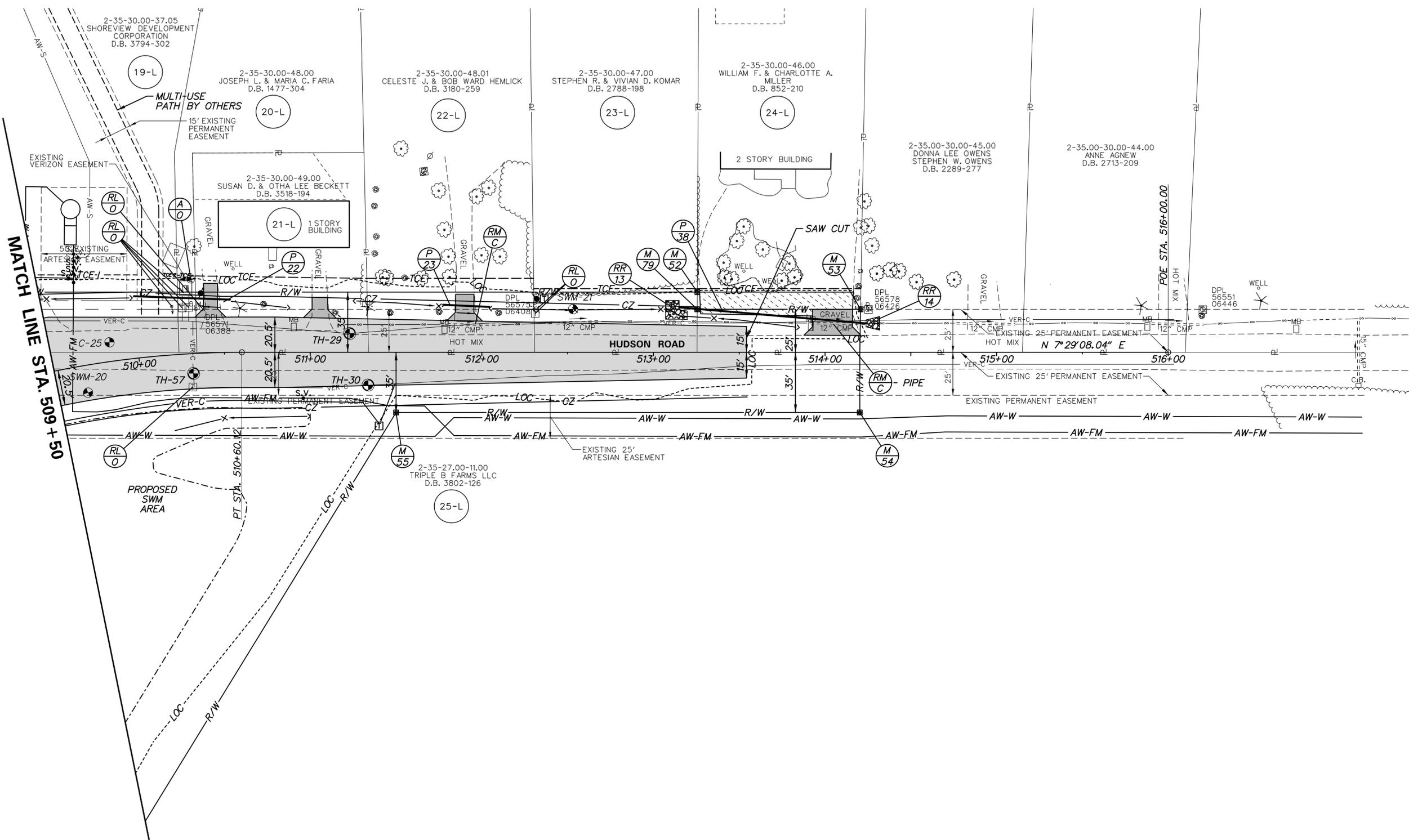
ROADWAY CORE SUMMARY			
NO.	STATION	OFFSET	DESCRIPTION
25	502+32	19' LT.	2.25" HOT MIX ON 2" SURFACE TREATMENT AND 2" ASPHALT TREATED BASE

UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL
TH-29	VER	511+22.95	10.92' LT	32.29	2.56	1 1/2" D.B. CABLE
TH-30	VER	511+33.72	19.08' RT	31.81	2.34	1 1/2" D.B. CABLE
TH-57	VER	510+31.36	11.58' RT	33.13	3.39	4" PVC CONDUIT

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
22	14" X23" RCEP	IV	56'	0.0035	32.09	31.89
23	15" RCP	V	27'	0.0104	30.12	29.84
38	12" RCP	IV	109'	0.0053	28.95	28.37

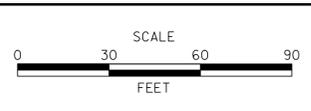
RIPRAP SCHEDULE		
NO.	TYPE	AREA
13	R-5	12 SY
14	R-5	5 SY

RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
52	CAPPED REBAR	513+25.57	35.00' LT	266344.8141	700432.5319
53	CAPPED REBAR	514+20.70	25.04' LT	266437.8295	700454.7992
54	CAPPED REBAR	514+20.26	35.00' RT	266429.5699	700514.2702
55	CAPPED REBAR	511+50.00	35.00' RT	266161.6173	700479.0622
79	CAPPED REBAR	513+25.53	25.00' LT	266343.4707	700442.4413



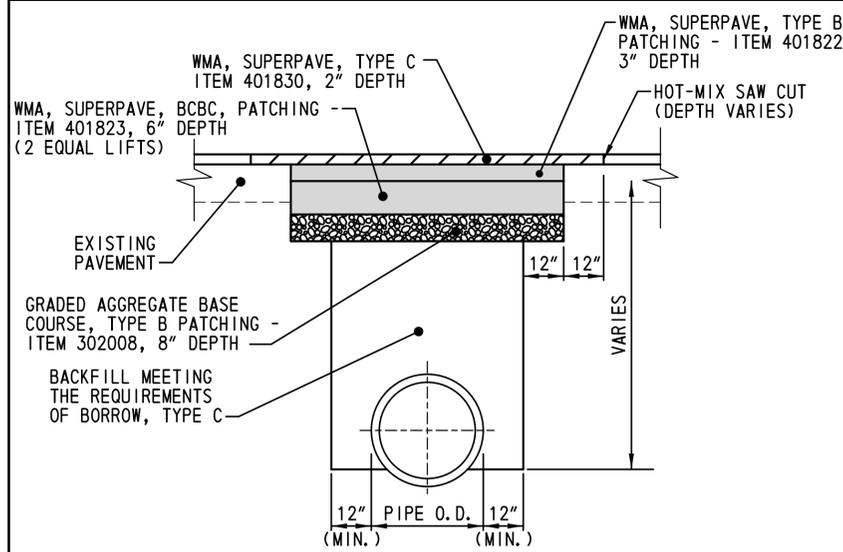
No. 191606-007, SA00, CPTIUS9-Hudson, A001.dgn  
 9/19/2013 7:53:40 AM

ADDENDUMS / REVISIONS	
△	REVISED CLASS ON P-38; R/RW/GS 06/25/13



CONTRACT	BRIDGE NO.	N/A
T200800901	DESIGNED BY:	J.L.R.
COUNTY	CHECKED BY:	R.R.W.
SUSSEX		

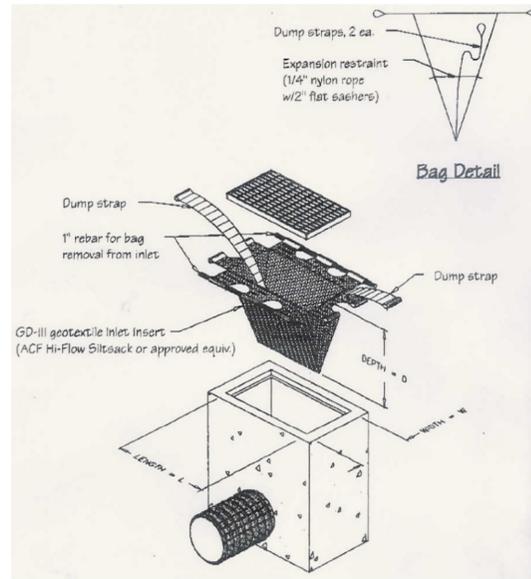
<b>CONSTRUCTION PLAN</b>	SHEET NO.
	28
	TOTAL SHTS.
	161



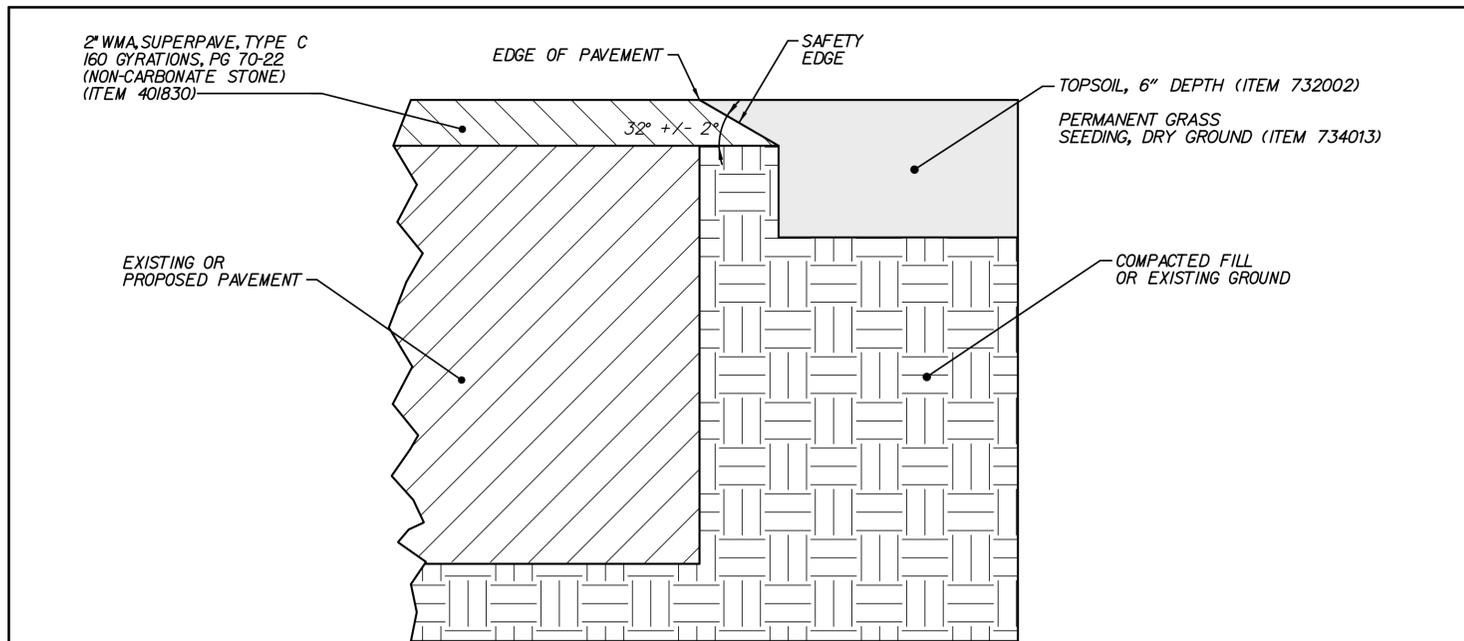
**PAVEMENT PATCH AND PIPE TRENCH**  
NOT TO SCALE

**NOTES:**

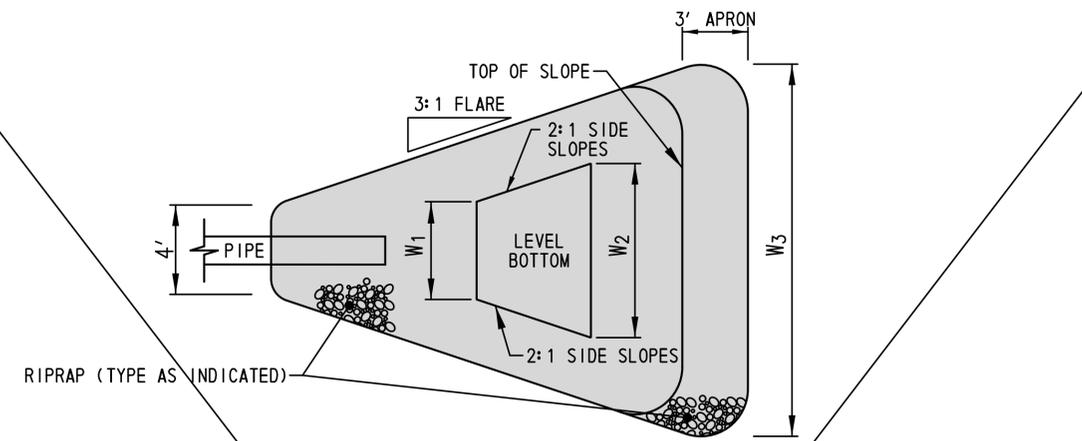
- EXISTING HOT-MIX PAVEMENT MAY BE REMOVED BY A MILLING OPERATION. ALL HOT-MIX MATERIAL MUST BE REMOVED TO THE SAW CUT JOINTS PRIOR TO WMA PATCHING.
- SEE STANDARD DETAILS FOR PIPE BEDDING.
- THESE DETAILS SHOW MINIMUM PAVEMENT PATCH REQUIREMENTS. IF EXISTING ROADWAY HAS A HEAVIER CROSS SECTION, PROPOSED PAVEMENT PATCH WILL MATCH HEAVIER CROSS SECTION, OR AS DIRECTED BY THE ENGINEER.
- NO ADDITIONAL PAYMENT SHALL BE MADE FOR PLACING GABC IN FLEXIBLE PAVEMENT SECTION BEYOND THAT MADE UNDER ITEM 302008 - GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING.



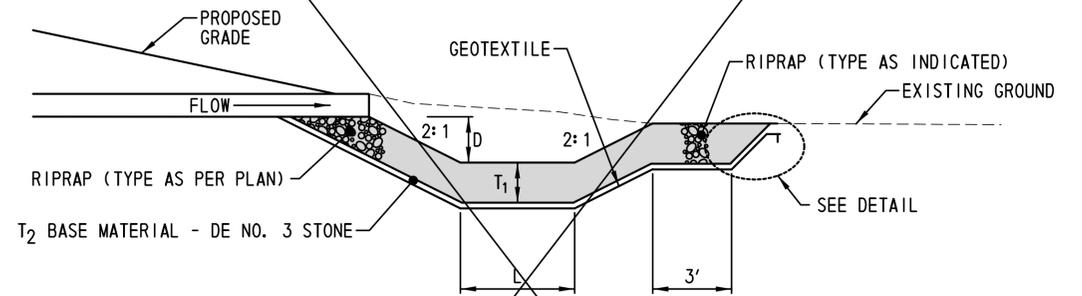
**ITEM 252002 - INLET SEDIMENT CONTROL, AT-GRADE INLET**  
NOT TO SCALE



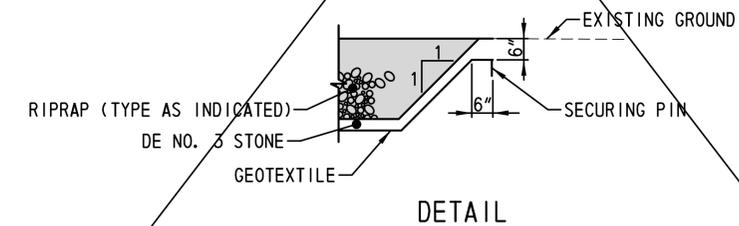
**SAFETY EDGE**  
SCALE: NONE



**PLAN VIEW**



**SIDE VIEW**



**DETAIL**

**PIPE ENERGY DISSIPATER**  
NOT TO SCALE

LOCATION	RIPRAP SIZE	D	T <sub>1</sub>	T <sub>2</sub> *	W <sub>1</sub>	W <sub>2</sub>	W <sub>3</sub>	L
STA. 401+98, LT	R-5	1.50'	20"	6"	3'	7'	16'	16'

\* NO. 3 STONE

**ADDENDUMS / REVISIONS**

DELETED DETAIL; RRR/GS 06/25/13

SCALE: AS SHOWN

**HSIP SUSSEX COUNTY US 9 PROJECTS**

CONTRACT	BRIDGE NO.	N/A
T200800901	DESIGNED BY:	J.L.R.
COUNTY	CHECKED BY:	R.R.W.
SUSSEX		

**CONSTRUCTION DETAILS**

SHEET NO.	65
TOTAL SHTS.	161