

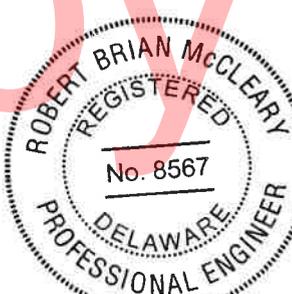
STATE OF DELAWARE

DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION SOLUTIONS
PLANS AND SPECIFICATIONS FOR:

CONTRACT NO: T201401004 P3E NO: 14-11004
FEDERAL AID NO: ESTP-2014(38)

CONTRACT TITLE: HIGH FRICTION SURFACE TREATMENT, STATEWIDE,
OPEN-END

PLANS PREPARED BY: ADAM S. WEISER, P.E., PTOE
SAFETY PROGRAMS MANAGER

<p>DATE RECOMMENDED: <u>Nov. 6, 2014</u></p> <p> SAFETY PROGRAMS MANAGER, TRAFFIC</p>	
<p>DATE RECOMMENDED: <u>11/6/14</u></p> <p> CHIEF TRAFFIC ENGINEER</p>	
<p>DATE APPROVED: <u>11/20/11</u></p> <p> CHIEF ENGINEER</p>	

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HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

GENERAL NOTES

1. CONSTRUCTION OF THIS CONTRACT SHALL CONFORM TO DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED AUGUST 2011 AS AMENDED BY THE SUPPLEMENTAL SPECIFICATIONS, THE SPECIAL PROVISIONS, THE MOST RECENT STANDARD CONSTRUCTION DETAILS, DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THESE PLANS.
2. THE PURPOSE OF THIS CONTRACT IS TO MAKE GENERAL IMPROVEMENTS TO ROADS AND/OR STREETS WITHIN THE STATE AS SPECIFIED HEREIN. DEPENDING ON FUND AVAILABILITY, THE DEPARTMENT RESERVES THE RIGHT TO ADD OR DELETE LOCATIONS AND/OR QUANTITIES FOR THIS CONTRACT. SUCH LOCATION OR QUANTITY ADDITIONS OR DELETIONS SHALL NOT BE CAUSE FOR AN INCREASE OR DECREASE IN ANY CONTRACT UNIT BID PRICES. NO ITEM PRICES ARE TO BE RENEGOTIATED DUE TO EITHER AN INCREASE OR DECREASE IN QUANTITY USAGE RESULTING FROM SAID ADDITIONS OR DELETIONS. IN THE CASE WHERE CONTRACT UNIT PRICES ARE NOT AVAILABLE, THE PRICES ARE TO BE NEGOTIATED.
3. THIS CONTRACT IS INTENDED TO INSTALL HIGH-FRICTION SURFACE TREATMENT OVERLAYS ON EXISTING HOT-MIX OR CONCRETE PAVEMENT SURFACES AT THE LOCATIONS SPECIFIED HEREIN AND IN ACCORDANCE WITH THESE PLANS, THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS. THE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO MAINTENANCE OF TRAFFIC AS REQUIRED PER LOCATION, CLEANING OF ROADWAY SURFACE, PROTECTION OF EXISTING PAVEMENT MARKINGS, INSTALLATION OF HIGH-FRICTION SURFACE TREATMENT, MASKING OF IN-ROADWAY UTILITY APPURTENANCES AND THE REMOVAL OF ANY ASSOCIATED CONSTRUCTION DEBRIS. LOCATION SHEETS AND DETAILS CAN BE FOUND WITHIN THE CONTRACT DOCUMENTS.
4. THIS CONTRACT ALSO INCLUDES AN OPEN-END (UNKNOWN LOCATION) PORTION THAT WILL RUN THREE (3) CALENDAR YEARS FROM THE DATE SPECIFIED IN THE NOTICE TO PROCEED. THIS PORTION WILL INCLUDE THE INSTALLATION OF HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX OR CONCRETE PAVEMENT SURFACES ON AN AS NEEDED BASIS AND WILL BE ISSUED VIA JOB ORDER.
5. THE CONTRACT COMPLETION TIME FOR THE KNOWN LOCATIONS (LOC. 1 - 15) WILL BE 180 CALENDAR DAYS FROM THE DATE SPECIFIED IN THE NOTICE TO PROCEED. LIQUIDATED DAMAGES WILL BE ASSESSED AFTER THIS TIME EXPIRES IF THESE KNOWN LOCATIONS ARE NOT SUBSTANTIALLY COMPLETE.
6. LOCATION LISTINGS INDICATE GENERAL LIMITS OF CONSTRUCTION, MAJOR TYPES OF IMPROVEMENTS AND ESTIMATED QUANTITIES. DURING THE BIDDING PERIOD, ANY QUESTIONS PERTAINING TO LOCATIONS SHALL BE DIRECTED TO THE CONTRACT ADMINISTRATOR. AFTER THE AWARD, SUCH QUESTIONS SHALL BE REFERRED TO THE ENGINEER.
7. THE CONTRACTOR SHALL PROVIDE ALL RESIDENTS AND BUSINESSES ADJACENT TO THE WORK ZONE A MINIMUM 48-HOUR WRITTEN NOTICE FOR THE START OF

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CONSTRUCTION WORK. THIS NOTIFICATION SHALL INCLUDE THE SCOPE OF WORK, WORKING HOURS, ANTICIPATED START AND COMPLETION DATES, CONTRACTOR NAME & ADDRESS, AND DELDOT CONTACT NUMBERS. FAILURE TO GIVE PROPER NOTICE WILL RESULT IN A SUSPENSION OF WORK REQUIRING NOTICE, UNTIL PROPER NOTICE IS PROVIDED. ACCESS TO ALL BUSINESSES AND RESIDENCES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THIS CONTRACT. ANY TEMPORARY CLOSURE OF A DRIVEWAY FOR TIE-IN PURPOSES SHALL BE COORDINATED WITH THE ENGINEER AND/OR PROPERTY OWNER IN ADVANCE OF THE CLOSURE.

8. ANY AND ALL CONSTRUCTION ENGINEERING SHALL BE INCIDENTAL TO THE CONTRACT.
9. NON-AVAILABILITY OF MATERIALS SHALL BE VERIFIED BY AT LEAST THREE (3) DIFFERENT SOURCES. VERIFICATION SHALL BE FORMAL AND SUPPLIED BY THE CONTRACTOR IN WRITING WITHIN FIVE (5) WORKING DAYS. IF THERE IS A VERIFIED NON-AVAILABILITY OF MATERIALS, TIME CHARGES SHALL COMMENCE ON THE FIRST WORKING DAY FOLLOWING THE DELIVERY DATE OF SAID MATERIALS.

OPEN-END NOTES

1. WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL BE GENERATED THROUGH JOB ORDERS ISSUED TO THE CONTRACTOR BY THE ENGINEER. UP TO SIX (6) WORK ORDERS WILL BE ISSUED AT ONE TIME, AS A GROUP, TO COMPOSE A JOB ORDER, TO ALLOW FOR THE MOST EFFICIENT ALLOCATION OF THE CONTRACTOR'S WORK FORCE.
2. A SINGLE ROAD LOCATION MOBILIZATION WILL BE PAID PER JOB ORDER. FOR EXAMPLE, IF A JOB ORDER IS ISSUED THAT INCLUDES THREE (3) DIFFERENT WORK ORDERS/LOCATIONS, ONE MOBILIZATION WILL BE PAID, NOT THREE.
3. A TEMPORARY TRAFFIC CONTROL – TYPICAL APPLICATION PAY ITEM WILL BE PAID TO COVER THE SETUP, REMOVAL AND MAINTENANCE OF TEMPORARY TRAFFIC CONTROL FOR EACH UNKNOWN LOCATION ISSUED VIA JOB ORDER. THE SPECIFIC PAY ITEM WILL BE INDICATED ON THE JOB ORDER ISSUED BY THE DEPARTMENT FOR THE REQUIRED TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION. FURNISHING OF TEMPORARY TRAFFIC CONTROL DEVICES (DRUMS , ARROW BOARDS, MESSAGE BOARDS, TRUCK MOUNTED ATTENUATORS, FLAGGERS, TRAFFIC OFFICERS, TEMPORARY WARNING SIGNS, ETC WILL BE PAID FOR UNDER THE RESPECTIVE PAY ITEM FOR BOTH KNOWN AND UNKNOWN LOCATIONS.
4. EXECUTION OF EACH WORK ORDER GROUP IS TO BEGIN WITHIN ONE (1) MONTH OF ITS BEING ISSUED TO THE CONTRACTOR, UNLESS REQUIRED MATERIALS ARE NOT AVAILABLE, AND WORK SHALL BE COMPLETED WITHIN ONE (1) MONTH.
5. IF WORK DOES NOT COMMENCE WITHIN THE SPECIFIED ONE (1) MONTH, OR NON-AVAILABLE OF MATERIALS IS NOT PRESENTED IN WRITING, TIME CHARGES EQUAL TO LIQUIDATED DAMAGES FOR THE WORK ORDER GROUP SHALL COMMENCE.

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6. FAILURE TO COMPLETE A WORK GROUP IN THE SPECIFIED TIME SHALL CONSTITUTE "FAILURE TO PURSUE THE WORK" AND SUBJECTS THE CONTRACTOR TO LIQUIDATED DAMAGES AS OUTLINED IN SUBSECTION 108.08 OF THE STANDARD SPECIFICATIONS. ADDITIONAL ITEMS AND/OR WORKING DAYS MAY BE ADDED TO ANY WORK ORDER AS NEEDED, AT THE DISCRETION OF THE ENGINEER. IF WORK ON A SPECIFIC WORK-ORDER GROUP IS NOT COMPLETED WITHIN THE ALLOTTED TIME, LIQUIDATED DAMAGES WILL BE ASSESSED IN ACCORDANCE WITH SUBSECTION 108.09 BASED ON THE TOTAL VALUE OF THAT WORK-ORDER GROUP.
7. THE DEPARTMENT WILL ATTEMPT TO ASSIGN JOB ORDERS IN A MANNER THAT WILL KEEP THE DISTANCE BETWEEN WORK ORDER LOCATIONS TO A MINIMUM AND IN LOGICAL SEQUENCE.
8. FOR KNOWN LOCATIONS, A SEMI-FINAL INSPECTION WILL BE PERFORMED BY COUNTY ONCE LOCATIONS ARE COMPLETE. SEMI-FINAL INSPECTIONS WILL OCCUR AS NEEDED FOR OPEN-END (UNKNOWN) LOCATIONS.

PROJECT NOTES

SECTION 100:

1. 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.
2. UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL, AS PART OF HIS PROJECT SCHEDULE, SUBMIT TO THE ENGINEER AN ESTIMATE OF THE MONTHLY PAYMENTS EXPECTED TO BE RECEIVED ON THE CONTRACT. THIS WILL BE REFERENCED AS THE "MONTHLY PAYMENT CHART".
 - A. A CHART IN MICROSOFT EXCEL, MICROSOFT WORD, OR HAND WRITTEN FORMAT WILL BE ACCEPTABLE FOR THIS PURPOSE. THE CHART SHOULD INCLUDE, AT A MINIMUM, COLUMNS FOR THE MONTH, YEAR AND ESTIMATED MONTHLY PAYMENTS. THE TOTAL OF ALL ESTIMATED MONTHLY PAYMENTS SHOULD EQUAL THE AWARDED CONTRACT TOTAL BID PRICE.
 - B. THE ENGINEER MAY REQUEST AN UPDATED "MONTHLY PAYMENT CHART" AT HIS DISCRETION, DEPENDING ON THE ACCURACY OF THE INITIAL ESTIMATES AND ACCORDING TO THE OVERALL NEEDS OF THE DEPARTMENT.
 - C. THE "MONTHLY PAYMENT CHART" WILL NOT BE CONSIDERED A BINDING DOCUMENT BY EITHER THE CONTRACTOR OR THE DEPARTMENT AND IS CONSIDERED SOLELY INFORMATIONAL.
 - D. ON PROJECTS REQUIRING CPM SCHEDULES, THE CONTRACTOR MAY, BUT IS NOT REQUIRED TO, "COST LOAD" THE CPM SCHEDULE IN ORDER TO GENERATE THE MONTHLY SPEND PAYMENT CHART.

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E. COSTS TO PREPARE AND/OR UPDATE THE “MONTHLY PAYMENT CHART” ARE ADDRESSED AS FOLLOWS:

- I. ON CONTRACTS REQUIRING CPM SCHEDULES AND UPDATES, PREPARATION OF THE INITIAL CHART SHALL BE INCIDENTAL TO ITEM 763508. UPDATES SHALL BE INCIDENTAL TO ITEM 763509.
 - II. ON CONTRACTS NOT REQUIRING CPM SCHEDULES, THE COST TO PREPARE AND UPDATE THE “MONTHLY PAYMENT CHART” SHALL BE INCLUDED IN ITEM 763000 – INITIAL EXPENSE.
3. THE CONTRACTOR SHALL SUBMIT THE REQUIRED COPIES OF A DETAILED PROGRESS SCHEDULE (PSC) AS OUTLINED IN STANDARD SPECIFICATION 108.04 PRIOR TO OR AT THE PRECONSTRUCTION MEETING. DETAILS SHALL INCLUDE A DESCRIPTION OF EACH WORK ACTIVITY, THE PLANNED DAYS OF WORK, MULTIPLE CREWS OR SHIFTS, AND SCHEDULED WORKING HOURS. DURING THE CONTRACT, THE CONTRACTOR SHALL SUBMIT TWO-WEEK (OR AS REQUIRED) “LOOK AHEAD” SCHEDULES TO THE AREA ENGINEER/MANAGER NO LATER THAN NOON OF EACH THURSDAY. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.
4. THE CONTRACTOR IS REMINDED THAT SECTION 105.07 OF THE STANDARD SPECIFICATIONS REQUIRES THE GENERAL CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT OR FOREMAN ON THE PROJECT AT ALL TIMES.

SECTION 700

1. MASK ALL UTILITY MANHOLES, JUNCTION WELL COVERS, DRAINAGE INLETS AND OTHER IN-ROADWAY APPURTENANCES SO AS NOT TO COVER THESE APPURTENANCES WITH HIGH-FRICTION SURFACE TREATMENT MATERIAL. UPON COMPLETION OF THE HIGH-FRICTION SURFACE TREATMENT INSTALLATION, REMOVING MASKING MATERIAL FROM THESE APPURTENANCES.
2. THE CONTRACTOR SHALL NOT SPRAY HIGH-FRICTION SURFACE TREATMENT MATERIAL ON EXISTING PAVEMENT MARKINGS. ANY PAVEMENT MARKINGS THAT CANNOT BE AVOIDED BY MAKING ADJUSTMENTS TO APPLICATION EQUIPMENT SHALL BE MASKED AND PROTECTED. NO MARKINGS SHALL BE REMOVED UNLESS INDICATED IN THE WORK ORDER LOCATION PLAN SHEETS OR AS DIRECTED BY THE ENGINEER.

MISCELLANEOUS

1. NO ENVIRONMENTAL PERMITS ARE REQUIRED FOR THIS WORK PROVIDED DITCHES OCCUR IN UPLANDS AND ARE CONVEYING ONLY ROADSIDE STORM WATER (I.E., NON CORPS-JURISDICTIONAL). IF THERE IS ANY QUESTION AS TO WHETHER OR NOT THE DITCHES ARE LOCATED IN JURISDICTIONAL WATERS, CONTACT THE DELDOT ENVIRONMENTAL SECTION AT (302) 760-2264.

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2. NO UTILITY RELOCATION INVOLVEMENT IS ANTICIPATED. SHOULD ANY CONFLICTS BE ENCOUNTERED DURING CONSTRUCTION REQUIRING ADJUSTMENT AND/OR RELOCATION OF THE AGENCIES' EXISTING FACILITIES, THE NECESSARY RELOCATION WORK SHALL BE ACCOMPLISHED BY THE RESPECTIVE AGENCY'S FORCES, AS DIRECTED BY THE ENGINEER. ANY ADJUSTMENTS AND/OR RELOCATIONS OF MUNICIPALLY OWNED FACILITIES SHALL BE DONE BY THE STATE'S CONTRACTOR IN ACCORDANCE WITH THE RESPECTIVE AGENCY'S STANDARD SPECIFICATIONS AS DIRECTED BY THE ENGINEER.
3. IT IS ANTICIPATED THAT ALL WORK WILL OCCUR WITHIN DELDOT'S EXISTING RIGHT-OF-WAY OR EASEMENT AREAS. SHOULD THE NEED OCCUR TO TRESPASS ONTO PRIVATE PROPERTY; IT WILL BE THE RESPONSIBILITY OF DELDOT'S PROJECT MANAGER TO SECURE SUCH TRESPASS NEEDS.
4. NO WORK NEAR OR WITHIN RAILROAD RIGHT-OF-WAY IS ANTICIPATED. IF ANY RAILROAD PROPERTY OR FACILITIES ARE NEAR OR WITHIN THE PROPOSED LIMITS OF WORK OR IF THE PROPOSED WORK ENCROACHES UPON THE RAILROAD'S RIGHT-OF-WAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE REQUIRED CLEARANCES AND INSURANCE FOR EACH INVOLVED RAILROAD IN ACCORDANCE WITH THE APPROPRIATE DELDOT MAINTENANCE OF RAILROAD TRAFFIC ITEM. DELDOT'S RAILROAD SECTION MANAGER MUST BE CONTACTED AT (302) 760-2183 TO COORDINATE THE EXECUTION OF THE APPROPRIATE AGREEMENTS AND AUTHORIZATIONS REQUIRED FROM ANY RAILROAD COMPANY INVOLVED, INCLUDING COORDINATION FOR RAILROAD FLAGGING, IF NECESSARY.
5. DELDOT'S PROJECT MANAGER SHALL BE RESPONSIBLE FOR COORDINATING WITH THE TRAFFIC SECTION RELATING TO ANY IMPACTS TO TRAFFIC SECTION FACILITIES (INCLUDING BUT NOT LIMITED TO TRAFFIC LOOPS, JUNCTION WELLS, ETC.) AT LEAST FOUR (4) WEEKS IN ADVANCE OF THE START OF THE ACTIVITY.
6. PRIOR TO INITIATING ANY WORK ON THIS CONTRACT (OR SITES), THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING FOR APPROVAL OF THE SAFETY SECTION, A MAINTENANCE OF TRAFFIC PLAN. SUFFICIENT TIME SHALL BE PROVIDED FOR THE REVIEW AND APPROVAL OF THE PLAN. MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE THE PROPOSED TIME RESTRICTIONS FOR THE CLOSURE OF TRAVEL LANES SUBJECT TO THE APPROVAL OF THE SAFETY SECTION.
7. DELDOT'S PROJECT MANAGER IS RESPONSIBLE FOR ENSURING ANY REQUIRED DOCUMENTS AND ANALYSIS AS PART OF THE ADOPTED WORK ZONE SAFETY AND MOBILITY PROCEDURES AND GUIDELINES HAS BEEN COMPLETED PRIOR TO ANY WORK STARTING ON THIS CONTRACT.

MAINTENANCE OF TRAFFIC

1. WORK SHALL BE PERFORMED IN A MANNER THAT WILL ENSURE THE LEAST PRACTICAL OBSTRUCTION TO THE TRAVELING PUBLIC, CONSISTENT WITH SAFETY STANDARDS AND SHALL COMPLY WITH THE REQUIREMENTS OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PART 6, INCLUDING

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ALL SUPPLEMENTAL INFORMATION, INTERIM GUIDANCE AND MEMORANDUMS PROVIDED ON WWW.MUTCD.DELDOT.GOV, HEREIN REFERRED TO AS THE DELAWARE MUTCD (INCLUDING REVISIONS IN EFFECT AT THE TIME OF ADVERTISEMENT FOR BIDS).

2. THE CONTRACTOR SHALL SUBMIT THE PROPOSED TEMPORARY TRAFFIC CONTROL PLANS FOR ALL KNOWN LOCATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK AT EACH LOCATION.
3. THE CONTRACTOR SHALL SUBMIT THE PROPOSED TEMPORARY TRAFFIC CONTROL PLANS FOR EACH WORK-ORDER ISSUED LOCATION TO THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK AT EACH LOCATION.
4. THE SETUP OF TRAFFIC CONES SHALL BE INCIDENTAL TO THE ITEMS THAT THEY PROTECT. ALL FLAGGERS, WARNING SIGNS, TRUCK MOUNTED ATTENUATORS AND OTHER TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE PAID SEPARATELY AS REQUIRED BY THE SPECIFIC WORK LOCATION.
5. WHEN SIDE ROADS INTERSECT THE WORK ZONE, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE ERECTED AS REQUIRED BY THE DELAWARE MUTCD AND THE ENGINEER.
6. MAINTENANCE OF TRAFFIC FOR OPERATIONS UNDER THIS CONTRACT SHALL CONFORM TO TYPICAL APPLICATION (TA) 10 OF THE DELAWARE MUTCD UNLESS OTHERWISE SPECIFIED IN THE WORK ORDER OR ELSEWHERE IN THESE PLANS.
7. THE CONTRACTOR SHALL ENSURE THAT DISRUPTION TO TRAFFIC IS MINIMIZED AT ALL TIMES IN ALL CASES. TIME RESTRICTIONS FOR LANE CLOSURES ON LOCATIONS ASSOCIATED WITH THIS CONTRACT WILL BE PROVIDED WITH EACH LOCATION DESCRIPTION OR ISSUED WORK ORDER. GENERAL CONTRACT TIME RESTRICTIONS ARE AS FOLLOWS:
 - A. NO LANE CLOSURES ON TWO-LANE ROADWAYS WITH AADT GREATER THAN OR EQUAL TO 5,000 VEHICLES PER DAY SHALL OCCUR BETWEEN 6:00 AM TO 9:00 AM AND/OR 3:00 PM TO 7:00 PM ON A STANDARD WEEKDAY, (I.E., MONDAY THROUGH FRIDAY) WITHOUT PRIOR PERMISSION FROM THE ENGINEER. FOR TWO-LANE ROADWAYS WITH AADT LESS THAN 5,000 VEHICLES PER DAY, LANE CLOSURES TYPICALLY WILL BE ALLOWED ANY TIME.
 - B. SUMMER WEEKEND OPERATIONS MAY OCCUR ON NON-BEACH ROUTE ROADWAYS SUBJECT TO DETERMINATION BY THE ENGINEER, BUT NO SUMMER WEEKEND WORK SHALL TAKE PLACE ON MAJOR BEACH ROUTES.
 - C. NIGHTTIME WORK MAY OCCUR ON CONGESTED MAJOR ROADWAY CORRIDORS AND/OR AT LOCATIONS AS DETERMINED BY THE ENGINEER WHERE DAYTIME LANE CLOSURES WILL CAUSE EXCESSIVE DISRUPTION TO TRAFFIC FLOW.

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- D. QUESTIONS REGARDING THE TIMING OF LANE CLOSURES ON A PARTICULAR ROADWAY SHALL BE DIRECTED TO THE TRAFFIC SAFETY SECTION.
 - E. IT SHALL BE NOTED THAT THE PROVISIONS ABOVE ARE FOR GENERAL GUIDANCE AND THAT THE DEPARTMENT CAN BE MORE RESTRICTIVE AT ITS DISCRETION.
8. PORTABLE LIGHT ASSEMBLIES USED FOR FLAGGER STATIONS WILL BE PAID FOR UNDER ITEM 743005. PORTABLE LIGHT ASSEMBLIES USED TO ILLUMINATE WORK AREAS FOR CONTRACTOR CONVENIENCE WILL BE INCIDENTAL TO THE WORK BEING PERFORMED.

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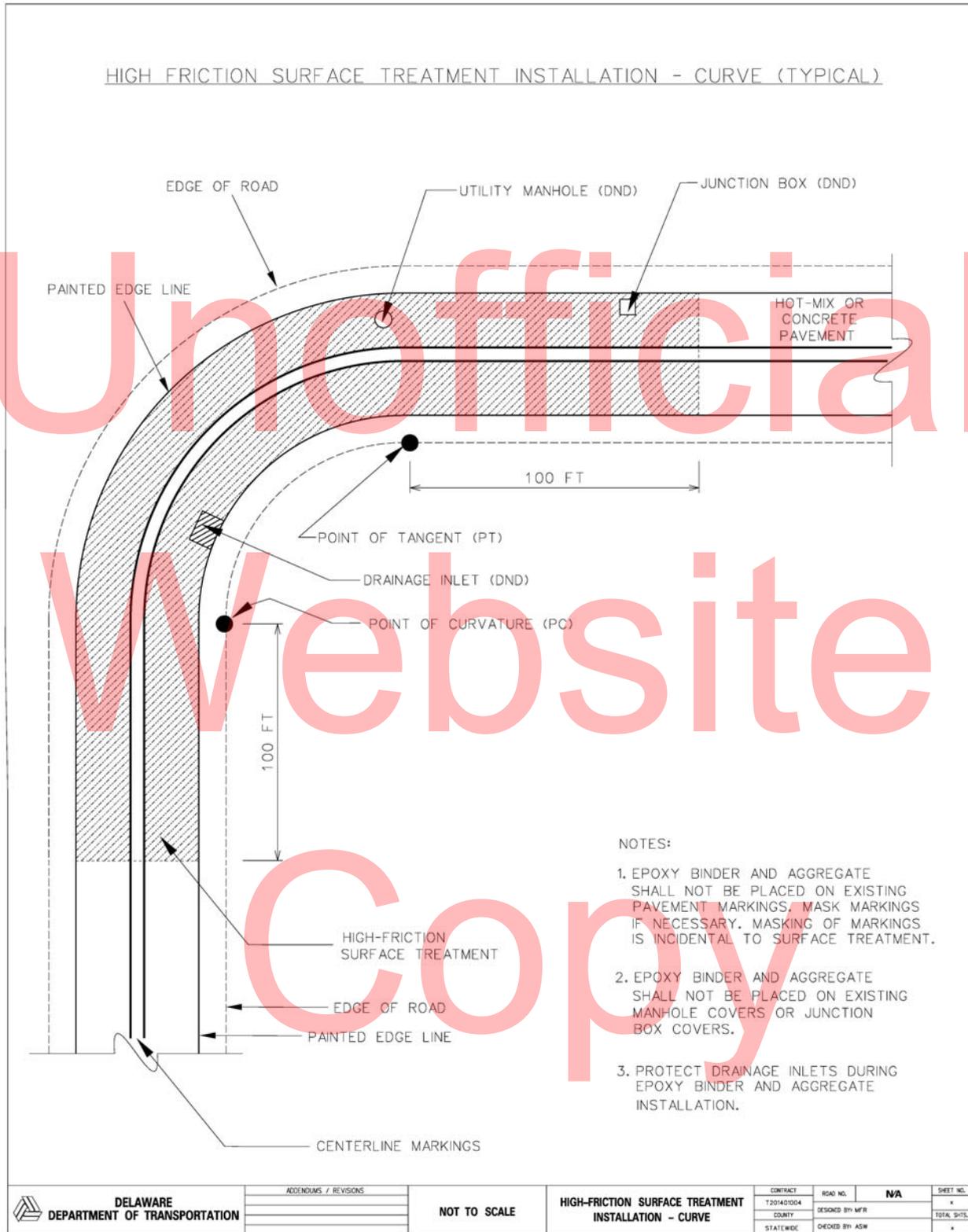
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MOBILIZATION ZONE MAPS – ZONE 1



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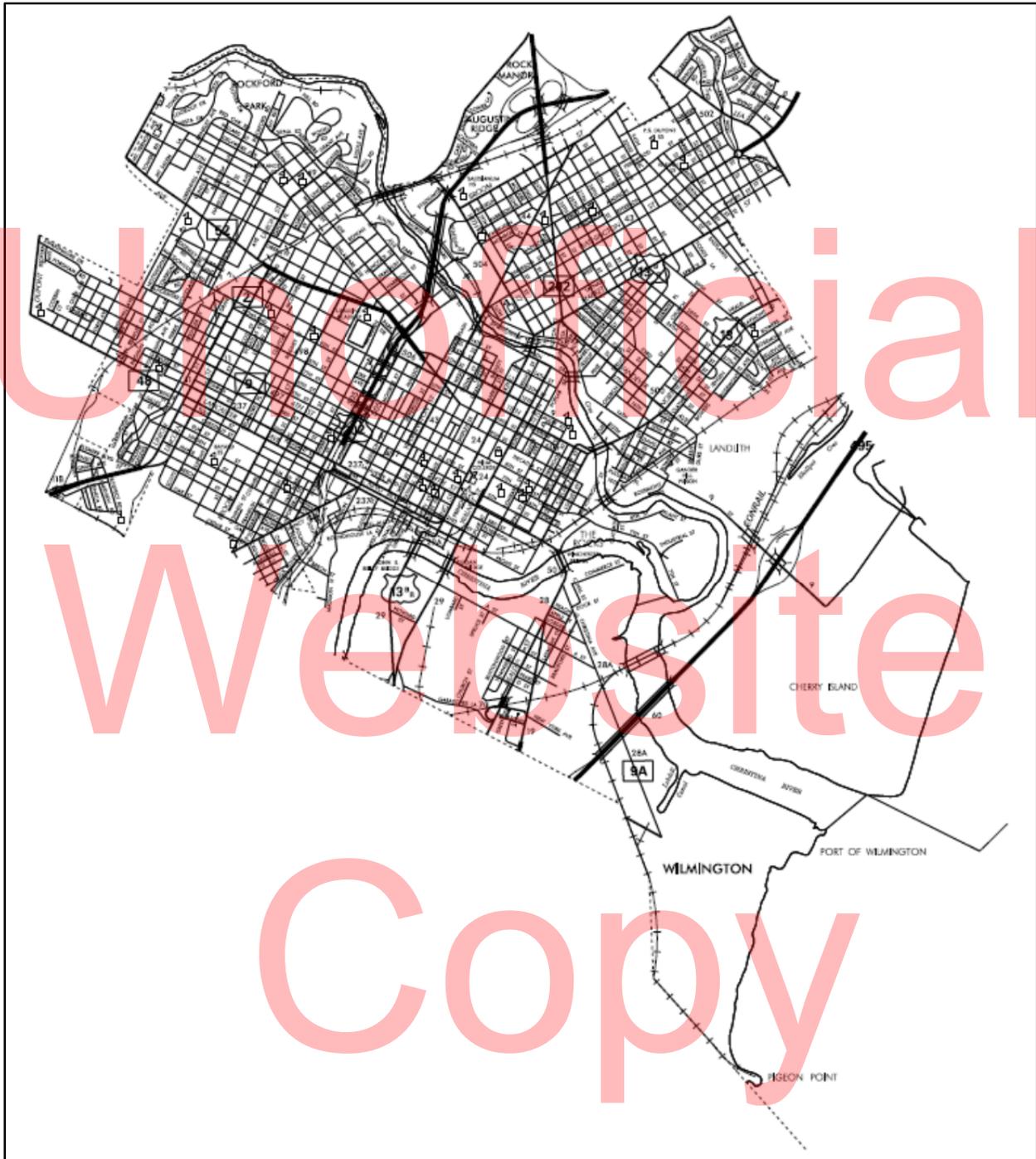
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MOBILIZATION ZONE MAPS – ZONE 4



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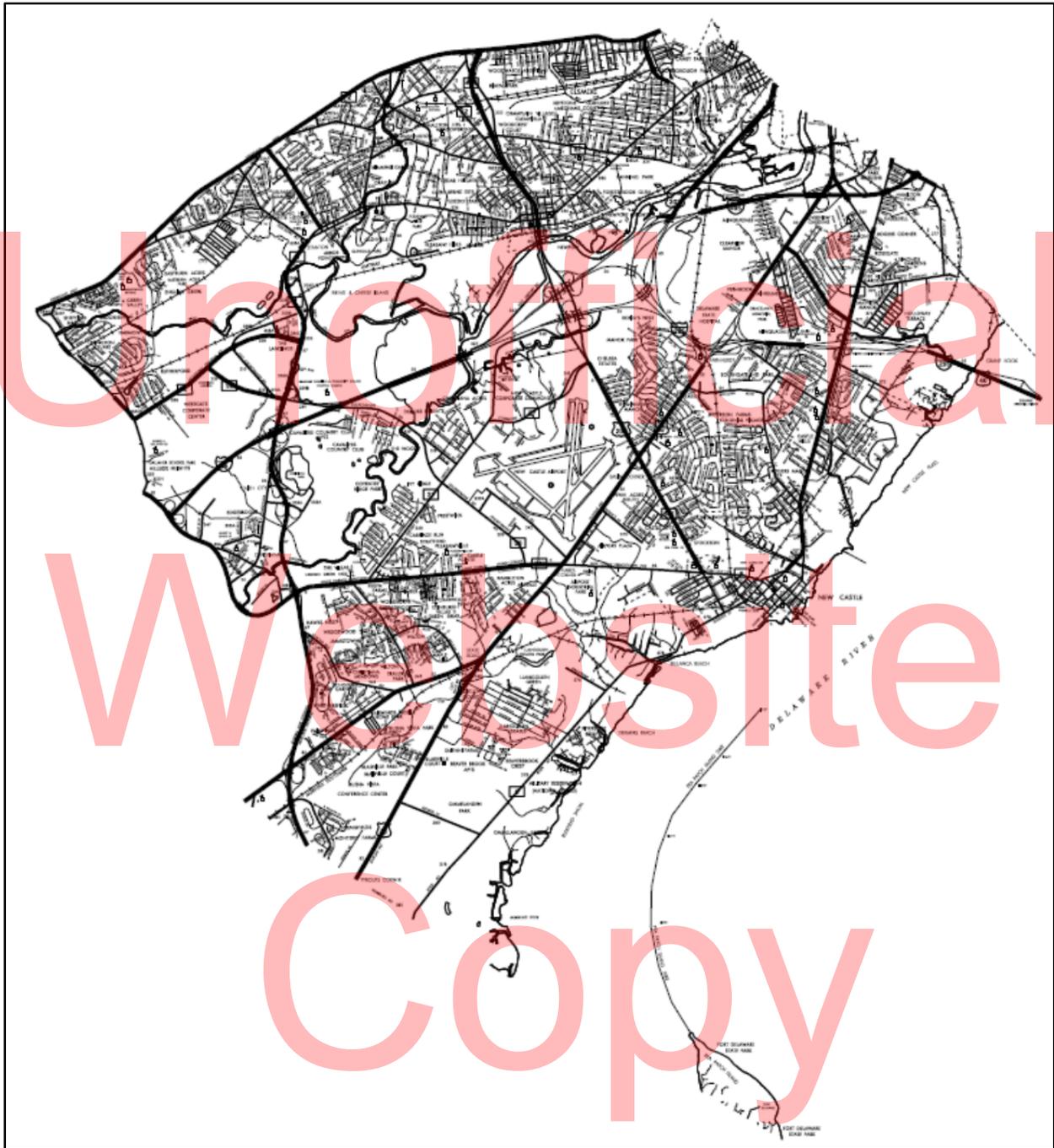
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MOBILIZATION ZONE MAPS – ZONE 5



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MOBILIZATION ZONE MAPS – ZONE 6



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MOBILIZATION ZONE MAPS – ZONE 7



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MOBILIZATION ZONE MAPS – ZONE 8



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MOBILIZATION ZONE MAPS – ZONE 9



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MOBILIZATION ZONE MAPS – ZONE 10



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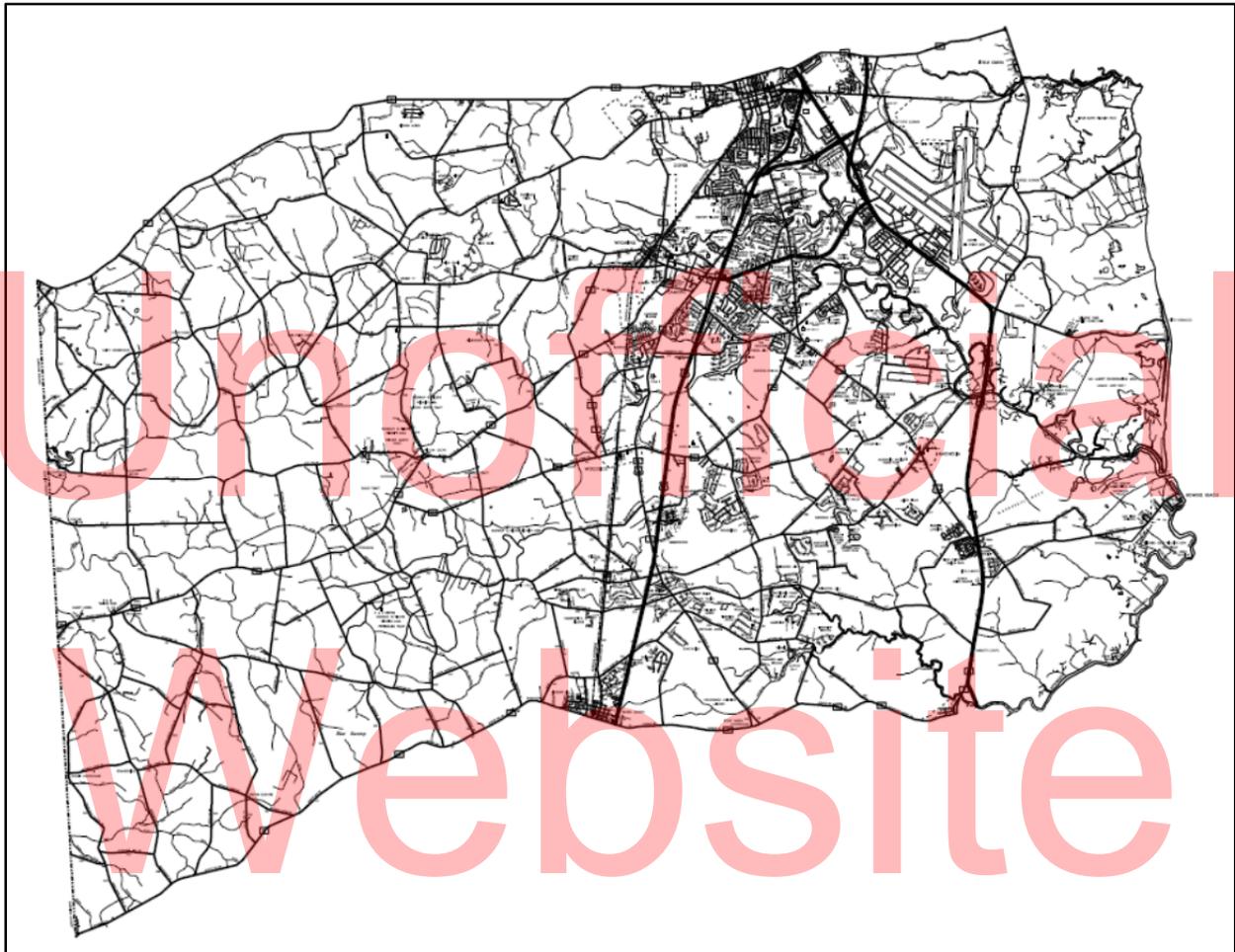
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MOBILIZATION ZONE MAPS – ZONE 11



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MOBILIZATION ZONE MAPS – ZONE 12



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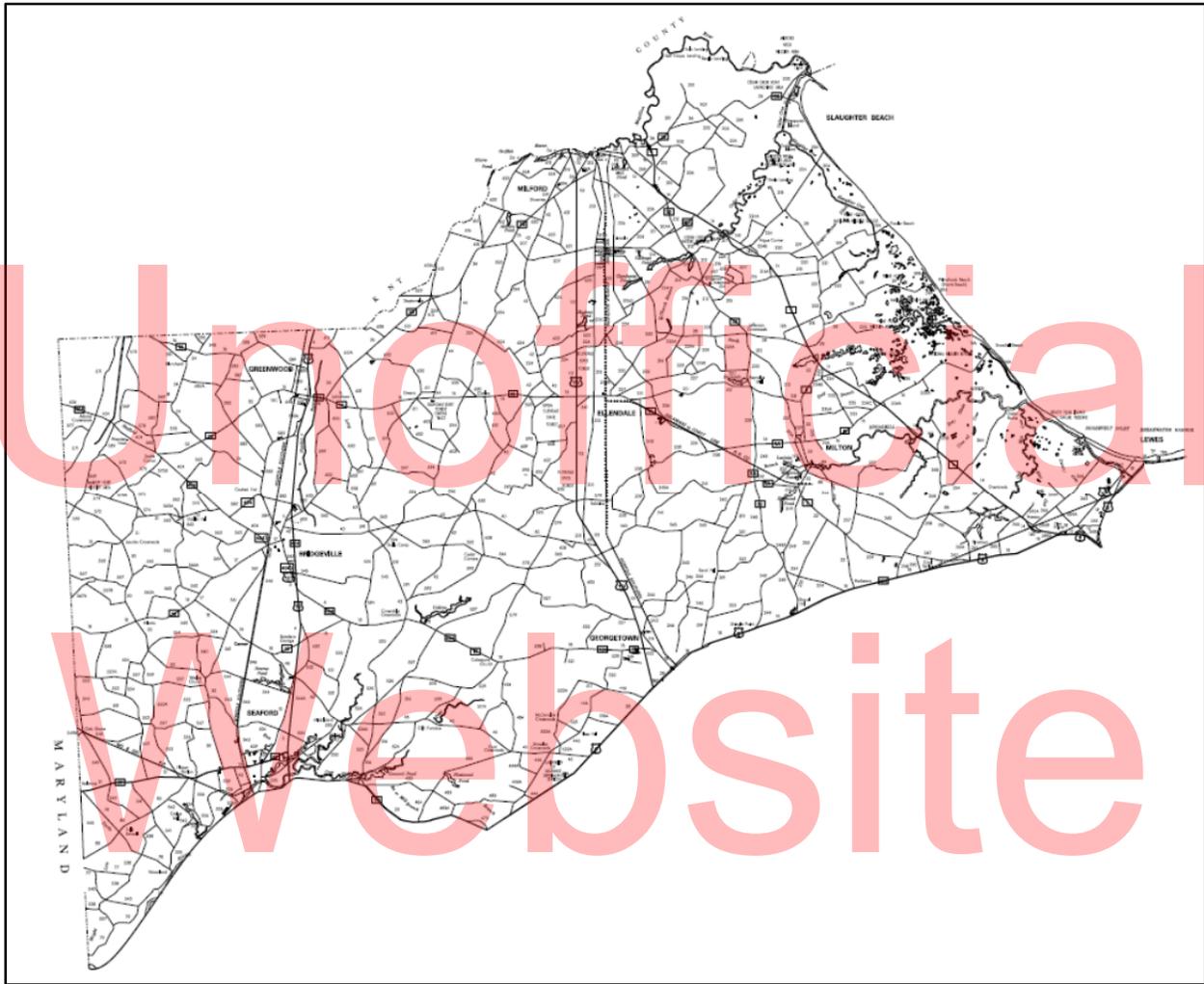
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MOBILIZATION ZONE MAPS – ZONE 12



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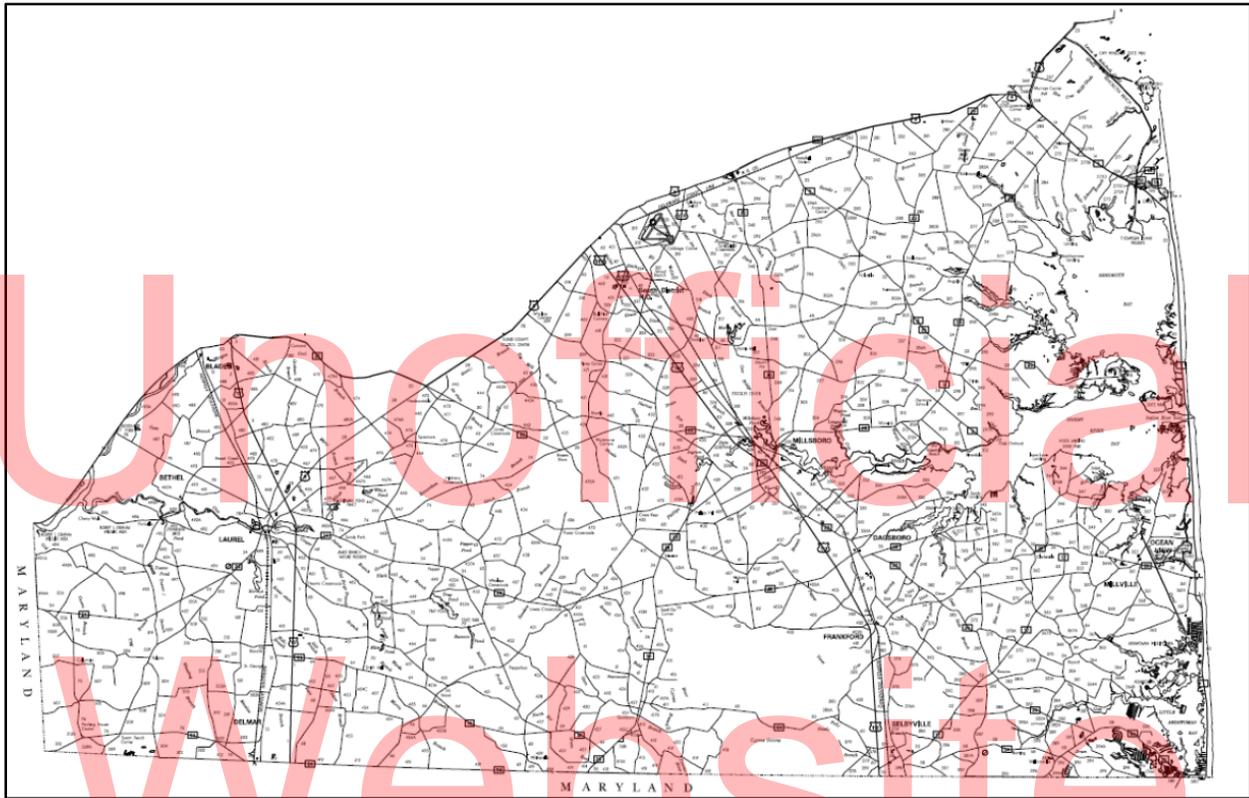
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MOBILIZATION ZONE MAPS – ZONE 14

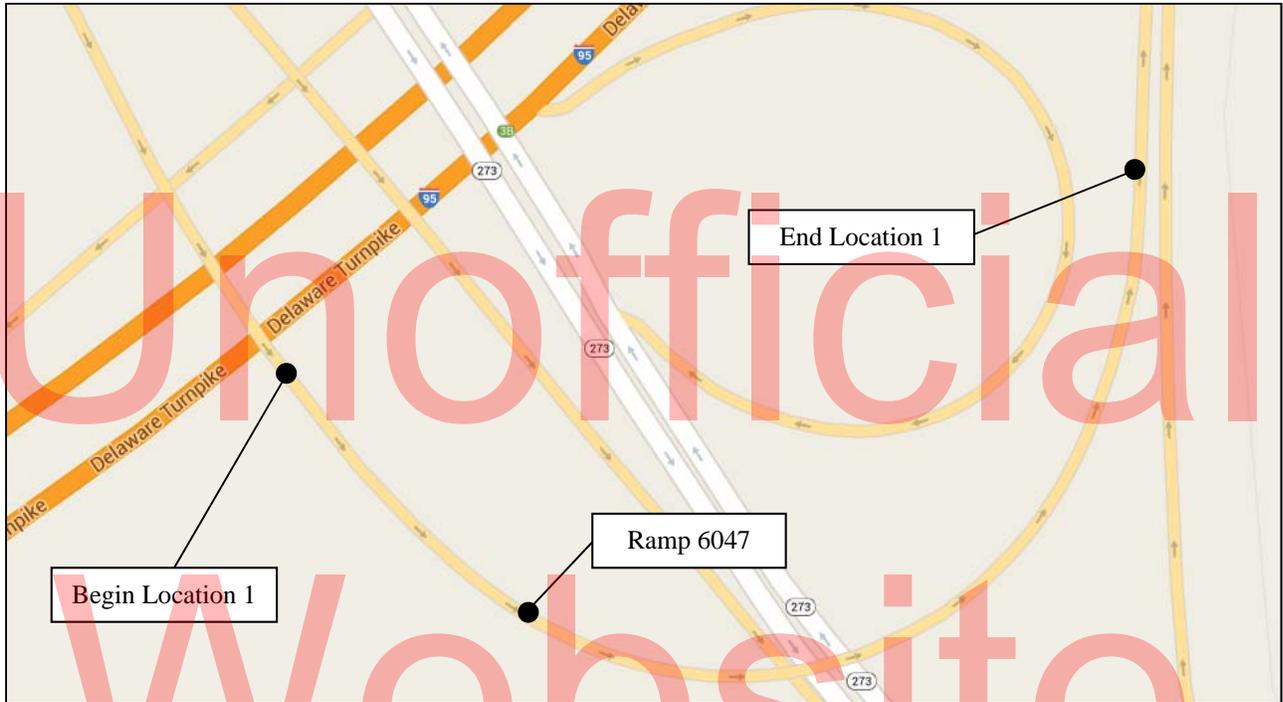


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LOCATION 1 RAMP 6047 (DE 273 EB TO I-95 NB)

LOCATION MAP



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LOCATION 1 RAMP 6047 (DE 273 EB TO I-95 NB)

LENGTH: 1,365 FT

GENERAL IMPROVEMENTS

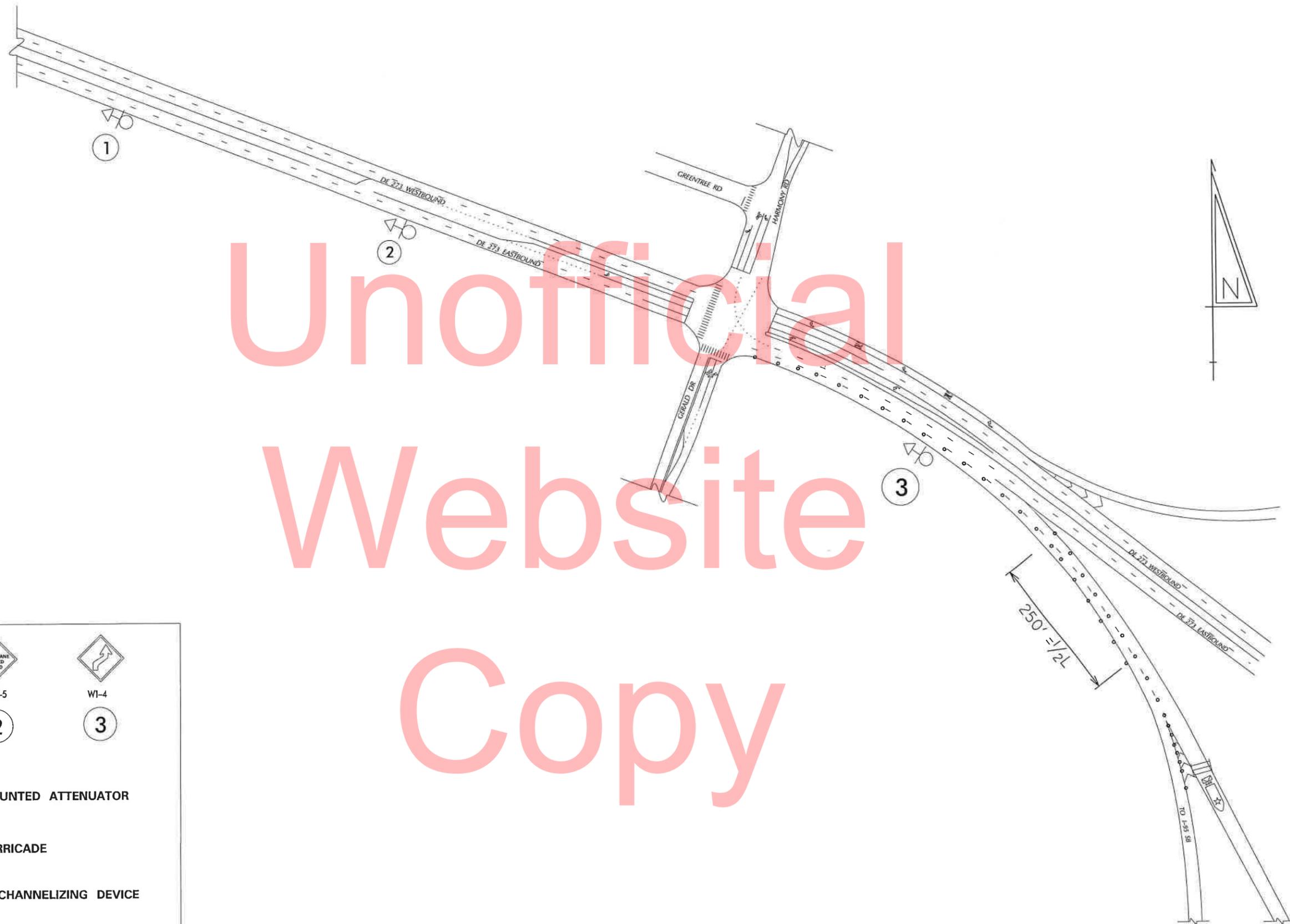
- INSTALL HIGH-FRICTION SURFACE TREATMENT ON CONCRETE AND HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: USE PROVIDED DETOUR PLAN TO CLOSE RAMP
- RESTRICTED WORK HOURS: 10:00 PM TO 5:00 AM

MATERIAL ESTIMATE FOR LOCATION 1

743003	ARROW PANELS, TYPE C	1.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	13.00 EA-DY
743006	PLASTIC DRUMS	40.00 EA-DY
743007	TRAFFIC OFFICERS	8.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	1.00 EA-DY
743023	TEMPORARY BARRICADES, TYPE III	18.00 LF-DY
743024	TEMPORARY WARNING SIGNS AND PLAQUES	13.00 EA-DY
760510	HIGH FRICTION SURFACE TREATMENT	1,600.00 SY

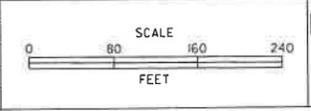


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W20-1	W20-5	W1-4
	- TRUCK MOUNTED ATTENUATOR	
	- TYPE III BARRICADE	
	- APPROVED CHANNELIZING DEVICE	
	- PROPOSED SIGN	

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS



HIGH FRICTION SURFACE TREATMENT STATEWIDE, OPEN END LOCATION 1

CONTRACT	ROAD NO.	RAMP
T 2014-01004	DESIGNED BY: MFR	MOT PLAN
COUNTY	CHECKED BY: ASW	
NEW CSATLE		RAMP CLOSURE

DE 273 EB RAMP TO I-95 NB

SHEET NO. 57
TOTAL SHEETS 57

PORTABLE CHANGEABLE MESSAGE SIGNS

PRIOR TO DETOUR
(NO DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1

I-95 NB
RAMP
TO CLOSE

XXXXXX
XPM-XAM

DURING DETOUR
(DISPLAY UPON IMPLEMENTATION OF DETOUR)

PCMS-1

I-95 NB
RAMP
CLOSED

USE 95S
TO 896S
TO I-95N

DURING DETOUR
(DISPLAY UPON IMPLEMENTATION OF DETOUR)

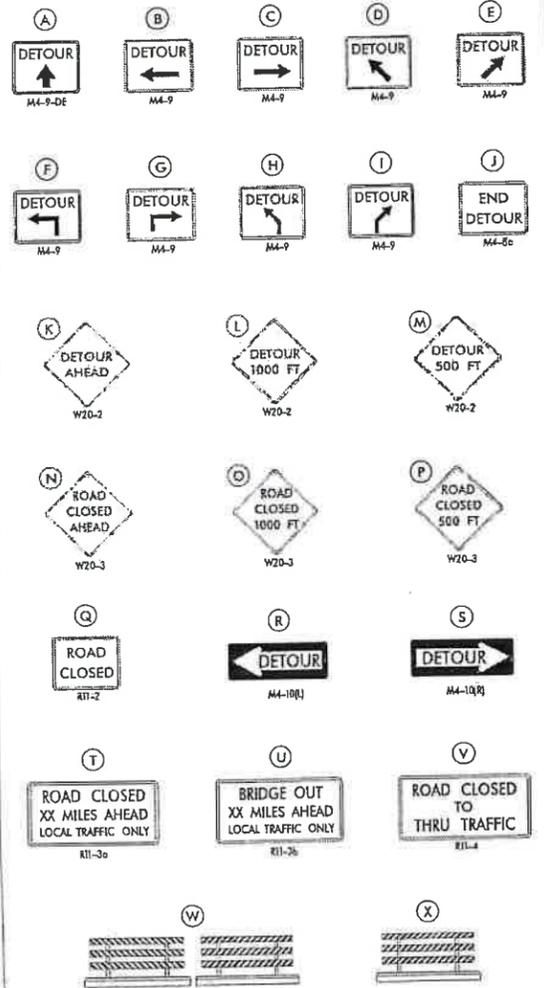
PCMS-2

TO I-95N
USE
EXIT 1A

SPECIAL SIGNS



LEGEND



GENERAL NOTES

- ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
- DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
- SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
- SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD) WILL PREVAIL.
- SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
- WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
- "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

W:\MSV\CELLS\PROJDEV\ASB\CEL

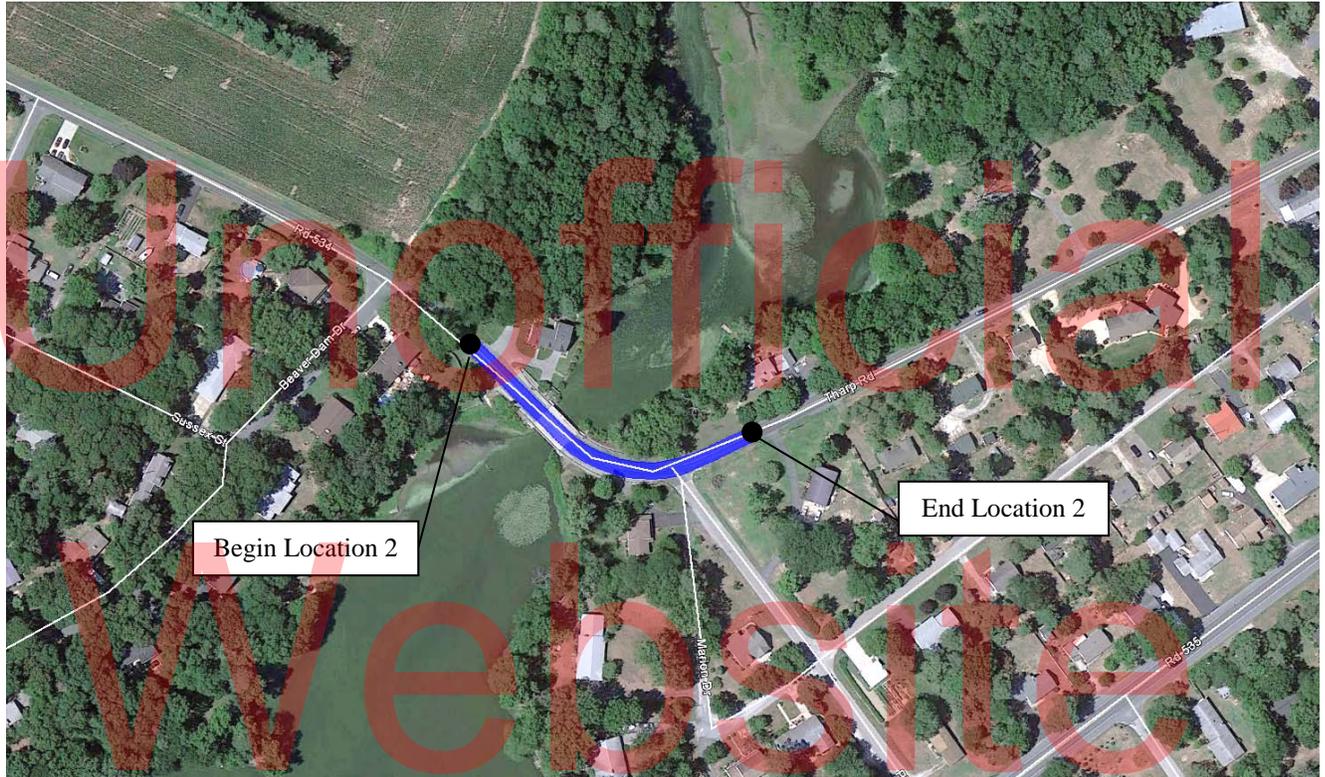
RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: _____	RECOMMENDED <i>[Signature]</i> DATE: 10/13/14	APPROVED CHIEF SAFETY OFFICER <i>[Signature]</i> DATE: 10-13-14	APPROVED TRAFFIC ENGINEER <i>[Signature]</i> DATE: 10/14/14											
<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>		NOT TO SCALE	HIGH FRICTION SURFACE TREATMENT STATEWIDE, OPEN END LOCATION 1	<table border="1"> <tr> <td>CONTRACT</td> <td>ROAD NO.</td> <td>RAMP</td> <td rowspan="3">VEHICULAR DETOUR PLAN</td> <td rowspan="3">SHEET NO. 258</td> </tr> <tr> <td>T201401004</td> <td>DESIGNED BY: MFR</td> <td></td> </tr> <tr> <td>COUNTY</td> <td>CHECKED BY: ASW</td> <td></td> </tr> </table>	CONTRACT	ROAD NO.	RAMP	VEHICULAR DETOUR PLAN	SHEET NO. 258	T201401004	DESIGNED BY: MFR		COUNTY	CHECKED BY: ASW	
CONTRACT	ROAD NO.	RAMP	VEHICULAR DETOUR PLAN	SHEET NO. 258											
T201401004	DESIGNED BY: MFR														
COUNTY	CHECKED BY: ASW														
				<table border="1"> <tr> <td>TOTAL SHTS.</td> <td>57</td> </tr> </table>	TOTAL SHTS.	57									
TOTAL SHTS.	57														

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 2 **THARP ROAD (S 534)**
From 160 Feet east of Beaver Dam Drive to 115 feet east of Marion Drive

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

Page 27 of 57

LOCATION 2 THARP ROAD (S 534)

LENGTH: 335 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON CONCRETE AND HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 2

743010	TEMPORARY WARNING SIGNS AND PLAQUES	10.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	24.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	1,122.00 SY

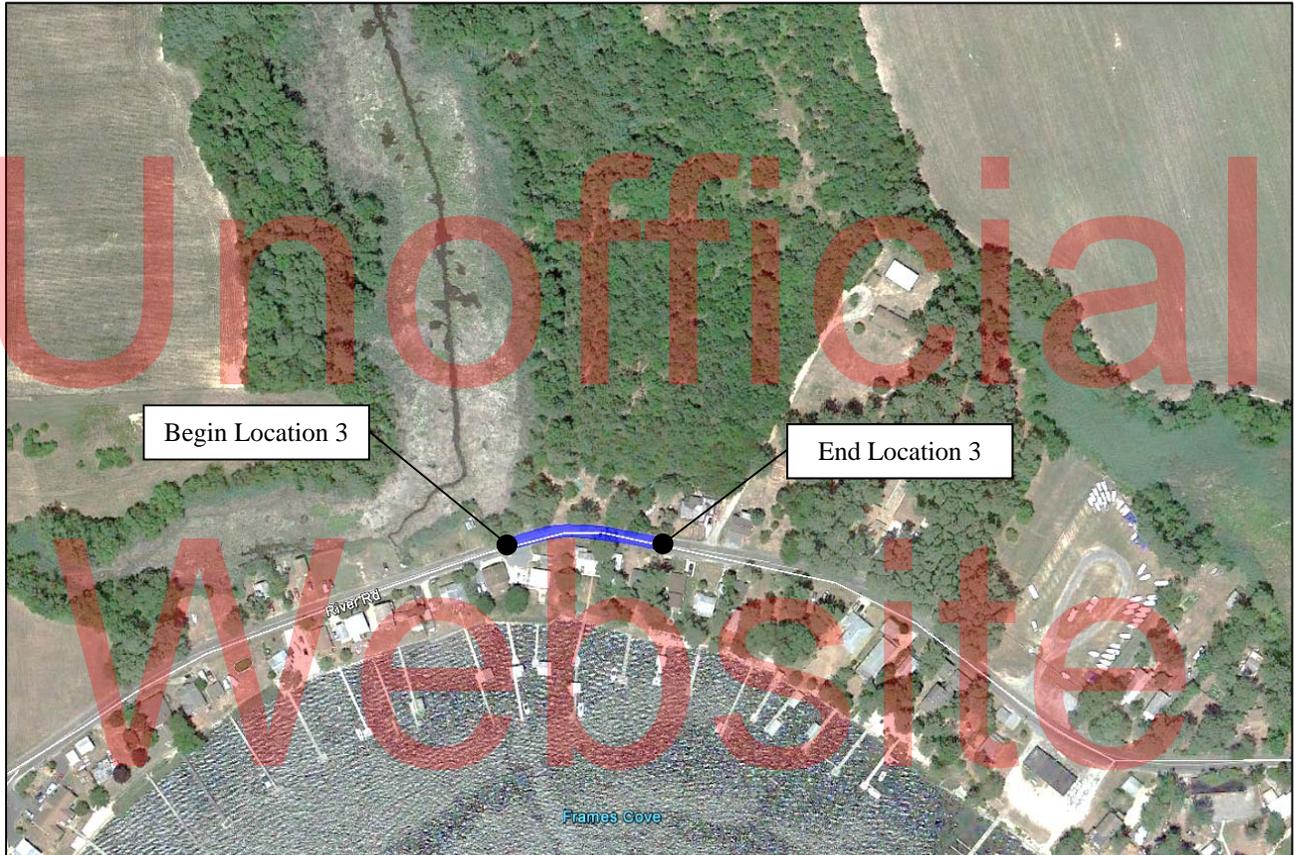
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Website
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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 3 **RIVER ROAD (S 312)**
From 1,905 feet west of Chief Road to 1,644 feet west of Chief Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

Page 29 of 57

LOCATION 3 RIVER ROAD (S 312)

LENGTH: 261 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 3

743010	TEMPORARY WARNING SIGNS AND PLAQUES	8.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	578.00 SY

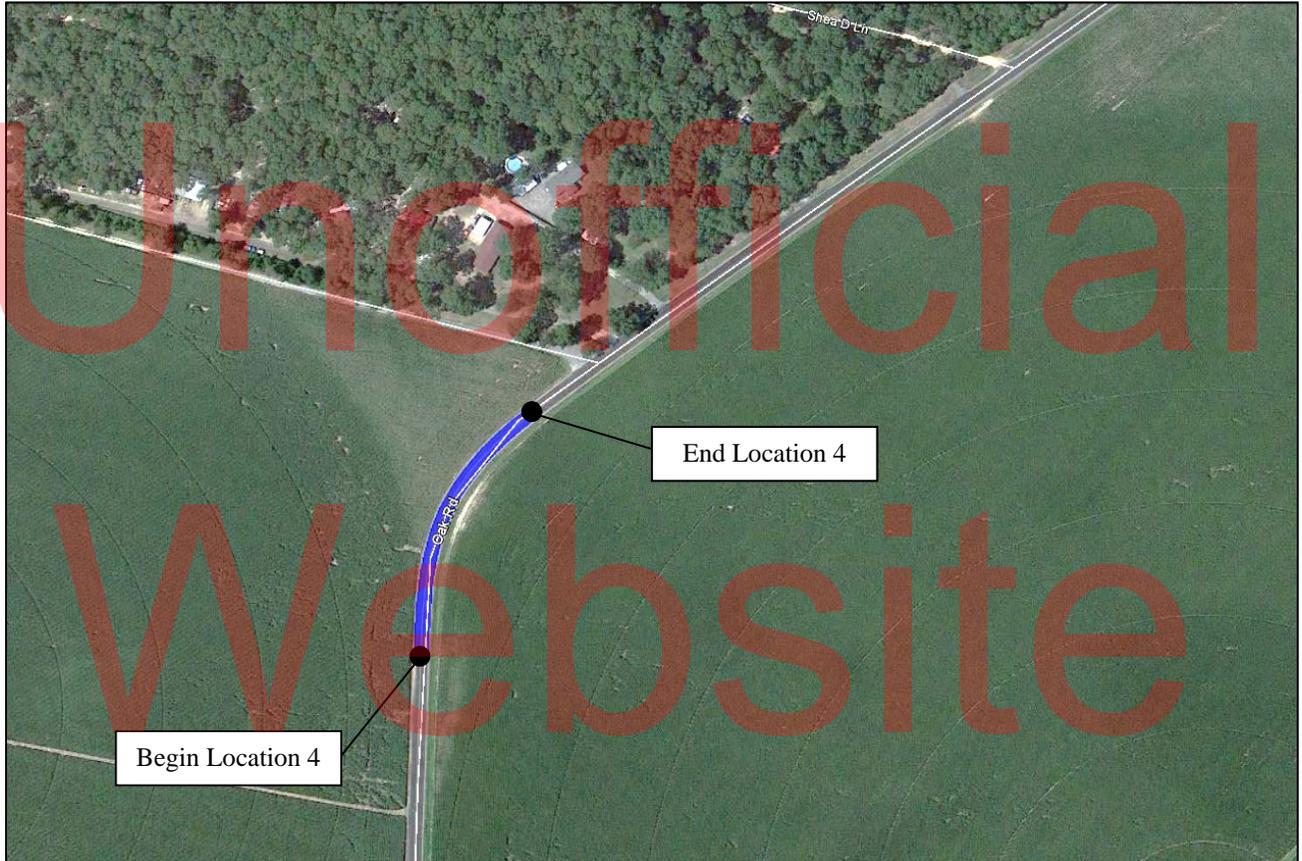
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Website
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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 4 **OAK ROAD (S 594)**
From 0.77 mile north of Rifle Range Road to 0.86 mile north of Rifle Range Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

Page 31 of 57

LOCATION 4 OAK ROAD (S 594)

LENGTH: 452 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 4

743010	TEMPORARY WARNING SIGNS AND PLAQUES	8.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	1,030.00 SY

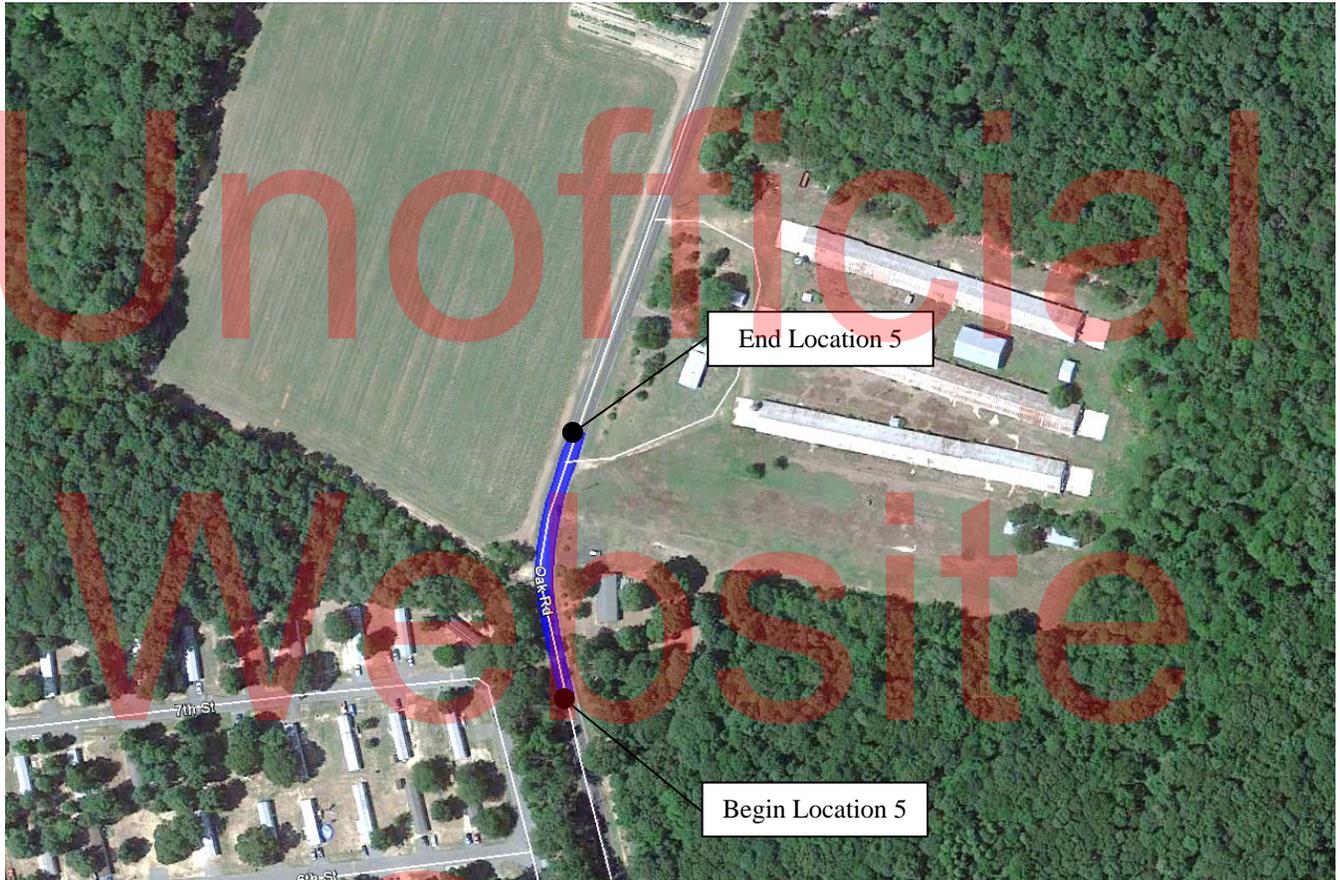
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Website
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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 5 **OAK ROAD (S 594)**
From 0.61 mile north of DE 404 to 0.68 mile north of DE 404

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

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LOCATION 5 OAK ROAD (S 594)

LENGTH: 380 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 5

743010	TEMPORARY WARNING SIGNS AND PLAQUES	8.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	906.00 SY

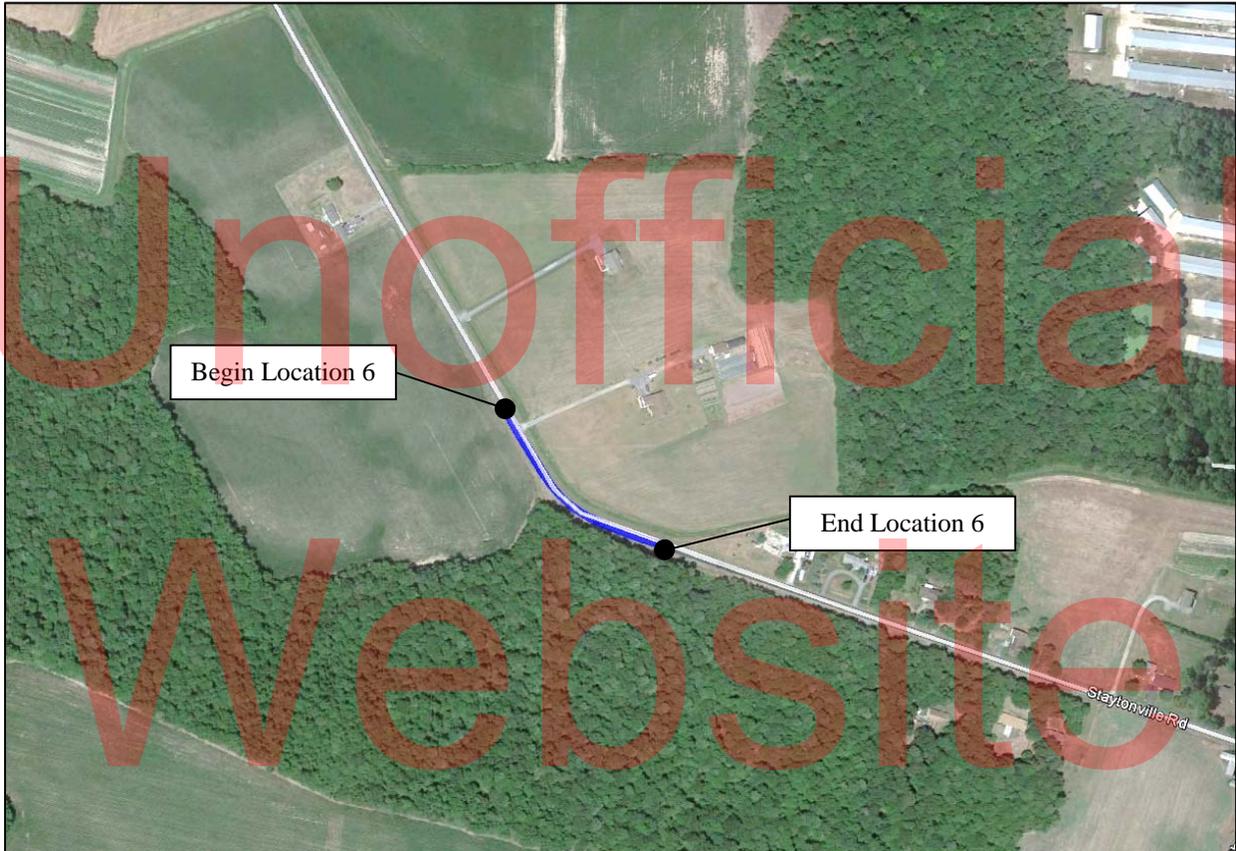
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Website
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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 6 **STAYTONVILLE ROAD (S 224)**
From 0.64 mile south of Shawnee Road to 0.75 mile south of Shawnee Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

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LOCATION 6 STAYTONVILLE ROAD (S 224)

LENGTH: 581 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 6

743010	TEMPORARY WARNING SIGNS AND PLAQUES	8.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	1,245.00 SY

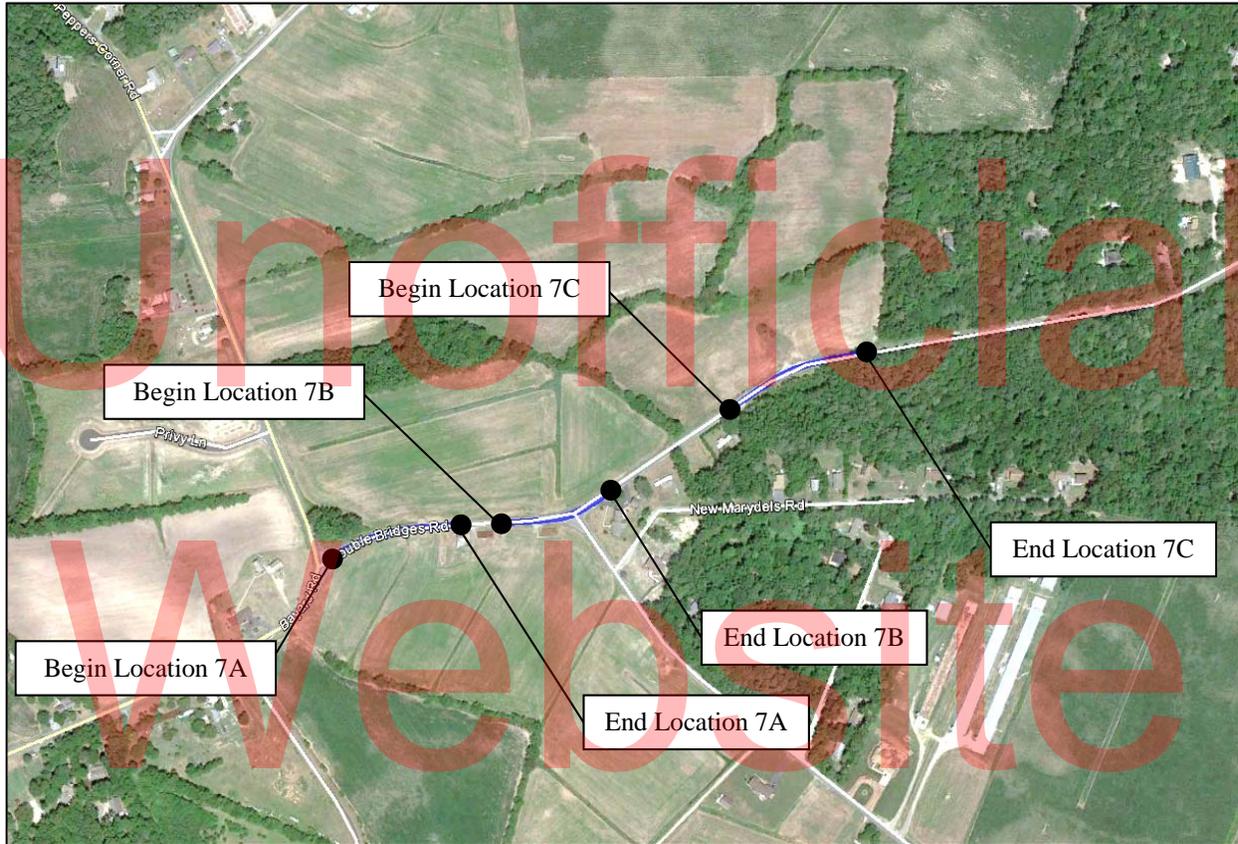
Unofficial
Website
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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 7 DOUBLE BRIDGES ROAD (S 363)
From Bayard Road to 0.22 mile east of Camp Barnes Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

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LOCATION 7 DOUBLE BRIDGES ROAD (S 363)

LENGTH: LOCATION 7A: 415 FT

LOCATION 7B: 387 FT

LOCATION 7C: 507 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 7

743010	TEMPORARY WARNING SIGNS AND PLAQUES	28.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	56.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	2,774.00 SY

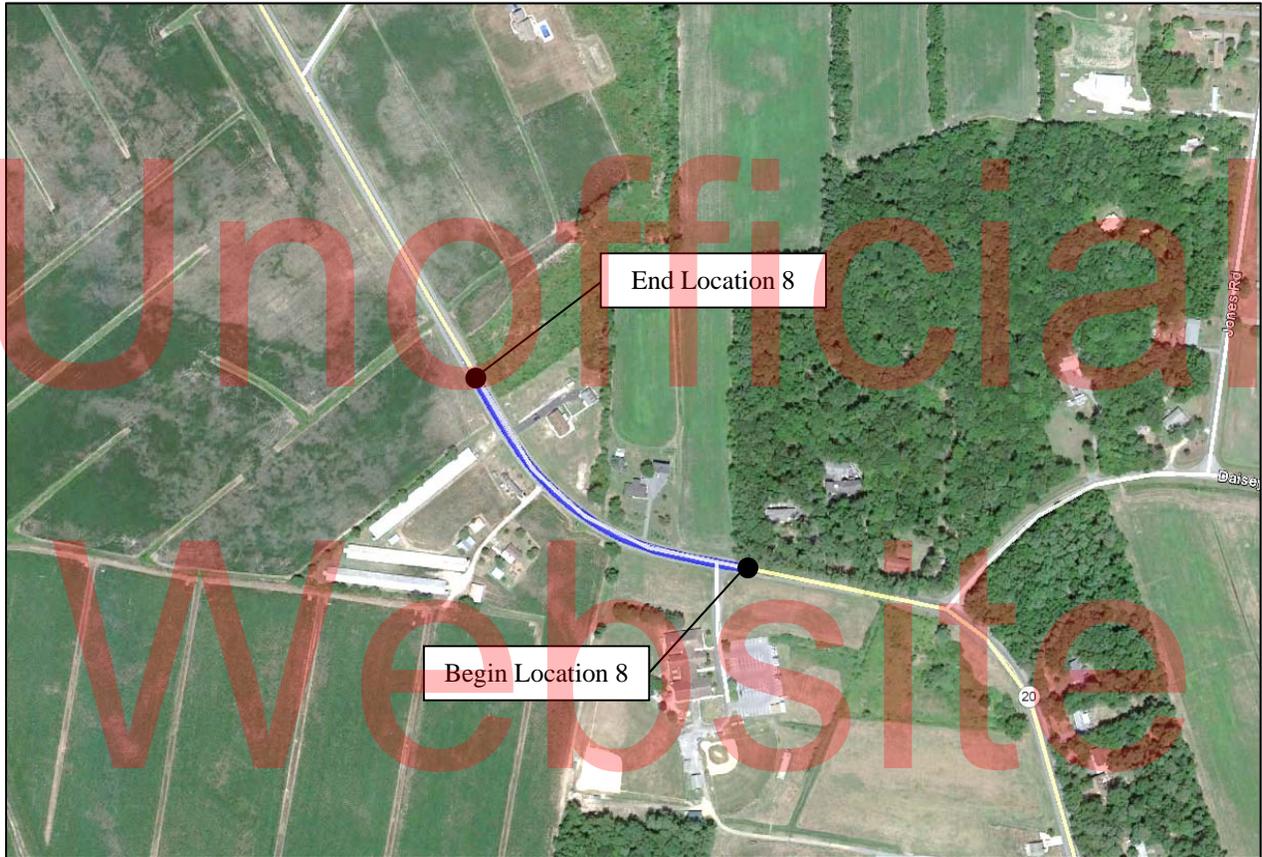
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Website
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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 8 **PYLE CENTER ROAD (S 382)**
From 0.11 mile north of Daisey Road to 0.29 mile north of Daisey Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

Page 39 of 57

LOCATION 8 PYLE CENTER ROAD (S 382)

LENGTH: 986 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 8

743010	TEMPORARY WARNING SIGNS AND PLAQUES	8.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	24.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	2,228.00 SY

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Website
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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 9 **NEW LONDON ROAD (N 262)**
From 0.13 mile south of Campbell Road to 0.23 mile south of Campbell Road
Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

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LOCATION 9 NEW LONDON ROAD (N 262)

LENGTH: 538 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: ROAD CLOSURE WITH DETOUR
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 9

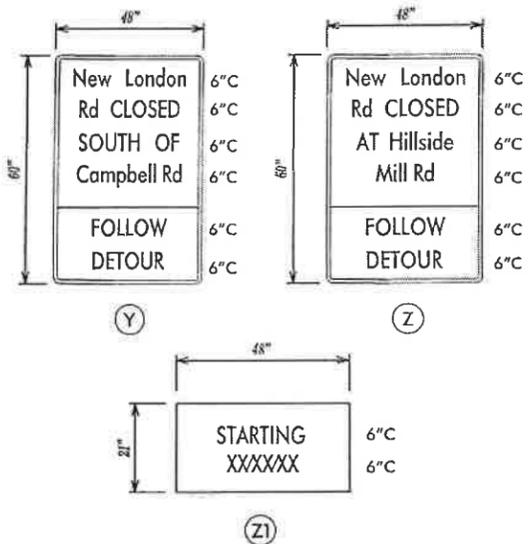
743023	TEMPORARY BARRICADES, TYPE III	54.00 LF-DY
743010	TEMPORARY WARNING SIGNS AND PLAQUES	128.00 EA-DY
743056	FLAGGER, NEW CASTLE COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	1,159.00 SY

Unofficial
Website
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PORTABLE CHANGEABLE MESSAGE SIGNS

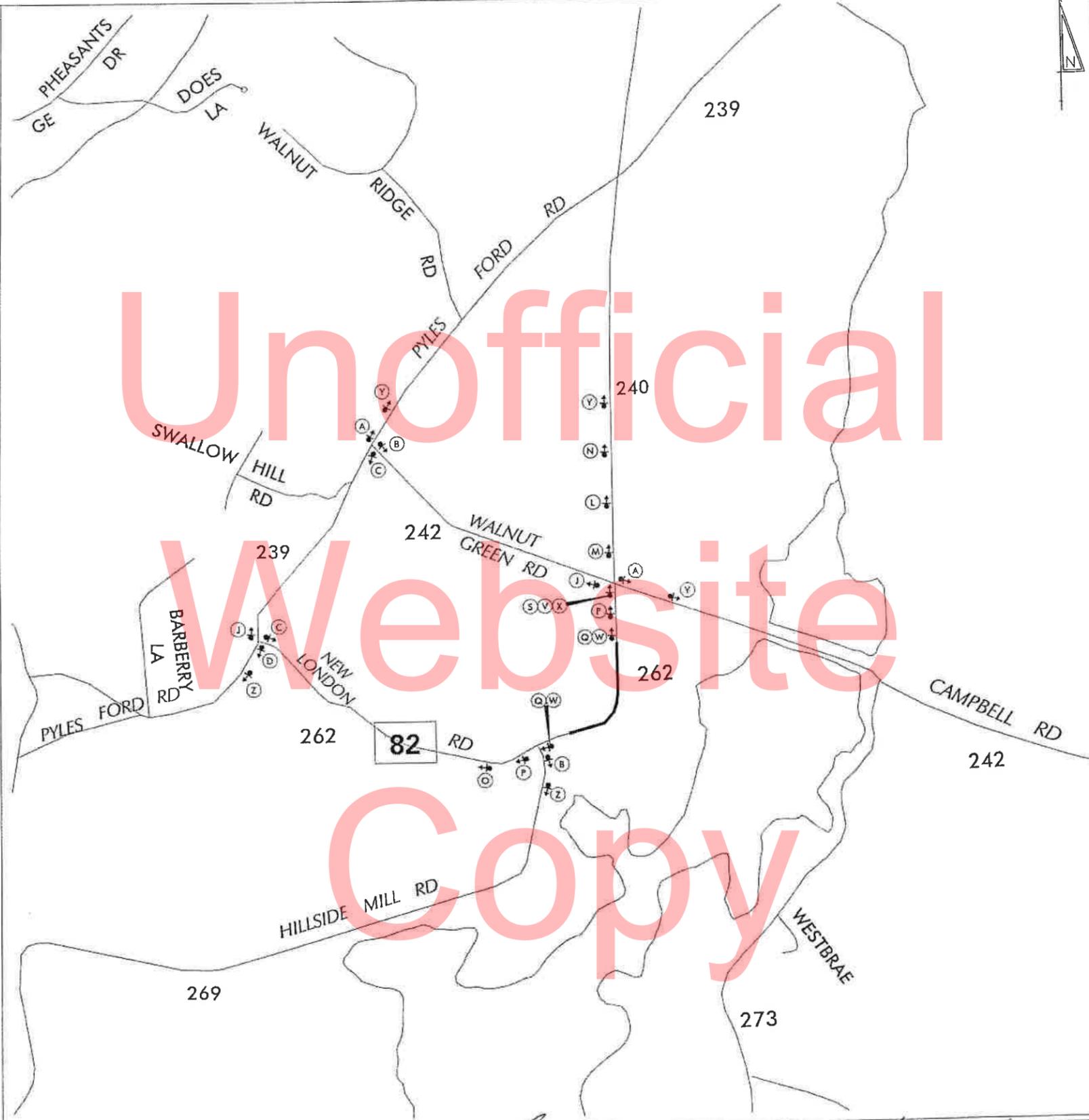


SPECIAL SIGNS

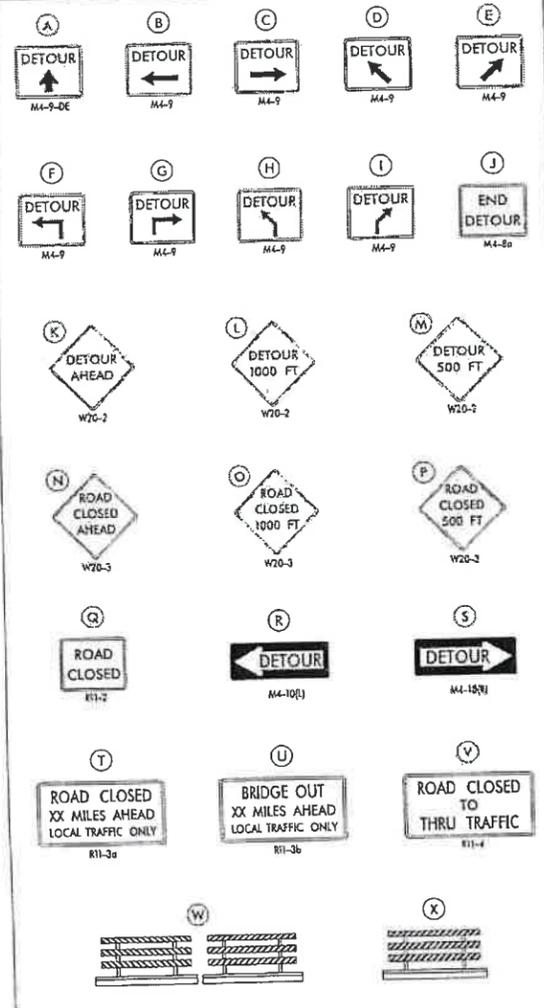


*DG RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND

*STARTING PLAQUE (ZI) SHALL BE AFFIXED OVER THE "FOLLOW DETOUR" PORTION OF SPECIAL SIGNS 10 DAYS PRIOR TO IMPLEMENTATION OF DETOUR AND REMOVED WHEN DETOUR IS IN EFFECT.



LEGEND



GENERAL NOTES

- ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
- DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
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- SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD) WILL PREVAIL.
- SIGNS "N" THROUGH "O" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
- WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
- "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

W:\MSV\CELLS\PROJDEV\ASB.GEL

RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: 10/27/14	APPROVED CHIEF SAFETY OFFICER: <i>[Signature]</i> DATE: 10-21-14	APPROVED TRAFFIC ENGINEER: <i>[Signature]</i> DATE: 10/22/14
<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>		<p>NOT TO SCALE</p>		<p>HIGH FRICTION SURFACE TREATMENT STATEWIDE, OPEN END LOCATION 9</p>
<p>ADDENDUM / REVISIONS</p>		<p>CONTRACT: T201401004</p>		<p>ROAD NO: N262</p>
<p>COUNTY: NEW CASTLE</p>		<p>DESIGNED BY: MFR</p>		<p>VEHICULAR DETOUR PLAN</p>
<p>CHECKED BY: ASW</p>		<p>CHECKED BY: ASW</p>		<p>NEW LONDON RD (N262)</p>
<p>SHEET NO. 41A</p>		<p>TOTAL SHEETS 57</p>		<p>DATE: 10/22/14</p>

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004

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FEDERAL AID NO.: ESTP-2014(38)

HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 10

MONTCHANIN ROAD (N 232)

From 0.44 mile north of Adams Dam Road to 0.54 mile north of Adams Dam Road
Road

LOCATION MAP



DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

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LOCATION 10 **MONTCHANIN ROAD (N 232)**

LENGTH: 508 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: ROAD CLOSURE WITH DETOUR
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 10

743003	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	20.00 EA-DY
743023	TEMPORARY BARRICADES, TYPE III	120.00 LF-DY
743010	TEMPORARY WARNING SIGNS AND PLAQUES	62.00 EA-DY
743056	FLAGGER, NEW CASTLE COUNTY, FEDERAL	32.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	591.00 SY

Unofficial
Website
Copy

PORTABLE CHANGEABLE MESSAGE SIGNS

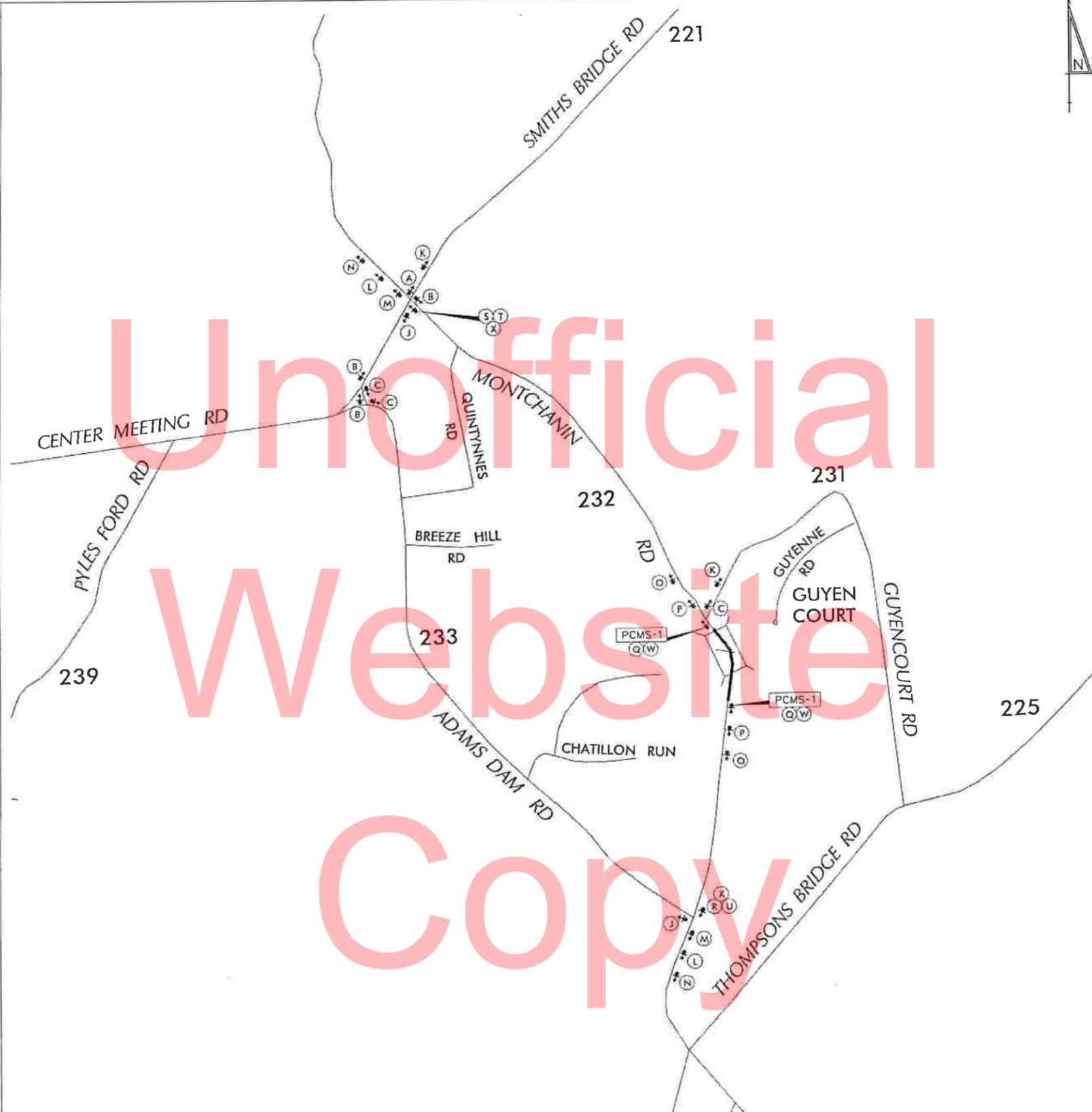
PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1

DE 100
TO CLOSE

STARTING
XX/XX/XX

SPECIAL SIGNS



LEGEND

(A) DETOUR M4-9-DE	(B) DETOUR M4-9	(C) DETOUR M4-9	(D) DETOUR M4-9	(E) DETOUR M4-9
(F) DETOUR M4-9	(G) DETOUR M4-9	(H) DETOUR M4-9	(I) DETOUR M4-9	(J) END DETOUR M4-8c
(K) DETOUR AHEAD W20-2	(L) DETOUR 1000 FT W20-2	(M) DETOUR 500 FT W20-2		
(N) ROAD CLOSED AHEAD W20-3	(O) ROAD CLOSED 1000 FT W20-3	(P) ROAD CLOSED 500 FT W20-3		
(Q) ROAD CLOSED R11-2	(R) DETOUR M4-10j	(S) DETOUR M4-10k		
(T) ROAD CLOSED 3/4 MILE AHEAD LOCAL TRAFFIC ONLY R11-2a	(U) ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY R11-2a	(V) ROAD CLOSED TO THRU TRAFFIC R11-4		
(W) BARRICADE		(X) BARRICADE		

GENERAL NOTES

- ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
- DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
- SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
- SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD) WILL PREVAIL.
- SIGNS "N" THROUGH "O" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
- WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
- "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

W:\MSV8\CELLS\PROJDEV\ASB\GEL

RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: 10/13/14	APPROVED CHIEF SAFETY OFFICER _____ DATE: 10-17-14	APPROVED TRAFFIC ENGINEER _____ DATE: 10/14/14	
<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>		ADDENDUM / REVISIONS	NOT TO SCALE	<p>CONTRACT T201401004</p> <p>ROAD NO. N232</p> <p>DESIGNED BY: MFR</p> <p>COUNTY NEW CASTLE</p> <p>CHECKED BY: ASW</p>	<p>VEHICULAR DETOUR PLAN</p> <p>MONTCHANIN RD (N232)</p> <p>SHEET NO. 43A</p> <p>TOTAL SHTS. 57</p>

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004

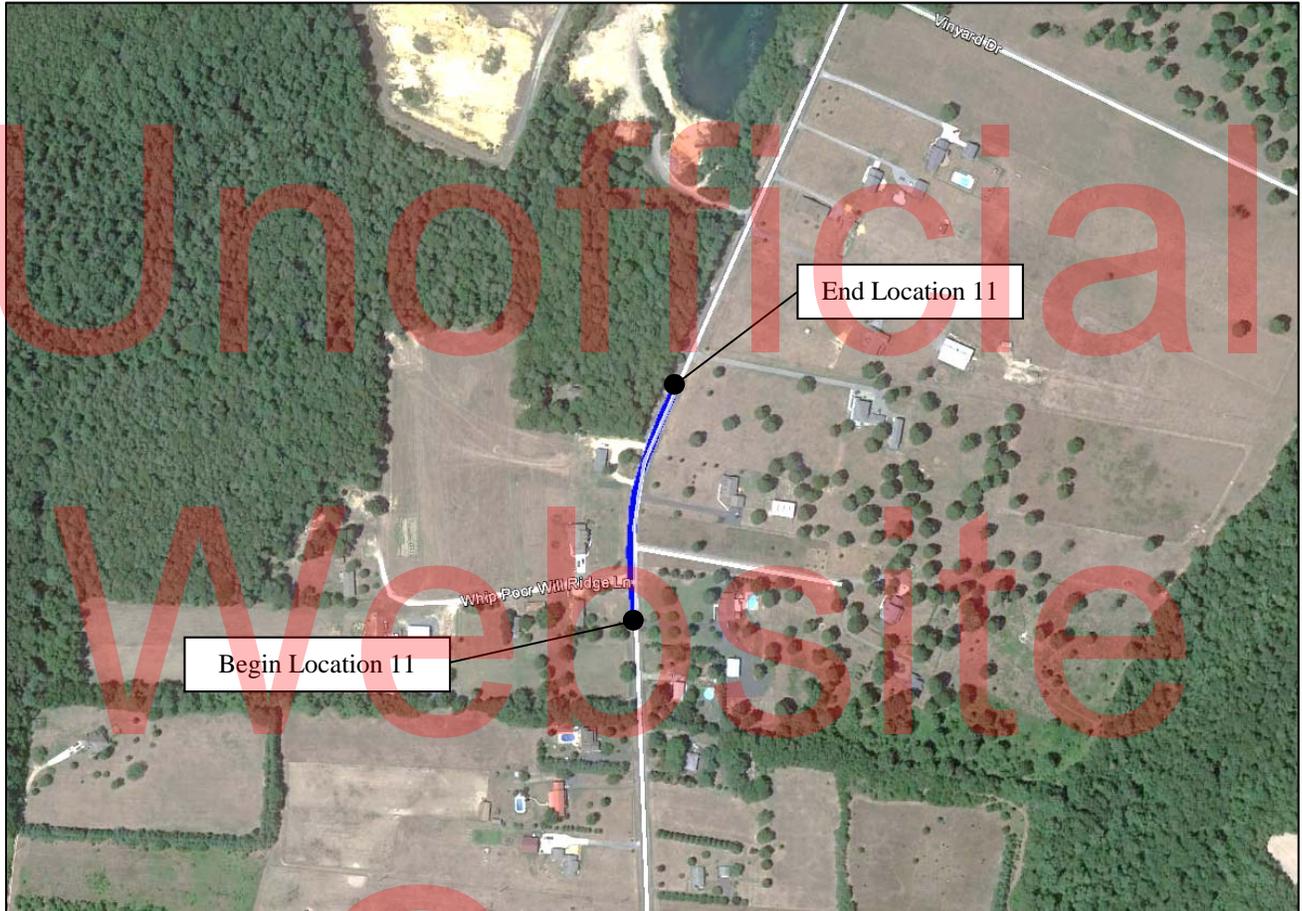
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FEDERAL AID NO.: ESTP-2014(38)

HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 11 GRIFFITH LAKE DRIVE (S 633)
From 0.34 mile north of Abbots Pond Road to 0.46 mile north of Abbots Pond Road

LOCATION MAP



DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

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LOCATION 11 GRIFFITH LAKE DRIVE (S 633)

LENGTH: 634 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: ROAD CLOSURE WITH DETOUR
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 11

743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	26.00 EA-DY
743023	TEMPORARY BARRICADES, TYPE III	66.00 LF-DY
743010	TEMPORARY WARNING SIGNS AND PLAQUES	30.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	1,383.00 SY

Unofficial
Website
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PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1
GRIFFITH LAKE DR TO CLOSE XXXXXX
 XAM-XPM

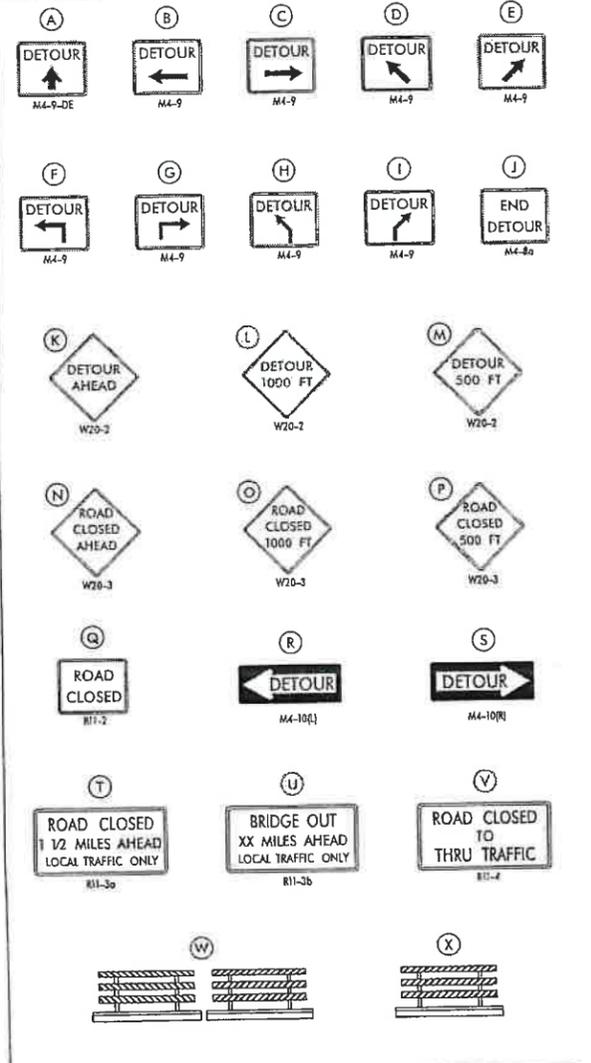
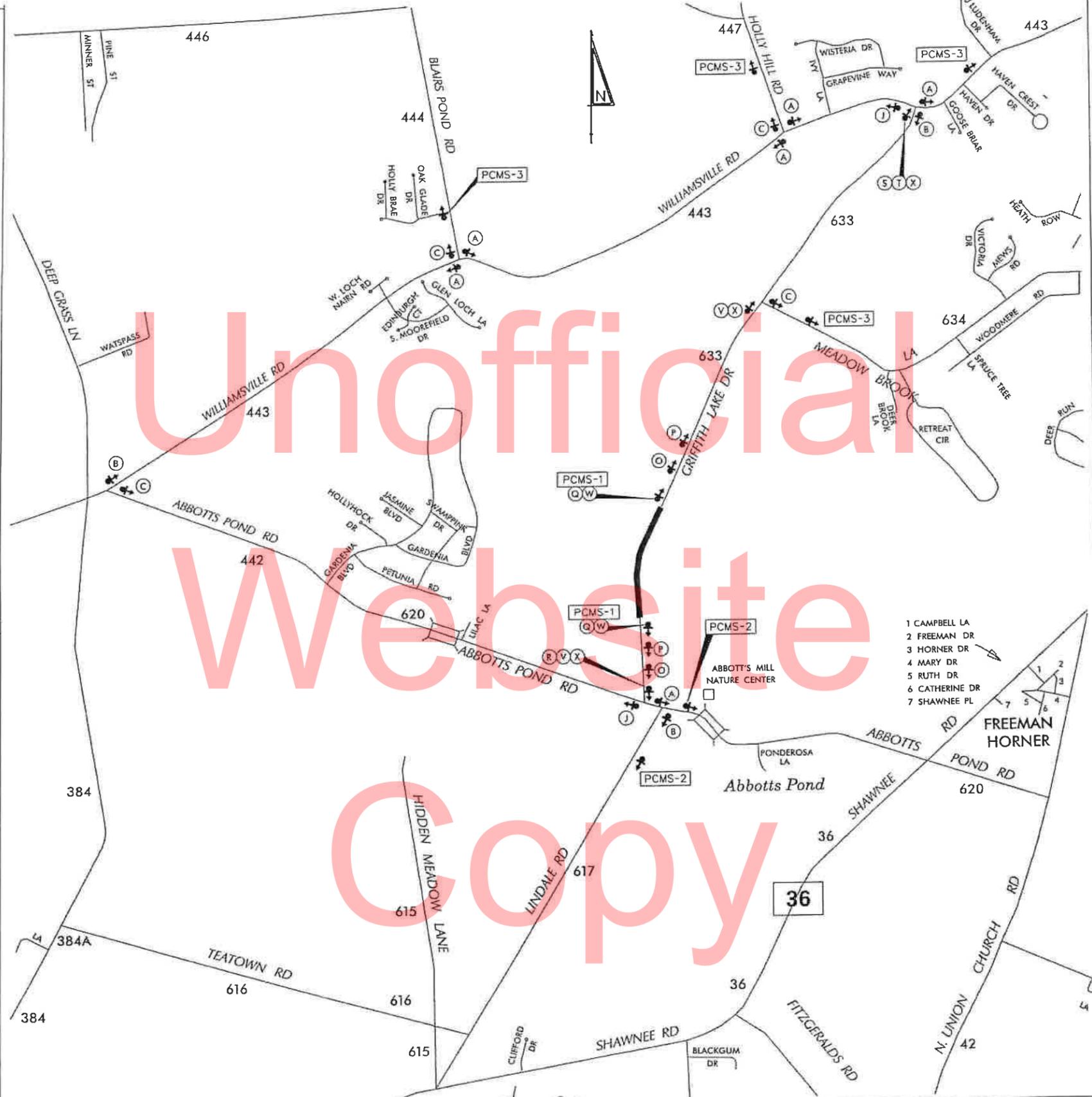
DURING DETOUR
(DISPLAY WHILE DETOUR IS IN EFFECT)

PCMS-2
GRIFFITH LAKE DR CLOSED NORTH OF ABBOTTS POND RD

DURING DETOUR
(DISPLAY WHILE DETOUR IS IN EFFECT)

PCMS-3
GRIFFITH LAKE DR CLOSED SOUTH OF MEADOW BROOK LN

SPECIAL SIGNS



GENERAL NOTES

- ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
- DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
- SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
- SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD) WILL PREVAIL.
- SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
- WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
- "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: 10/23/14	APPROVED CHIEF SAFETY OFFICER _____ DATE: 10-24-14	APPROVED TRAFFIC ENGINEER _____ DATE: 10/27/2014
DELAWARE DEPARTMENT OF TRANSPORTATION		ADDENDUM / REVISIONS _____ _____ _____	NOT TO SCALE	HIGH FRICTION SURFACE TREATMENT STATEWIDE, OPEN END LOCATION 11
		CONTRACT T2014-01004 COUNTY SUSSEX	ROAD NO. S633 DESIGNED BY: MFR CHECKED BY: ASW	VEHICULAR DETOUR PLAN GRIFFITH LAKE DR (S633) SHEET NO. 45A TOTAL SHS 57

IN MSVB CELLS, PROJ DEV V SB.CEL

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 12 **MORRIS MILL ROAD (S 297)**
From 0.31 mile south of Zoar Road to 0.45 mile south of Zoar Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

Page 47 of 57

LOCATION 12 MORRIS MILL ROAD (S 297)

LENGTH: 739 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 12

743010	TEMPORARY WARNING SIGNS AND PLAQUES	8.00 EA-DY
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	1,584.00 SY

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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004

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FEDERAL AID NO.: ESTP-2014(38)

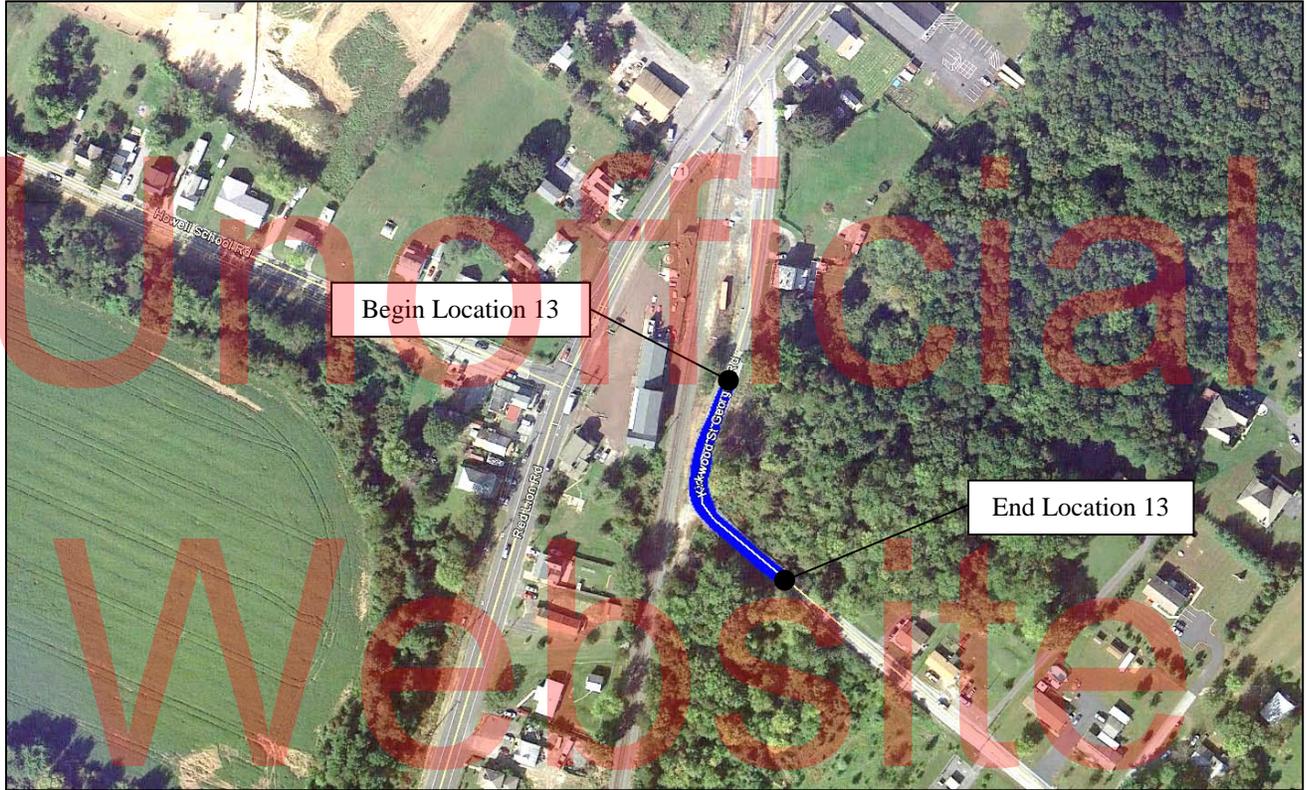
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 13

KIRWOOD St. GEORGE'S ROAD (N 409)

From 0.09 mile south of DE Route 71 to 0.15 mile south of DE Route 71

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 13 KIRKWOOD ST. GEORGES ROAD (N 409)

LENGTH: 317 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: ROAD CLOSURE WITH DETOUR
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 13

743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	24.00 EA-DY
743023	TEMPORARY BARRICADES, TYPE III	60.00 LF-DY
743010	TEMPORARY WARNING SIGNS AND PLAQUES	33.00 EA-DY
743056	FLAGGER, NEW CASTLE COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	831.00 SY

Unofficial
Website
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PORTABLE CHANGEABLE MESSAGE SIGNS

PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-1

KIRKWOOD ST GEORGES RD

TO CLOSE
XX/XX/XX
XAM-XPM

DURING DETOUR
(DISPLAY WHILE DETOUR IS IN EFFECT)

PCMS-2

KIRKWOOD ST GEORGES RD

CLOSED
AT DE 71

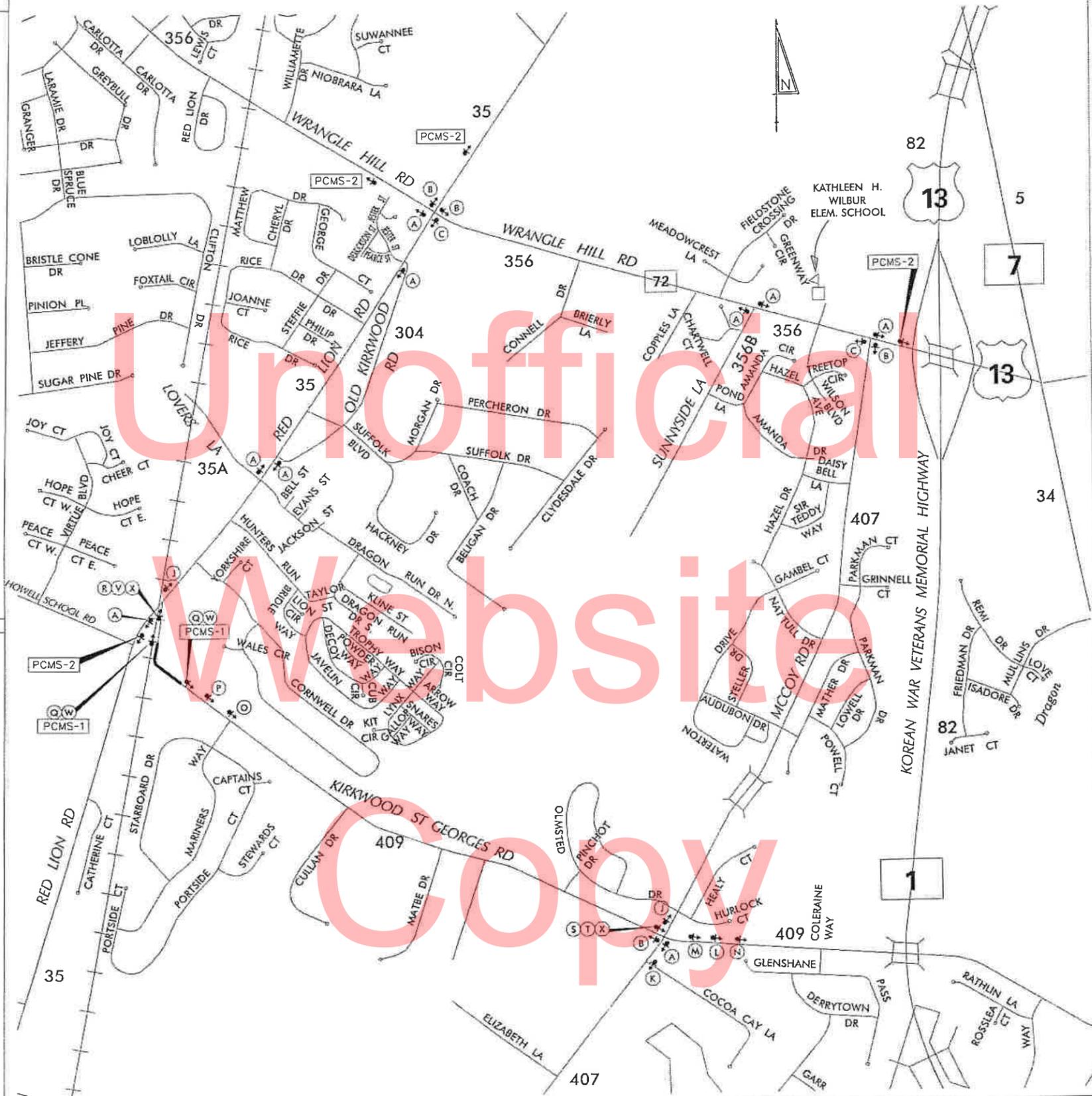
SPECIAL SIGNS

LEGEND

(A) DETOUR M4-9-DE	(B) DETOUR M4-9	(C) DETOUR M4-9	(D) DETOUR M4-9	(E) DETOUR M4-9
(F) DETOUR M4-9	(G) DETOUR M4-9	(H) DETOUR M4-9	(I) DETOUR M4-9	(J) END DETOUR M4-20
(K) DETOUR AHEAD W20-2	(L) DETOUR 1000 FT W20-2	(M) DETOUR 500 FT W20-2		
(N) ROAD CLOSED AHEAD W20-3	(O) ROAD CLOSED 1000 FT W20-3	(P) ROAD CLOSED 500 FT W20-3		
(Q) ROAD CLOSED R11-3	(R) DETOUR M4-10(J)	(S) DETOUR M4-10(J)		
(T) ROAD CLOSED 1/4 MILES AHEAD LOCAL TRAFFIC ONLY R11-3a	(U) BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3b	(V) ROAD CLOSED TO THRU TRAFFIC R11-4		
(W) BARRICADE		(X) BARRICADE		

GENERAL NOTES

- ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
- DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
- SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
- SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD) WILL PREVAIL.
- SIGNS "N" THROUGH "Q" AND "T" AND "V," THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP," "RR XING," OR "BRIDGE" WHERE APPLICABLE.
- WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
- "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.



RECOMMENDED _____ DATE: _____
DELAWARE DEPARTMENT OF TRANSPORTATION

RECOMMENDED _____ DATE: _____
 ADDENDUM / REVISIONS

RECOMMENDED *M. R. [Signature]* DATE: 10/13/14
 APPROVED CHIEF SAFETY OFFICER *[Signature]* DATE: 10-17-14

APPROVED TRAFFIC ENGINEER *[Signature]* DATE: 10/14/14

NOT TO SCALE

HIGH FRICTION SURFACE TREATMENT
 STATEWIDE, OPEN END
 LOCATION 13

CONTRACT	ROAD NO.	N409
T201401004	DESIGNED BY:	MFR
COUNTY	CHECKED BY:	ASW
NEW CASTLE		

VEHICULAR DETOUR PLAN
 KIRKWOOD ST GEORGES RD (N409)
 SHEET NO. 49A
 TOTAL SHTS. 57

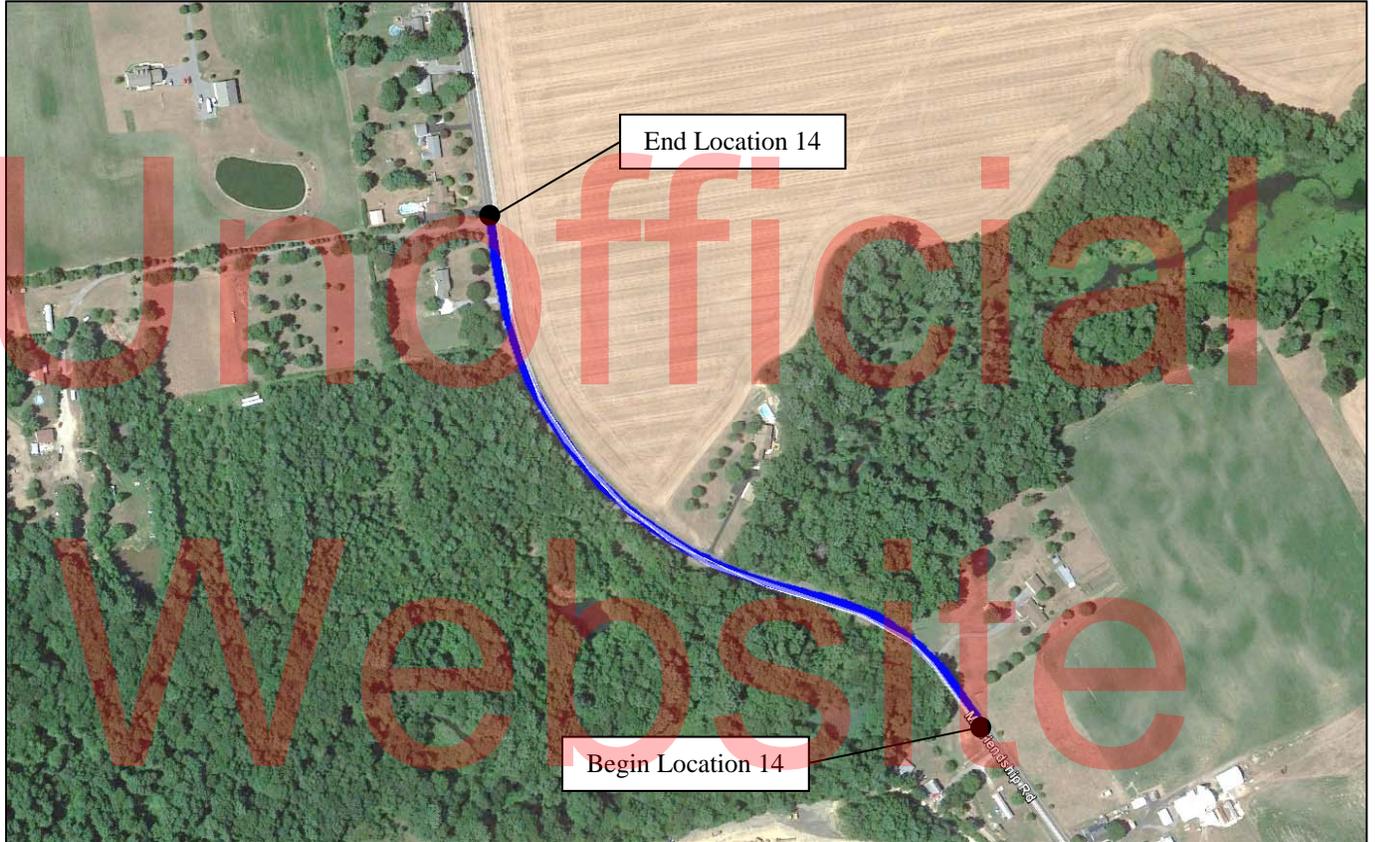
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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 14 **MT. FRIENDSHIP ROAD (K 091)**
From 0.54 mile north of Brenford Road to 0.91 mile north of Brenford Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

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LOCATION 14 MT. FRIENDSHIP ROAD (K 091)

LENGTH: 1,954 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: TA-10
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 14

743010	TEMPORARY WARNING SIGNS AND PLAQUES	16.00 EA-DY
743057	FLAGGER, KENT COUNTY, FEDERAL	32.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	4,553.00 SY

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DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004

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FEDERAL AID NO.: ESTP-2014(38)

HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 15 **PLEASANT HILL ROAD (N 301)**
From 0.98 mile east of Thompson Station Road to 1.02 mile east of Thompson Station Road

LOCATION MAP



Copy

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

Page 53 of 57

LOCATION 15 PLEASANT HILL ROAD (N 301)

LENGTH: 211 FT

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: ROAD CLOSURE WITH DETOUR
- RESTRICTED WORK HOURS: 8:00 AM TO 4:00 PM

MATERIAL ESTIMATE FOR LOCATION 15

743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	2.00 EA-DY
743023	TEMPORARY BARRICADES, TYPE III	66.00 LF-DY
743010	TEMPORARY WARNING SIGNS AND PLAQUES	57.00 EA-DY
743056	FLAGGER, NEW CASTLE COUNTY, FEDERAL	16.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	241.00 SY

Unofficial
Website
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PORTABLE CHANGEABLE MESSAGE SIGNS
DURING DETOUR
 (DISPLAY WHILE DETOUR IS IN EFFECT)

PCMS-1

PLEASANT HILL RD CLOSED EAST OF THOMPSON STA RD FOLLOW DETOUR

SPECIAL SIGNS

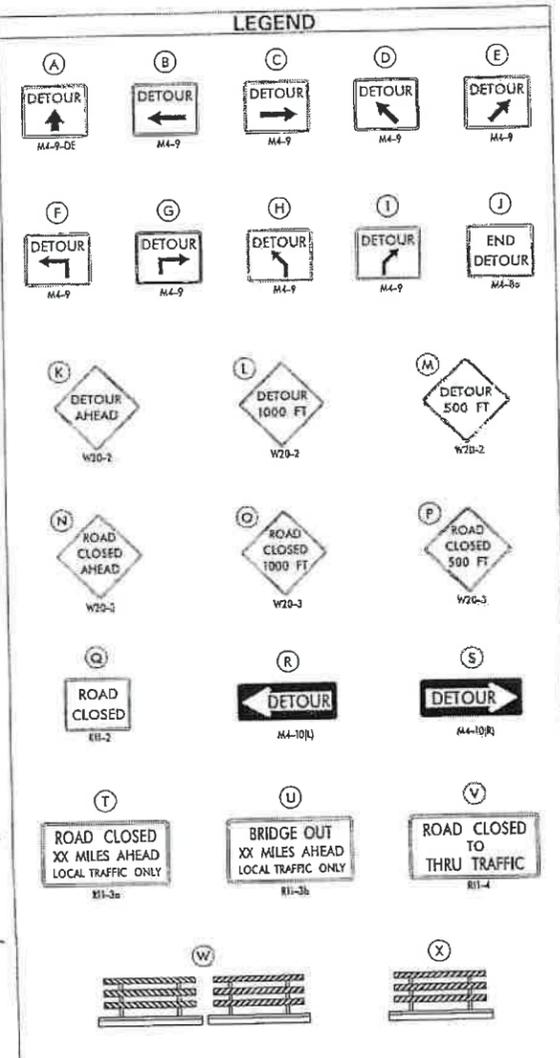
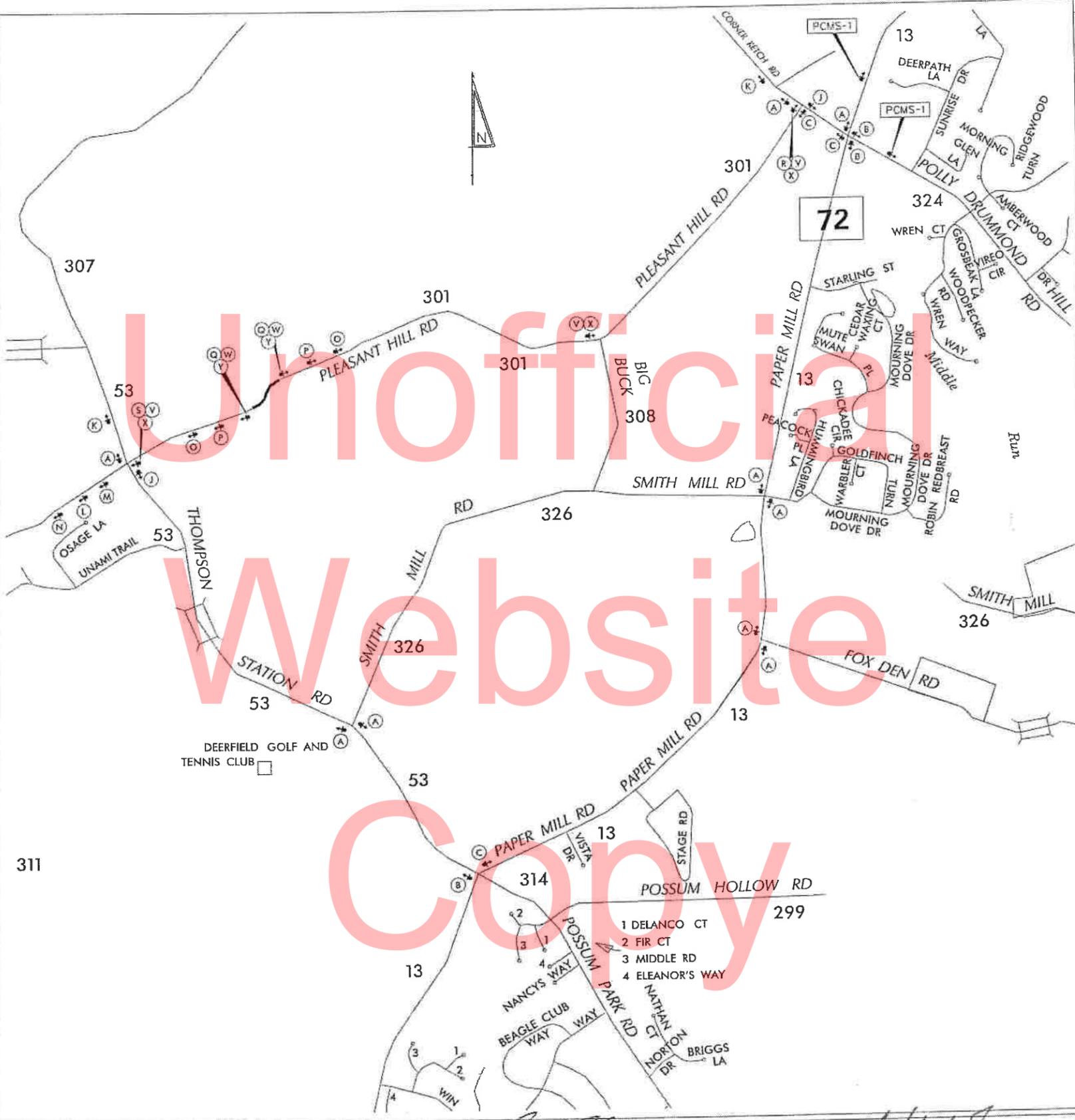
*D/G RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND

48" 60"

Pleasant Hill Road TO CLOSE	6"C
XXXXXX	6"C
XAM-XPM	6"C

Y

PRIOR TO DETOUR
 (DISPLAY 10 DAYS PRIOR TO IMPLEMENTATION OF DETOUR)



GENERAL NOTES

- ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
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- SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
- SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD) WILL PREVAIL.
- SIGNS "N" THROUGH "Q" AND "T" AND "V". THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
- WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
- "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: 11/17/14	APPROVED CHIEF SAFETY OFFICER _____ DATE: 10-22-14	APPROVED TRAFFIC ENGINEER _____ DATE: 10/22/14
DELAWARE DEPARTMENT OF TRANSPORTATION		NOT TO SCALE	HIGH FRICTION SURFACE TREATMENT STATEWIDE, OPEN END LOCATION 15	VEHICULAR DETOUR PLAN PLEASANT HILL RD (N301)
ADDENDUM / REVISIONS		CONTRACT T201401004	ROAD NO. N301	SHEET NO. 53A
		COUNTY NEW CASTLE	DESIGNED BY: MFR	TOTAL SHTS. 57
			CHECKED BY: ASW	

W:\MSV8\CELLS\PROJ\REV\USB\CEL

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 16 VARIOUS LOCATIONS AS DETERMINED BY DELDOT

LENGTH: N/A

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX OR CONCRETE SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: DETERMINED BY DELDOT FOR EACH WORK ORDER
- RESTRICTED WORK HOURS: DETERMINED BY DELDOT FOR EACH WORK ORDER

MATERIAL ESTIMATE FOR LOCATION 16

743003	ARROW PANELS, TYPE C	4.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	16.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	4.00 EA-DY
743006	PLASTIC DRUMS	20.00 EA-DY
743007	TRAFFIC OFFICERS	16.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743023	TEMPORARY BARRICADES, TYPE III	120.00 LF-DY
743024	TEMPORARY WARNING SIGNS AND PLAQUES	240.00 EA-DY
743056	FLAGGER, NEW CASTLE COUNTY, FEDERAL	64.00 HOUR
743057	FLAGGER, KENT COUNTY, FEDERAL	60.00 HOUR
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	160.00 HOUR
743065	FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	20.00 HOUR
743066	FLAGGER, KENT COUNTY, FEDERAL, OVERTIME	20.00 HOUR
743067	FLAGGER, SUSSEX COUNTY, FEDERAL, OVERTIME	20.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	10,000.00 SY
763544	ROAD LOCATION MOBILIZATION, ZONE 1	3.00 EACH
763545	ROAD LOCATION MOBILIZATION, ZONE 2	3.00 EACH

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

LOCATION 16 VARIOUS LOCATIONS AS DETERMINED BY DELDOT

LENGTH: N/A

GENERAL IMPROVEMENTS

- INSTALL HIGH-FRICTION SURFACE TREATMENT ON HOT-MIX OR CONCRETE SURFACES

COMMENTS:

- RECOMMENDED TRAFFIC CONTROL: DETERMINED BY DELDOT FOR EACH WORK ORDER
- RESTRICTED WORK HOURS: DETERMINED BY DELDOT FOR EACH WORK ORDER

MATERIAL ESTIMATE FOR LOCATION 16

763546	ROAD LOCATION MOBILIZATION, ZONE 3	1.00 EACH
763547	ROAD LOCATION MOBILIZATION, ZONE 4	1.00 EACH
763548	ROAD LOCATION MOBILIZATION, ZONE 5	1.00 EACH
763549	ROAD LOCATION MOBILIZATION, ZONE 6	1.00 EACH
763550	ROAD LOCATION MOBILIZATION, ZONE 7	1.00 EACH
763551	ROAD LOCATION MOBILIZATION, ZONE 8	1.00 EACH
763552	ROAD LOCATION MOBILIZATION, ZONE 9	1.00 EACH
763553	ROAD LOCATION MOBILIZATION, ZONE 10	1.00 EACH
763554	ROAD LOCATION MOBILIZATION, ZONE 11	1.00 EACH
763555	ROAD LOCATION MOBILIZATION, ZONE 12	1.00 EACH
763556	ROAD LOCATION MOBILIZATION, ZONE 13	1.00 EACH
763557	ROAD LOCATION MOBILIZATION, ZONE 14	1.00 EACH
763606	TEMPORARY TRAFFIC CONTROL – TWO LANE, TWO-WAY WITH LANE CLOSURE (TA-10)	1.00 EACH
763608	TEMPORARY TRAFFIC CONTROL – MULTILANE DIVIDED HIGHWAY WITH LANE CLOSURE (TA-33)	1.00 EACH
763674	TEMPORARY TRAFFIC CONTROL – DETOUR FOR A CLOSED STREET (TA-20)	1.00 EACH

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

CONTRACT QUANTITIES SUMMARY SHEET

743000	MAINTENANCE OF TRAFFIC	LUMP
743003	ARROW PANELS, TYPE C	5.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	101.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	4.00 EA-DY
743006	PLASTIC DRUMS	60.00 EA-DY
743007	TRAFFIC OFFICERS	24.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	5.00 EA-DY
743023	TEMPORARY BARRICADES, TYPE III	504.00 LF-DY
743024	TEMPORARY WARNING SIGNS AND PLAQUES	665.00 EA-DY
743056	FLAGGER, NEW CASTLE COUNTY, FEDERAL	144.00 HOUR
743057	FLAGGER, KENT COUNTY, FEDERAL	92.00 HOUR
743058	FLAGGER, SUSSEX COUNTY, FEDERAL	360.00 HOUR
743065	FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	20.00 HOUR
743066	FLAGGER, KENT COUNTY, FEDERAL, OVERTIME	20.00 HOUR
743067	FLAGGER, SUSSEX COUNTY, FEDERAL, OVERTIME	20.00 HOUR
760510	HIGH FRICTION SURFACE TREATMENT	31,825.00 SY
763000	INITIAL EXPENSE	LUMP
763544	ROAD LOCATION MOBILIZATION, ZONE 1	1.00 EACH
763545	ROAD LOCATION MOBILIZATION, ZONE 2	1.00 EACH
763546	ROAD LOCATION MOBILIZATION, ZONE 3	1.00 EACH
763547	ROAD LOCATION MOBILIZATION, ZONE 4	1.00 EACH
763548	ROAD LOCATION MOBILIZATION, ZONE 5	1.00 EACH
763549	ROAD LOCATION MOBILIZATION, ZONE 6	1.00 EACH
763550	ROAD LOCATION MOBILIZATION, ZONE 7	1.00 EACH

DEPARTMENT OF TRANSPORTATION

CONTRACT NO.: T201401004
FEDERAL AID NO.: ESTP-2014(38)
HIGH FRICTION SURFACE TREATMENT, STATEWIDE, OPEN-END

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CONTRACT QUANTITIES SUMMARY SHEET

763551	ROAD LOCATION MOBILIZATION, ZONE 8	1.00 EACH
763552	ROAD LOCATION MOBILIZATION, ZONE 9	1.00 EACH
763553	ROAD LOCATION MOBILIZATION, ZONE 10	1.00 EACH
763554	ROAD LOCATION MOBILIZATION, ZONE 11	1.00 EACH
763555	ROAD LOCATION MOBILIZATION, ZONE 12	1.00 EACH
763556	ROAD LOCATION MOBILIZATION, ZONE 13	1.00 EACH
763557	ROAD LOCATION MOBILIZATION, ZONE 14	1.00 EACH
763606	TEMPORARY TRAFFIC CONTROL – TWO LANE, TWO-WAY WITH LANE CLOSURE (TA-10)	1.00 EACH
763608	TEMPORARY TRAFFIC CONTROL – MULTILANE DIVIDED HIGHWAY WITH LANE CLOSURE (TA-33)	1.00 EACH
763674	TEMPORARY TRAFFIC CONTROL – DETOUR FOR A CLOSED STREET (TA-20)	1.00 EACH

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