

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

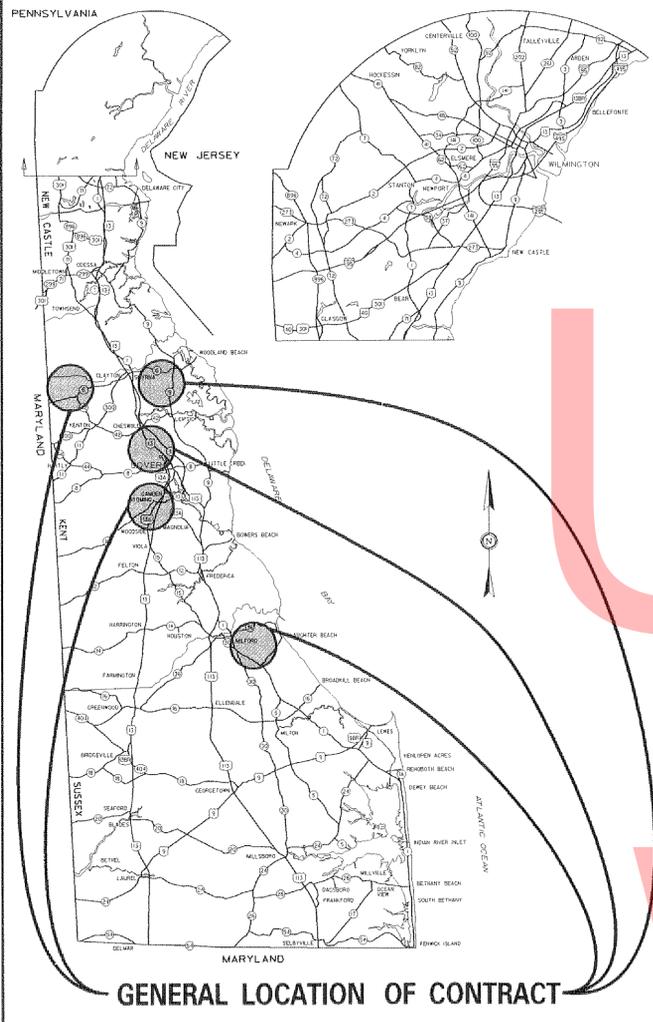
U.S. CUSTOMARY
UNITS



CONSTRUCTION & RIGHT-OF-WAY PLANS FOR:
**KENT AND SUSSEX COUNTY
PIPE REPLACEMENTS,
OPEN-END, FY 15-17**

CONSTRUCTION CONTRACT NUMBER: T201407502
FEDERAL AID PROJECT NUMBER: N/A

COUNTY: KENT & SUSSEX M.R. #: K125, K126, K156, S200 & K317



SEE SHEET 2 FOR
PROJECT LOCATION

DESIGN DESIGNATION	
FUNCTIONAL CLASS: VARIES BY LOCATION	D.H.V. PROJECTED: YEAR:
TYPE OF CONSTRUCTION: PIPE REPLACEMENT	DESIGN SPEED:
A.A.D.T. CURRENT: YEAR:	TRUCKS:
A.A.D.T. PROJECTED: YEAR:	DIRECTION OF DISTRIBUTION:
INDEX OF SHEETS	
SHEET NO	TABLE OF CONTENTS
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TOTAL SHEETS: 25

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
	SEE LOCATION SPECIFIC TITLE SHEET

RECOMMENDED

[Signature] 6/16/14
SQUAD MANAGER, CONSTRUCTION DATE

[Signature] 6/16/14
GROUP ENGINEER, CONSTRUCTION DATE

[Signature] 6/24/14
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) DATE

~~RECOMMENDED~~

~~STORMWATER ENGINEER~~

~~DATE~~ ~~SEAL~~

RECOMMENDED

[Signature]
SQUAD MANAGER, BRIDGE DESIGN

DATE 6/2/2014

[Seal: CRAIG A. STEVENS, LICENSE No. 15250, DELAWARE PROFESSIONAL ENGINEER]

SEAL

RECOMMENDED

[Signature]
BRIDGE DESIGN ENGINEER

DATE 2 JUNE 2014

[Seal: JASON M. HASTINGS, REGISTERED No. 13546, DELAWARE PROFESSIONAL ENGINEER]

SEAL

RECOMMENDED

[Signature]
ASSISTANT DIRECTOR, BRIDGE

DATE JUNE 2, 2014

APPROVED

[Signature]
CHIEF ENGINEER

DATE 7/24/14

[Seal: BARRY A. BEITON, REGISTERED No. 10774, DELAWARE PROFESSIONAL ENGINEER]

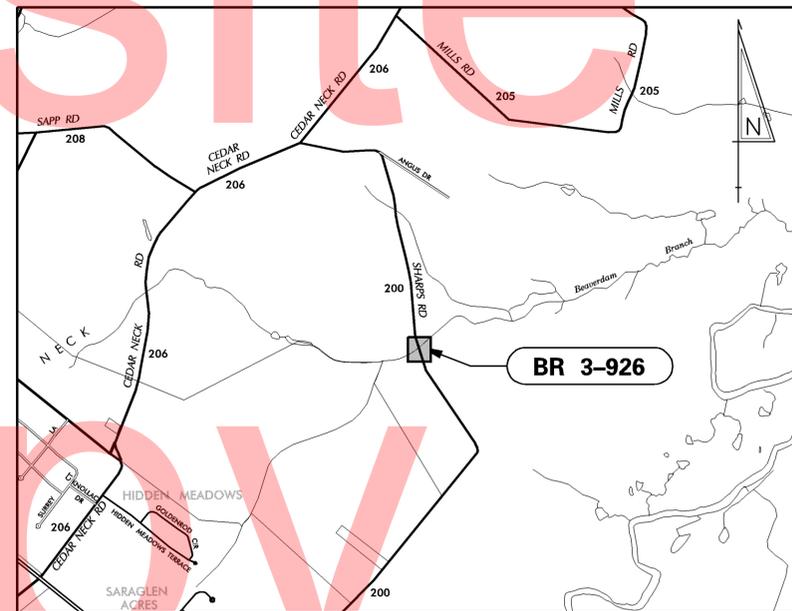
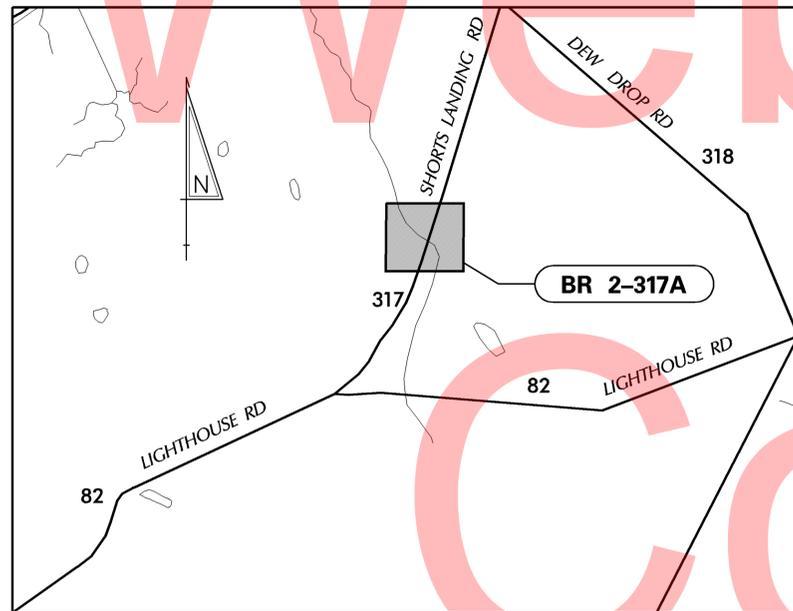
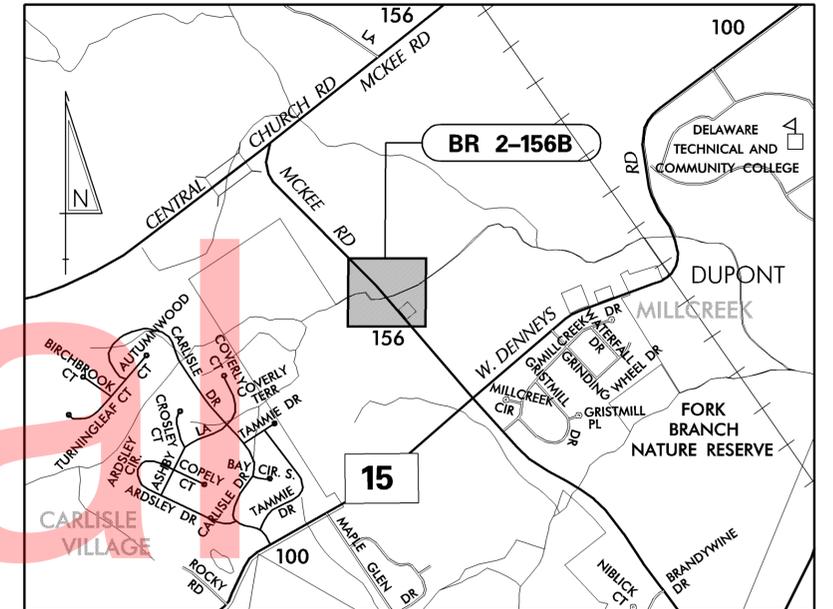
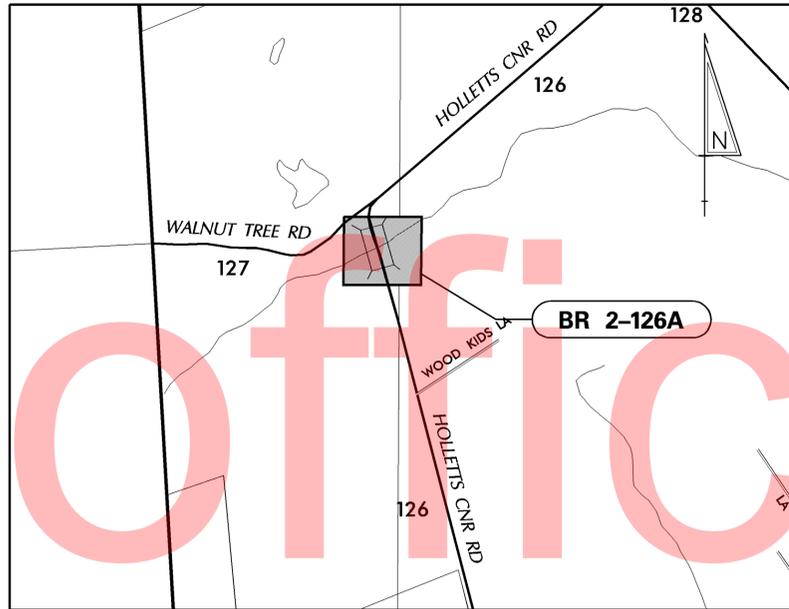
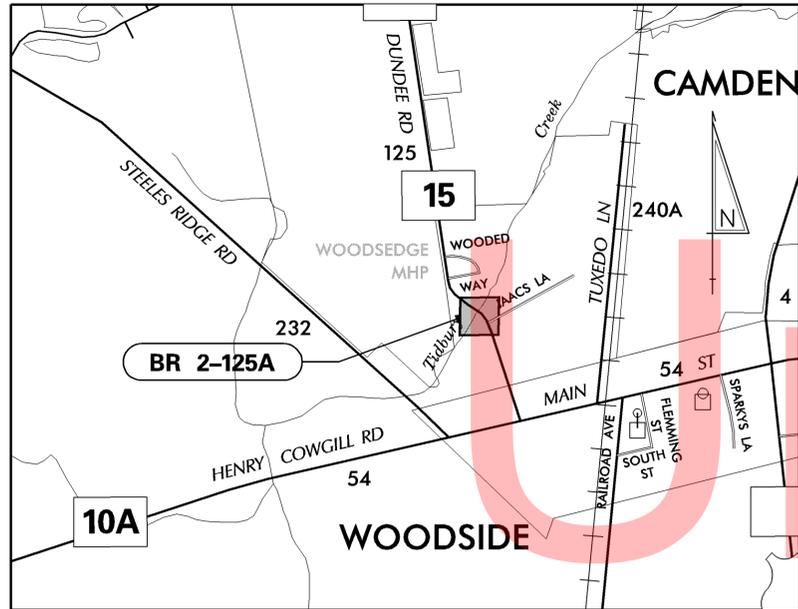
SEAL

[Signature]
CHIEF ENGINEER

DATE 7/24/14

[Seal: ROBERT B. MCGLENN, REGISTERED No. 8567, DELAWARE PROFESSIONAL ENGINEER]

SEAL



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EXISTING SYMBOLS

DRAINAGE	
	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
	DRAINAGE INLET
	DRAINAGE JUNCTION BOX
	DRAINAGE MANHOLE
	DRAINAGE PIPE AND FLOW ARROW
	DRAINAGE PIPE HEADWALL
	RIPRAP - AREA FEATURE
	RIPRAP - LINEAR FEATURE

MANMADE ROADSIDE FEATURES	
	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
	CURB
	CURB AND GUTTER
	FENCE - CHAINLINK OR STRANDED
	FENCE - STOCKADE OR SPLIT RAIL
	FLAG POLE
	GUARDRAIL - STEEL BEAM
	GUARDRAIL - WIRE ROPE
	LAMP AND POST - RESIDENTIAL
	MAILBOX
	PARKING METER AND POST
	PAVEMENT - FLEXIBLE
	PAVEMENT - RIGID
	PILE - BRIDGE
	PILLAR OR MISCELLANEOUS POST
	TRAFFIC SIGN AND POST
	WALL - BRICK OR BLOCK
	WALL - STONE

NATURAL ROADSIDE FEATURES	
	GRASS LAWN
	HEDGEROW OR THICKET
	MARSH BOUNDARY LINE
	TREE - CONIFEROUS
	TREE - DECIDUOUS
	TREE STUMP
	SHRUBBERY
	DELINEATED WETLAND BOUNDARY LINE
	WOODS LINE BOUNDARY

RIGHT-OF-WAY SYMBOLS	
	PROPERTY MARKER - CONCRETE MON.
	PROPERTY MARKER - IRON PIPE
	HISTORIC RIGHT-OF-WAY BASELINE
	EXISTING RIGHT-OF-WAY
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING DENIAL OF ACCESS
	EXISTING R/W & DENIAL OF ACCESS

SURVEY CONTROL & MONUMENTATION	
	SURVEY BENCHMARK LOCATION
	SURVEY TIE POINT LOCATION
	SURVEY TRAVERSE POINT
	POINT OF CURVATURE OR TANGENCY
	POINT OF INTERSECTING TANGENTS

UTILITY	
	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
	CABLE TV DISTRIBUTION BOX
	ELECTRIC MANHOLE
	ELECTRIC METER
	ELECTRIC TRANSFORMER
	POLE MOUNTED LUMINAIRE
	GAS MANHOLE
	GAS METER
	GAS VALVE
	GAS PUMP - SERVICE STATION
	RAILROAD TRACKS
	SANITARY SEWER MANHOLE
	SANITARY SEWER VALVE
	SANITARY SEWER VENT OR CLEANOUT
	SEPTIC DRAIN FIELD
	TELEPHONE BOOTH
	TELEPHONE MANHOLE
	TELEPHONE TEST POINT
	TRAFFIC - CONDUIT JUNCTION WELL
	TRAFFIC - LIGHT POLE AND BASE
	TRAFFIC - PEDESTRIAN POLE & BASE
	TRAFFIC - SIGNAL CABINET & BASE
	TRAFFIC - SIGNAL POLE AND BASE
	UTILITY BOX
	UTILITY POLE GUY WIRE ANCHOR
	UTILITY POLE
	WATER - FIRE HYDRANT
	WATER METER
	WATER VALVE
	WELL HEAD
	MANHOLE - UNDETERMINED OWNER

UTILITY COMPANY FACILITIES	
	CITY OF DOVER - ELECTRIC
	CHESAPEAKE GAS
	EASTERN SHORES
	VERIZON

CONSTRUCTION	
	CONCRETE SAFETY BARRIER - PERMANENT
	BIOFILTRATION SWALE
	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
	BRICK PATTERNED SURFACE
	BUTT JOINT
	CONSTRUCTION BASELINE
	CONSTRUCTION SAFETY FENCE
	CURB, TYPE 1 & TYPE 3
	CURB, TYPE 2
	CURB & GUTTER, TYPE 1
	CURB & GUTTER, TYPE 2
	CURB & GUTTER, TYPE 3
	CURB & GUTTER, TYPE 4
	CLEAR ZONE
	DRAINAGE INLET
	DITCH
	FENCE - METAL
	FENCE - WOOD
	FLARED END SECTION
	GUARDRAIL, TYPE 1
	GUARDRAIL, TYPE 2
	GUARDRAIL, TYPE 3
	GUARDRAIL END ANCHORAGE
	GUARDRAIL END TREATMENT, TYPE 1
	GUARDRAIL END TREATMENT, TYPE 2
	GUARDRAIL END TREATMENT, TYPE 3
	HORIZONTAL CLEARANCE
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
	LIMIT OF CONSTRUCTION
	MAILBOX
	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK - 4"
	P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)
	UNDERDRAIN
	UNDERDRAIN OUTLET

RIGHT-OF-WAY SYMBOLS	
	PROPOSED RIGHT-OF-WAY MONUMENT
	PROPOSED DENIAL OF ACCESS
	PROPOSED PERMANENT EASEMENT
	PROPOSED RIGHT-OF-WAY
	PROPOSED R/W & DENIAL OF ACCESS
	TEMPORARY CONSTRUCTION EASEMENT
	PROPOSED RIGHT-OF-WAY BASELINE

PROPOSED SYMBOLS

IDENTIFIERS	
	ADJUST BY CONTRACTOR
	ADJUST BY OTHERS
	CONCRETE SAFETY BARRIER
	CURB OR CURB & GUTTER
	CONVERT TO JUNCTION BOX
	CONVERT TO DRAINAGE MANHOLE
	CURB OPENING
	CURB RAMP / TYPE
	CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
	CONSTRUCTION SAFETY FENCE
	DRAINAGE INLET
	DO NOT DISTURB
	ENERGY DISSIPATOR
	FENCE
	FLARED END SECTION
	FILL WITH FLOWABLE FILL
	FILTRATION STRUCTURE
	GUARDRAIL
	JUNCTION BOX
	MANHOLE
	MONUMENT - RIGHT-OF-WAY
	PIPE
	RELOCATE BY CONTRACTOR
	RELOCATE BY OTHERS
	REMOVE BY CONTRACTOR
	REMOVE BY OTHERS
	UNDERDRAIN / LENGTH
	UNDERDRAIN OUTLET PIPE

LANDSCAPING	
	LANDSCAPE PLANTINGS
	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

TRAFFIC	
	ITMS CONDUIT
	SIGNAL CONDUIT
	CONDUIT JUNCTION WELL
	LUMINAIRE
	PAVEMENT MARKINGS
	PAVEMENT STRIPING
	TRAFFIC SIGN

PAVEMENT SECTION(S)	
	OVERLAY PAVEMENT - 2" SUPERPAVE, TYPE C WARM-MIX
	RECONSTRUCTED PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS

EROSION & SEDIMENT CONTROL	
	DEWATERING BAG
	DEWATERING BASIN
	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
	PORTABLE SEDIMENT TANK
	SANDBAG DIKE
	SANDBAG DIVERSION
	STONE CHECK DAM
	STABILIZED CONSTRUCTION ENTRANCE
	SILT FENCE / LENGTH
	SILT FENCE
	SILT FENCE - REINFORCED
	SUMP PIT, TYPE 1
	SUMP PIT, TYPE 2
	SEDIMENT TRAP
	SEDIMENT TRAP
	SEDIMENT TRAP WITH INLET AS OUTLET
	SEDIMENT TRAP PIPE OUTLET
	STILLING WELL
	TEMPORARY SWALE
	TEMPORARY SLOPE DRAIN
	TURBIDITY CURTAIN / LENGTH
	TURBIDITY CURTAIN

LAST REVISED: 01/30/2012
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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.
- 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 PRIOR TO THE EXECUTION OF THE CONTRACT. 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 PRIOR TO THE EXECUTION OF THE CONTRACT. THE SITE REVIEWER REQUIREMENTS IN EFFECT ON THIS PROJECT SHALL BE MARKED WITH AN "X" BELOW:

EROSION POTENTIAL FOR THIS PROJECT	SITE REVIEWER REQUIREMENT
(X) MAJOR	SUPERINTENDENT AND AN INDIVIDUAL FROM CONTRACTOR'S STAFF SHALL BE CCR. ONE INDIVIDUAL FROM THE CONTRACTOR'S STAFF MUST BE A CCR PRIOR TO THE EXECUTION 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 AWARDED CONTRACTOR, INCLUDE:

(X)	ALL PLAN SHEETS, IN PDF FORMAT.
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- PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE CONTRACTOR, INCLUDE:

(X)	CROSS SECTIONS (WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR)
(X)	RIGHT-OF-WAY PLANS (WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR)

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

(X)	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
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- THE DISTURBED AREA ARE AS FOLLOWS: 0.7046 ACRES (BR 2-125A), 0.5409 ACRES (BR2-126A), 1.2125 ACRES (BR2-156B), 0.7798 ACRES (BR2-317A), AND 0.6800 ACRES (BR 3-926)

- 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 FOR EACH WORK ORDER, 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.

- CONTRACT TERM: THIS CONTRACT SHALL BE FOR A PERIOD OF THREE YEARS (1,095 CALENDAR DAYS) AND SHALL BEGIN FROM THE DATE OF NOTICE TO PROCEED. THE PERFORMANCE BOND SHALL BE SUBMITTED AT THE BEGINNING OF EACH FISCAL YEAR. FAILURE ON THE PART OF THE CONTRACTOR TO SUBMIT THE PERFORMANCE BOND FOR THE EXTENSION PERIOD PRIOR TO THE LAST WORKING DAY BEFORE END OF THE PREVIOUS PERIOD SHALL RESULT IN THE CONTRACT BEING CANCELLED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE FORMS NECESSARY TO RENEW THE PERFORMANCE BOND EACH YEAR THE CONTRACT IS IN FORCE.

- ADVANCE UTILITY RELOCATION INVOLVEMENT IS ANTICIPATED AND WILL BE ADDRESSED IN FUTURE WORK ORDER SUBMITTALS PRIOR TO ISSUING A NOTICE TO PROCEED FOR THAT WORK ORDER. SHOULD ANY CONFLICTS BE ENCOUNTERED DURING CONSTRUCTION REQUIRING ADJUSTMENT AND/OR RELOCATION OF THE EXISTING FACILITIES, THE NECESSARY RELOCATION WORK SHALL BE ACCOMPLISHED BY THE RESPECTIVE UTILITY, AS DIRECTED BY THE CONSTRUCTION ENGINEER. ANY ADJUSTMENTS AND/OR RELOCATIONS ON MUNICIPALLY OWNED FACILITIES SHALL BE DONE BY THE STATE'S CONTRACTOR IN ACCORDANCE WITH THE RESPECTIVE UTILITY'S STANDARD SPECIFICATIONS AS DIRECTED BY THE CONSTRUCTION ENGINEER.

- ENVIRONMENTAL PERMITS ARE REQUIRED FOR THIS WORK. FINAL ENVIRONMENTAL COMPLIANCE WILL BE INCLUDED IN EACH WORK ORDER. SEE FUTURE WORK ORDER SUBMITTALS FOR ENVIRONMENTAL COMPLIANCE PLAN FOR FURTHER RESTRICTIONS/GUIDANCE ASSOCIATED WITH EACH PROJECT SITE. STREAM RESTORATION AND RIPRAP TREATMENTS:

- THE CONTRACTOR SHALL FOLLOW THE SPECIAL PROVISIONS OF ITEM *712531 CHANNEL BED FILL IN REGARDS TO THE SALVAGING OF ON-SITE NATURAL STREAM BOTTOM MATERIAL OR THE FURNISHING OF OFF-SITE MATERIAL. IF SUFFICIENT SOURCES FOR CHANNEL BED FILL DO NOT EXIST ON-SITE, ANY NEW MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ITEM *712531 CHANNEL BED FILL. ALL RIPRAP IN THE CHANNEL BOTTOM (I.E. BELOW THE WATER LINE) SHALL BE RECESSED ONE FOOT BELOW STREAM BED ELEVATION AND CHOKED WITH BORROW TYPE "B" SO THAT ALL OF THE VOIDS IN THE RIPRAP ARE FILLED WITH MATERIAL. PAYMENT UNDER ITEM *209002 BORROW TYPE "B". THE RIPRAP SHALL THEN BE COVERED WITH A MINIMUM OF 12" CHANNEL BED FILL. FINAL CHANNEL ELEVATIONS SHALL MATCH EXISTING ELEVATIONS AT THE UPSTREAM AND DOWNSTREAM PROJECT LIMITS. THROUGH THE STRUCTURE, ELEVATIONS SHALL BE AS NOTED ON THE PLANS. PAYMENT UNDER ITEM *712531 CHANNEL BED FILL.
- OTHER AREAS OF THE CHANNEL BOTTOM AFFECTED BY CONSTRUCTION (INCLUDING, BUT NOT LIMITED TO, THE LOCATION OF SUMP PITS, STABILIZED OUTFALLS, TEMPORARY PIPES AND/OR SANDBAG DIKES AND DIVERSIONS) SHALL BE RESTORED TO EXISTING CONDITIONS. ANY CAVITIES OR SCOUR HOLES RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE FILLED WITH CHANNEL BED FILL. PAYMENT UNDER ITEM *712531 CHANNEL BED FILL.

- WHEN ALL EROSION AND SEDIMENT CONTROL MEASURES ARE REMOVED AND THE STREAM RETURNS TO ITS NATURAL FLOW CONDITIONS, THE FLOW MUST REMAIN ABOVE GROUND AND ABOVE THE RIPRAP (I.E. THE FLOW CANNOT BE "LOST" IN THE RIPRAP OR BENEATH THE STRUCTURE). IF THIS IS NOT ACHIEVED, THE CONTRACTOR WILL BE REQUIRED TO TAKE CORRECTIVE ACTION AT THE CONTRACTOR'S EXPENSE.
- ALL RIPRAP ON THE STREAM BANK, OUTSIDE THE CHANNEL BED, SHALL BE CHOKED WITH DELAWARE *57 STONE, FILLED WITH TOPSOIL, AND SEEDED. PLACE JUST ENOUGH CHOKE MATERIAL TO PREVENT THE LOSS OF TOPSOIL THROUGH THE RIPRAP, AND THEN FINISH FILLING THE VOIDS WITH TOPSOIL SO THAT THE RIPRAP PEAKS ARE BARELY VISIBLE. AN ADDITIONAL 4-INCH TOPSOIL LAYER SHALL BE PLACED ON TOP OF THE RIPRAP. SLOPE SEEDING SHALL BE WITH ITEM *734531 STREAMBANK SEED MIX. FOLLOWING THE SEEDING OPERATION, ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5, OR OTHER BLANKET AS SHOWN ON THE PLANS SHALL BE INSTALLED. ALL WORK, STARTING WITH THE INITIAL CHOKING WITH TOPSOIL THROUGH THE SEEDING SHALL BE COMPLETED PRIOR TO ANY RAIN EVENT. DELAWARE *57 STONE SHALL BE INCIDENTAL TO THE RIPRAP ITEM.
- THE TOPSOIL/SEED/MULCH CAN BE PLACED BEFORE OR AFTER THE REMOVAL OF THE STREAM DIVERSION. IF IT OCCURS AFTER STREAM DIVERSION REMOVAL, A TURBIDITY CURTAIN SHALL BE USED TO MINIMIZE IN-STREAM SEDIMENTATION. PAYMENT SHALL BE INCIDENTAL TO ITEM 265500 - STREAM DIVERSION.

- PROTECTION OF RESOURCES:

- CLEARING IN WETLAND AREAS SHALL BE KEPT TO A MINIMUM ABSOLUTELY NECESSARY FOR CONSTRUCTION ACCESS. ALL EQUIPMENT TRAVERSING WETLANDS AND SUBAQUEOUS LAND SHALL BE SUPPORTED ON MATS. MATS SHALL BE INCIDENTAL TO ITEM NUMBER 201000 CLEARING AND GRUBBING. IN WETLAND AREAS THAT ARE CLEARED, THERE SHALL BE NO GRUBBING EXCEPT WHERE NECESSARY TO CONSTRUCT PROJECT COMPONENTS SUCH AS FOUNDATIONS AND RIPRAP PROTECTION. VEGETATION SHALL BE CUT FLUSH WITH THE GROUND (I.E. NO DISTURBANCE OF THE ROOT MAT. TEMPORARILY DISTURBED WETLAND AREAS SHALL BE RESTORED TO GRADE AND SEEDED WITH TEMPORARY GRASS SEEDING - DRY GROUND, (PAYMENT UNDER ITEM 734017).

- SILT FENCE INSTALLATION ADJACENT TO WOODED UPLANDS/WETLANDS: SANDBAGS SHALL BE USED TO SECURE SILT FENCE IN LIEU OF TRENCHING UNLESS PROPER EROSION & SEDIMENT CONTROL CANNOT BE MAINTAINED. SANDBAGS USED TO SECURE SILT FENCE SHALL BE INCIDENTAL TO ITEM NUMBER 251000 SILT FENCE. THE ENVIRONMENTAL STUDIES SECTION (CAROL SULLIVAN, 302-760-2129) CAN PROVIDE FURTHER GUIDANCE REGARDING THIS METHOD OF INSTALLATION.

- EACH LOCATION SHALL BE CONSIDERED A SINGLE UNIT OF WORK (WORK ORDER). UPON COMPLETION OF EACH SINGLE UNIT OF WORK AND ACCEPTANCE BY THE DEPARTMENT, ONE ITEMIZED INVOICE WILL BE PREPARED BY THE DEPARTMENT FOR THAT WORK. THE CONTRACTOR SHALL REVIEW AND APPROVE THE INVOICE. PAYMENT WILL BE MONTHLY FOR THE COMPLETED INVOICES AS OUTLINED IN SECTION 109.07.

- RIGHT-OF-WAY, PERMANENT EASEMENTS, AND/OR TEMPORARY EASEMENTS WILL BE ACQUIRED BY THE DEPARTMENT PRIOR TO ISSUING A NOTICE TO PROCEED FOR THE WORK ORDER. THE CONTRACTOR SHALL NOT TRESPASS ON PRIVATE PROPERTY UNLESS THE DEPARTMENT HAS ACQUIRED THE ABOVE OR A "TEMPORARY TRESPASS AGREEMENT" FROM THE PROPERTY OWNER. IF THE WORK IS WITHIN A PERMANENT EASEMENT, THE WORK SHALL NOT BEGIN UNTIL THE ADJACENT PROPERTY OWNERS HAVE BEEN NOTIFIED. PRIOR TO STARTING WORK ON PRIVATE PROPERTY, THE CONTRACTOR SHALL NOTIFY AFFECTED PROPERTY OWNERS OF PROPOSED WORK DATES.

- 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.

- PROSECUTION AND PROGRESS OF WORK:

THE CONTRACTOR SHALL COMMENCE WORK INDICATED ON THE WORK ORDER NO LATER THAN THE THIRTIETH (30) BUSINESS DAY AFTER ISSUANCE UNLESS REQUIRED MATERIALS ARE NOT AVAILABLE. 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.

ISSUANCE OF EACH WORK ORDER CONSTITUTES THE NOTICE TO PROCEED WITH THE WORK DESCRIBED ON THE WORK ORDER. IF THERE IS A VERIFIED NON-AVAILABILITY OF MATERIALS, TIME CHARGES SHALL COMMENCE ON THE FIRST (1ST) WORKING DAY FOLLOWING THE DELIVERY DATE OF SAID MATERIALS.

FAILURE TO START ASSIGNED WORK ORDERS IN THE ALLOWED TIME CONSTITUTES "FAILURE TO PURSUE THE WORK" AND SUBJECTS THE CONTRACTOR TO LIQUIDATED DAMAGES AS OUTLINED IN SUBSECTION 108.09 OF THE STANDARD SPECIFICATIONS. IF WORK ON A SPECIFIC WORK ORDER IS NOT COMPLETED WITHIN THE ALLOTTED TIME, LIQUIDATED DAMAGES WILL BE ASSESSED IN ACCORDANCE WITH SUBSECTION 108.09 AND BASED ON THE TOTAL VALUE OF THAT WORK ORDER.

A FINAL INSPECTION WILL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 105.20 ON EACH WORK ORDER AND IF THE WORK IS SATISFACTORILY COMPLETED IT WILL BE ACCEPTED BY THE DEPARTMENT.

PROJECT NOTES

SECTION 100

- 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.

SECTION 200

- ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
 - PIPES
 - GUARDRAIL
 - SACK CONCRETE RIPRAP

- 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 210000 - CLEARING AND GRUBBING.

- THE SUB-SURFACE EXPLORATION IN SOME LOCATIONS REVEALED POTENTIAL ISSUES WITH HIGH WATER TABLE AND/OR RUNNING SAND. THE CONTRACTOR SHALL BE AWARE OF THE POSSIBLE NEED FOR A WELL POINT SYSTEM (ITEM * 202574). THE CONTRACTOR WILL ONLY BE PAID UNDER THIS ITEM * 202574 IF THE WELL POINT SYSTEM IS USED.

- THE SOIL BORINGS REVEALED POTENTIAL UNSUITABLE MATERIAL AT THE APPROXIMATE ELEVATION OF THE PROPOSED COARSE AGGREGATE. THE LAYER MAY BE UNACCEPTABLE FOR THE BEARING OF THE STRUCTURE AND SHALL BE EXCAVATED UNTIL SUITABLE MATERIAL IS REACHED AS DETERMINED BY THE FIELD ENGINEER. IF REQUIRED, UNDERCUT (ITEM * 212000) WILL BE LIMITED TO A MAXIMUM DEPTH OF 3 FT. UNDERCUT EXCAVATION SHALL BE BACKFILLED WITH BORROW TYPE "B" (ITEM * 209002).

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 SINGULAR SOURCE, FULL DEPTH, IN ORDER THAT PROPER TESTING MAY BE ACCOMPLISHED. THE CONTRACTOR AND 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 BEING EQUAL TO THE ACTUAL QUANTITY USED UNDER 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 EXCESS 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 760006.
- 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.

- SHOULD THE CONTRACTOR ELECT TO TEMPORARILY STOCKPILE MILLINGS ON THE JOB SITE FOR LATER USE, ALL COSTS FOR STOCKPILING 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 FOR 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.

SECTION 700

- ALL MOT ITEMS WITH THE EXCEPTION OF CHANGEABLE MESSAGE BOARDS AND FLAGGERS WILL BE INCLUDED IN ITEM NUMBER 763643 - MAINTENANCE OF TRAFFIC, ALL INCLUSIVE.

- ALL PAVED AREAS TO BE RECONSTRUCTED OR WIDENED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT. ALL HOT-MIX SAWCUT SHALL BE FULL DEPTH UNLESS OTHERWISE NOTED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

MISCELLANEOUS

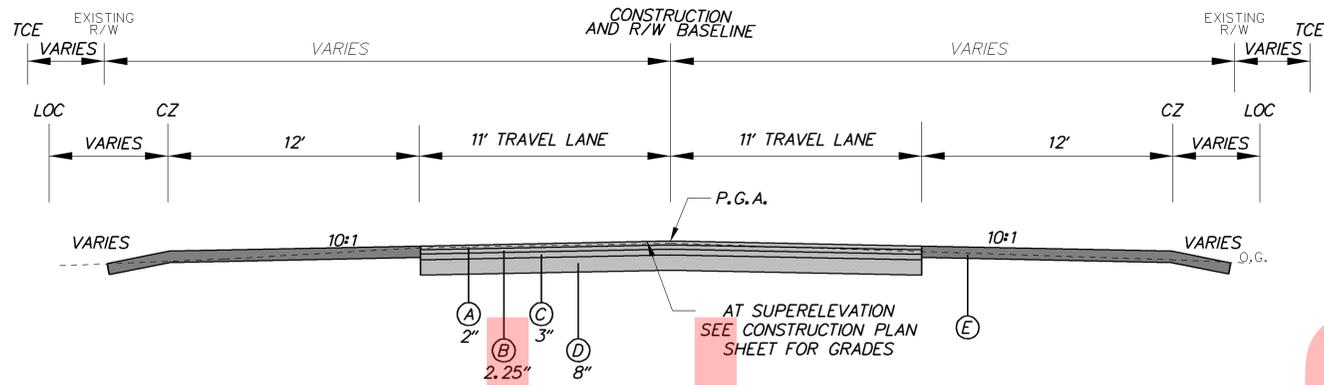
- ROAD SHALL NOT BE CLOSED FOR MORE THAN 30 DAYS PER WORK ORDER, WITH THE EXCEPTION OF BR 2-156B ON MCKEE ROAD (K156), WHICH CANNOT BE CLOSED FOR MORE THAN 51 DAYS TO ALLOW FOR EASTERN SHORE NATURAL GAS TO RELOCATE THEIR UTILITY UNDER THE CONTRACT'S DETOUR.

- THE CONTRACTOR MAY SIMULTANEOUSLY WORK ON MULTIPLE LOCATIONS WITH APPROVAL FROM THE TRAFFIC ENGINEER AND PROVIDING THE DETOURS DO NOT OVERLAP.

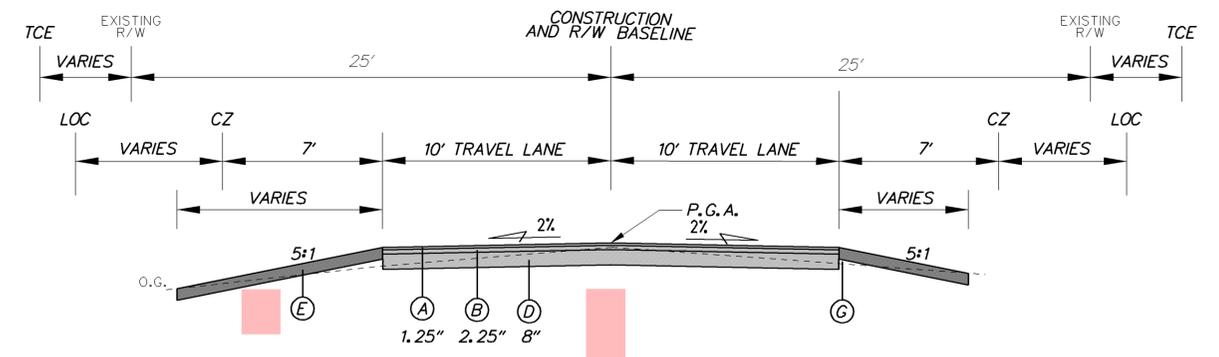
- PLANS SHOWN ARE SUBJECT TO MINOR CHANGES. FINAL APPROVED PLANS WILL BE ISSUED WHEN THE WORK ORDER IS GIVEN TO THE CONTRACTOR. PAYMENT WILL BE MADE ON THE ACTUAL QUANTITIES USED.

- THE INITIAL EXPENSE WILL BE PAID ONE TIME FOR THE FIRST WORK ORDER. JOB ORDER MOBILIZATION (ITEM * 763614/763615) WILL BE UTILIZED TO PAY FOR MOBILIZATION TO ALL OTHER WORK ORDER LOCATIONS.

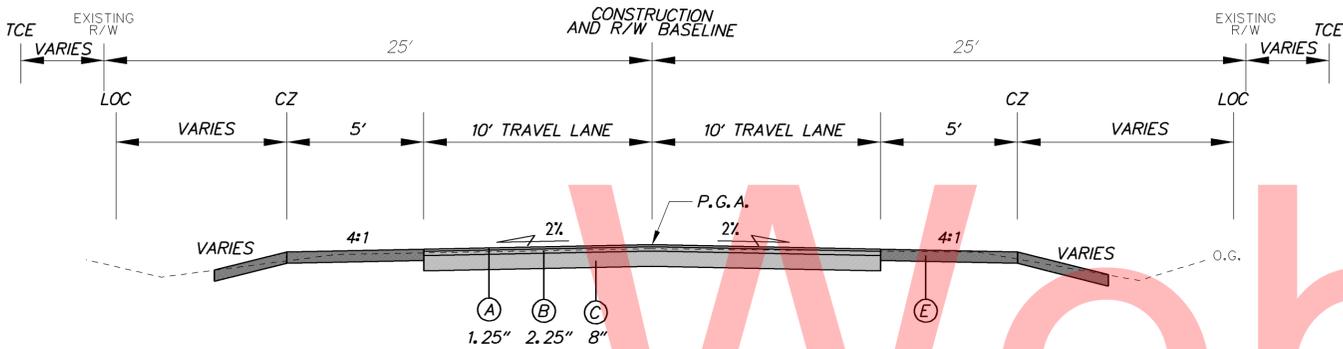
- THE LOCATIONS BELOW ARE POTENTIAL CONSTRUCTION SITES. OTHER WORK SITES MAY POTENTIALLY BE ADDED. WORK SHALL NOT BEGIN UNTIL NOTICE TO PROCEED IS ISSUED BY CONSTRUCTION ENGINEER.
 - BR 2-125A ON DUNDEE ROAD (K125) OVER TIDBURY CREEK
 - BR 2-126A HOLLETTS CORNER ROAD (K126) OVER UNNAMED DITCH
 - BR 2-156B ON MCKEE ROAD (K156) OVER FORK BRANCH
 - BR 2-317A ON SHORTS LANDING ROAD (K317) OVER TRIBUTARY TO CREEK ROAD
 - BR 3-926 ON SHARPS ROAD (S200) OVER BEAVERDAM BRANCH



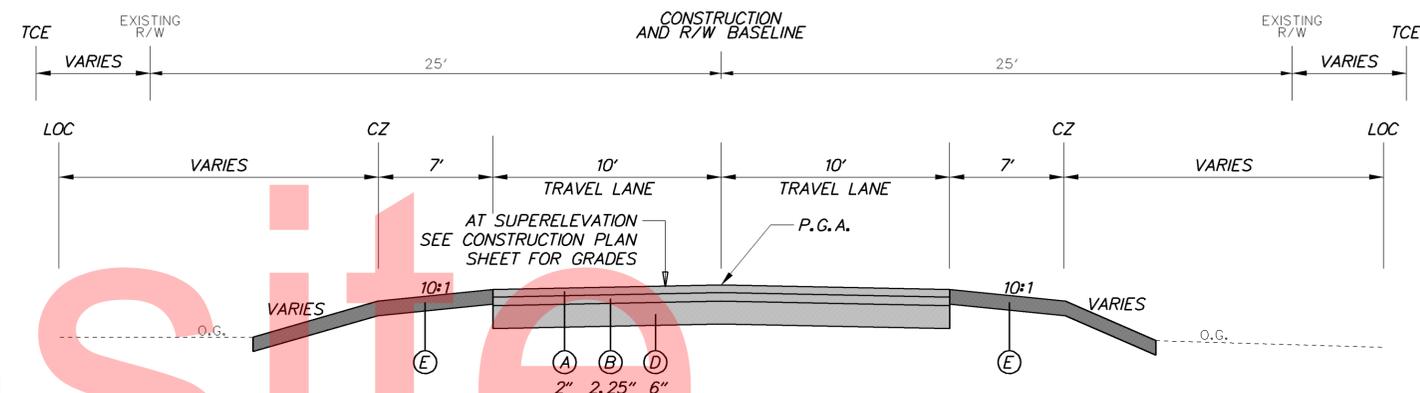
DUNDEE ROAD
STATION 23+00 TO STATION 24+50



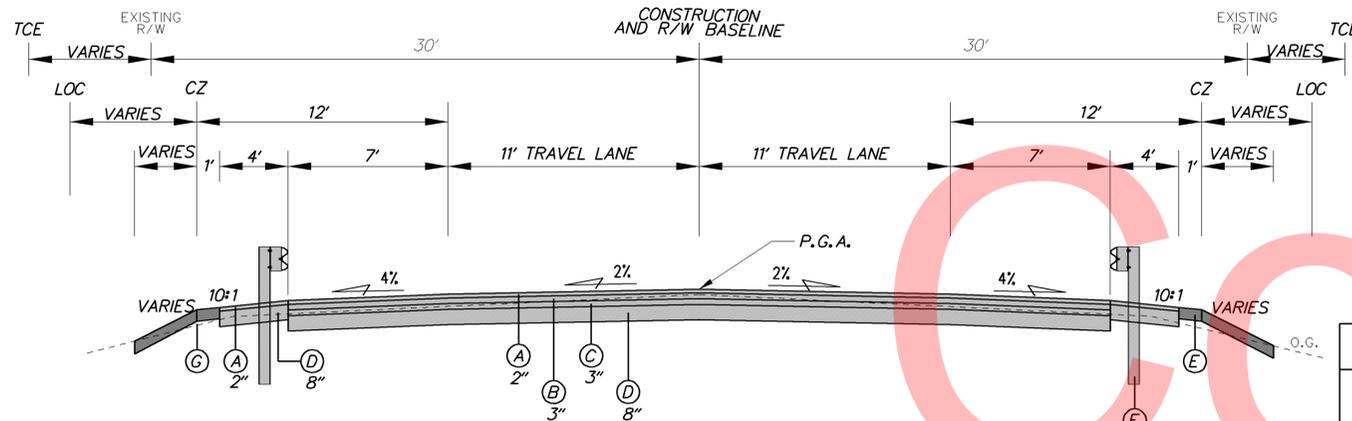
SHORTS LANDING ROAD
STATION 61+25 TO STATION 63+75



HOLLETTS CORNER ROAD
STATION 90+30 TO STATION 93+00

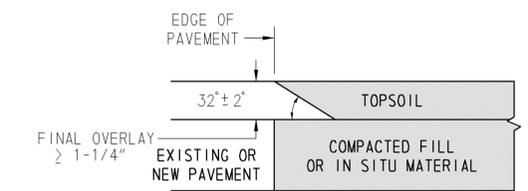


SHARPS ROAD
STATION 63+50 TO STATION 66+25



MCKEE ROAD
STATION 14+00 TO STATION 19+75

- LEGEND**
- (A) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATION, PG 64-22 (CARBONATE STONE)
 - (B) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATION, PG 64-22
 - (C) ITEM 401819 - WMA, SUPERPAVE, BCBC, 160 GYRATIONS, PG 64-22
 - (D) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
 - (E) ITEM 732002 - TOPSOIL, 6" DEPTH
 - (F) ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
 - (F) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
 - (G) ITEM 209006 - BORROW, TYPE F



HOT-MIX PAVEMENTS AND OVERLAYS
NOT TO SCALE

SAFETY EDGE DETAIL
NOT TO SCALE

Y:\KENT\126\BRIDGE\T201207504\GENERAL\PNJDGN

ADDENDUMS / REVISIONS	

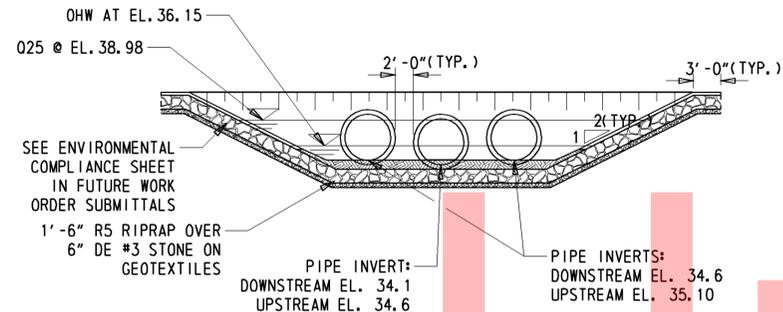
NOT TO SCALE

KENT AND SUSSEX COUNTY PIPE REPLACEMENTS, OPEN-END, FY 15-17

CONTRACT T201207504	BRIDGE NO. -
COUNTY KENT & SUSSEX	DESIGNED BY: S.M.
	CHECKED BY: C.A.S.

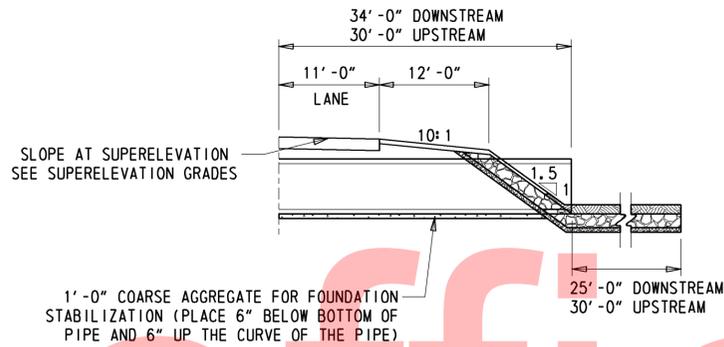
TYPICAL SECTIONS

SHEET NO. 5
TOTAL SHTS. 25



BRIDGE ELEVATION

1" = 10'



BRIDGE SECTION

1" = 10'

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
1	CAPPED REBAR	23+38.00	30.79'	391208.3522	611538.8373
2	CAPPED REBAR	23+46.00	-33.02'	391249.5758	611588.1912
3	CAPPED REBAR	23+98.09	-34.32'	391209.3613	611627.4441
4	CAPPED REBAR	24+15.00	30.00'	391156.1463	611587.5453

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL
1	VERIZON	23+56.56	13.18'	41.39	1.46'	3/4" BLACK CABLE
2	VERIZON	23+85.38	13.21'	42.08	1.63'	3/4" BLACK CABLE

NOTE 1: ALL UTILITIES SHALL BE RELOCATED IN ADVANCE OF CONSTRUCTION.

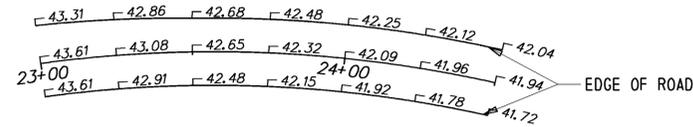
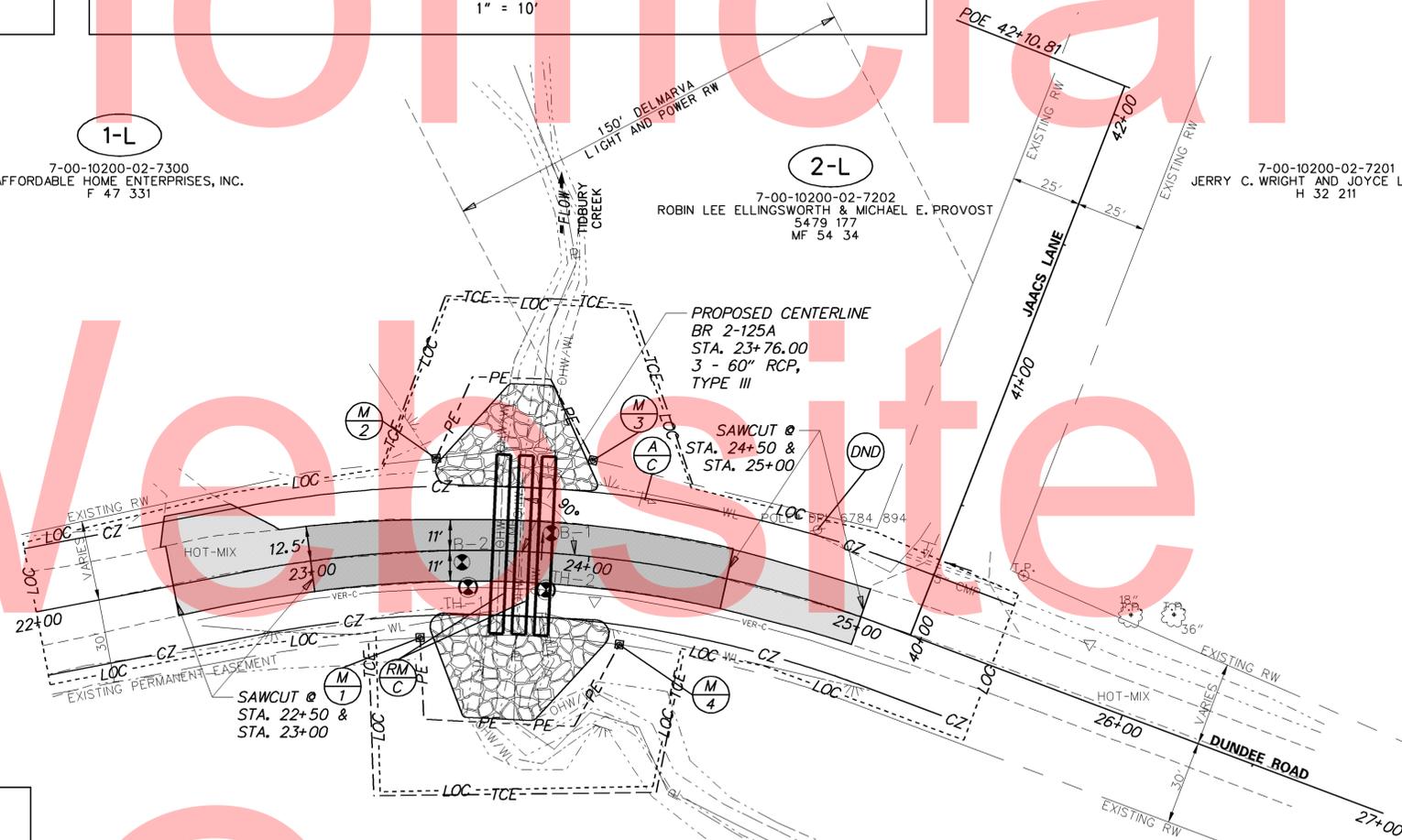
SOIL BORING SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
B-1	23+85.92	-7.16'	SEE SOIL BORING LOG
B-2	23+54.42	4.23'	SEE SOIL BORING LOG

1-L
7-00-10200-02-7300
AFFORDABLE HOME ENTERPRISES, INC.
F 47 331

2-L
7-00-10200-02-7202
ROBIN LEE ELLINGSWORTH & MICHAEL E. PROVOST
5479 177
MF 54 34

7-00-10200-02-7201
JERRY C. WRIGHT AND JOYCE L. WRIGHT
H 32 211



SUPERELEVATION GRADES

1" = 30'

1-R
7-00-10200-02-4901
MARY ANN FRANCES BRYANT
3248 226

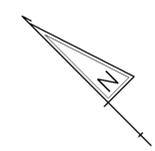
2-R
7-00-11008-01-1300
BARBARA TOWERS
WP005 0016
F 21 371

Unofficial
 Web Site
 Copy

BORING: B-1		DATE DRILLED: 10/5/12	
STATION: 23+85.92		ELEVATION: 42.04	
OFFSET: -7.16'		NORTHING: 391201.531	
COMMENTS: N/A		EASTING: 611598.482	
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	REMARKS
1	0.5	2	MOIST MEDIUM DENSE GRAY COARSE TO FINE SAND W/TRACE OF SILT AND FINE GRAVEL.
	2.0	11	
2	2.0	4	MOIST MEDIUM DENSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	4.0	5	
3	4.0	2	WET LOOSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	6.0	4	
4	6.0	1	WET LOOSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	8.0	5	
5	8.0	2	WET LOOSE GRAY FINE TO COARSE SAND W/SOME FINE GRAVEL, TRACE OF SILT.
	10.0	3	
6	10.0	1	WET LOOSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	12.0	2	
7	12.0	2	WET LOOSE GRAY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	14.0	7	
8	14.0	3	NO SIEVE ANALYSIS - INDICATION OF WET LOOSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	16.0	2	
9	16.0	3	WET LOOSE BROWNISH GRAY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	18.0	2	
10	18.0	2	WET LOOSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	20.0	4	
11	23.0	7	WET DENSE BROWN FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	25.0	25	
12	28.0	17	WET VERY DENSE BROWN FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	30.0	50	
			END BORING.

BORING: B-2		DATE DRILLED: 10/5/12	
STATION: 23+54.42		ELEVATION: 42.41	
OFFSET: -4.23'		NORTHING: 391216.759	
COMMENTS: N/A		EASTING: 611568.540	
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	REMARKS
1	0.5	1	MOIST MEDIUM DENSE BROWN COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	2.0	12	
2	2.0	4	MOIST LOOSE BROWN COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	4.0	2	
3	4.0	2	WET VERY LOOSE GRAY SILTY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL
	6.0	3	
4A	6.0	2	WET VERY LOOSE GRAY SILTY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL.
	7.0	1	
4B	7.0	3	WET LOOSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL, SILT AND ORGANIC MATTER.
	8.0	4	
5	8.0	2	WET LOOSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	10.0	2	
6	10.0	1	WET LOOSE GRAY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	12.0	3	
7	12.0	8	WET MEDIUM DENSE GRAY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	14.0	6	
8	14.0	1	SATURATED FIRM BROWNISH GRAY CLAYEY FINE SANDY SILT W/SOME COARSE SAND, TRACE OF FINE GRAVEL AND ORGANIC MATTER.
	16.0	3	
9	16.0	5	SATURATED MEDIUM DENSE BROWNISH GRAY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	18.0	5	
10	18.0	1	SATURATED VERY LOOSE GRAY SILTY FINE TO COARSE SAND W/SOME ORGANIC MATTER.
	20.0	3	
11	23.0	7	SATURATED DENSE BROWN COARSE TO FINE SAND W/TRACE OF FINE GRAVEL AND SILT.
	25.0	20	
12	28.0	5	SATURATED MEDIUM DENSE BROWN FINE TO COARSE SAND W/TRACE OF SILT.
	30.0	13	
			END BORING.

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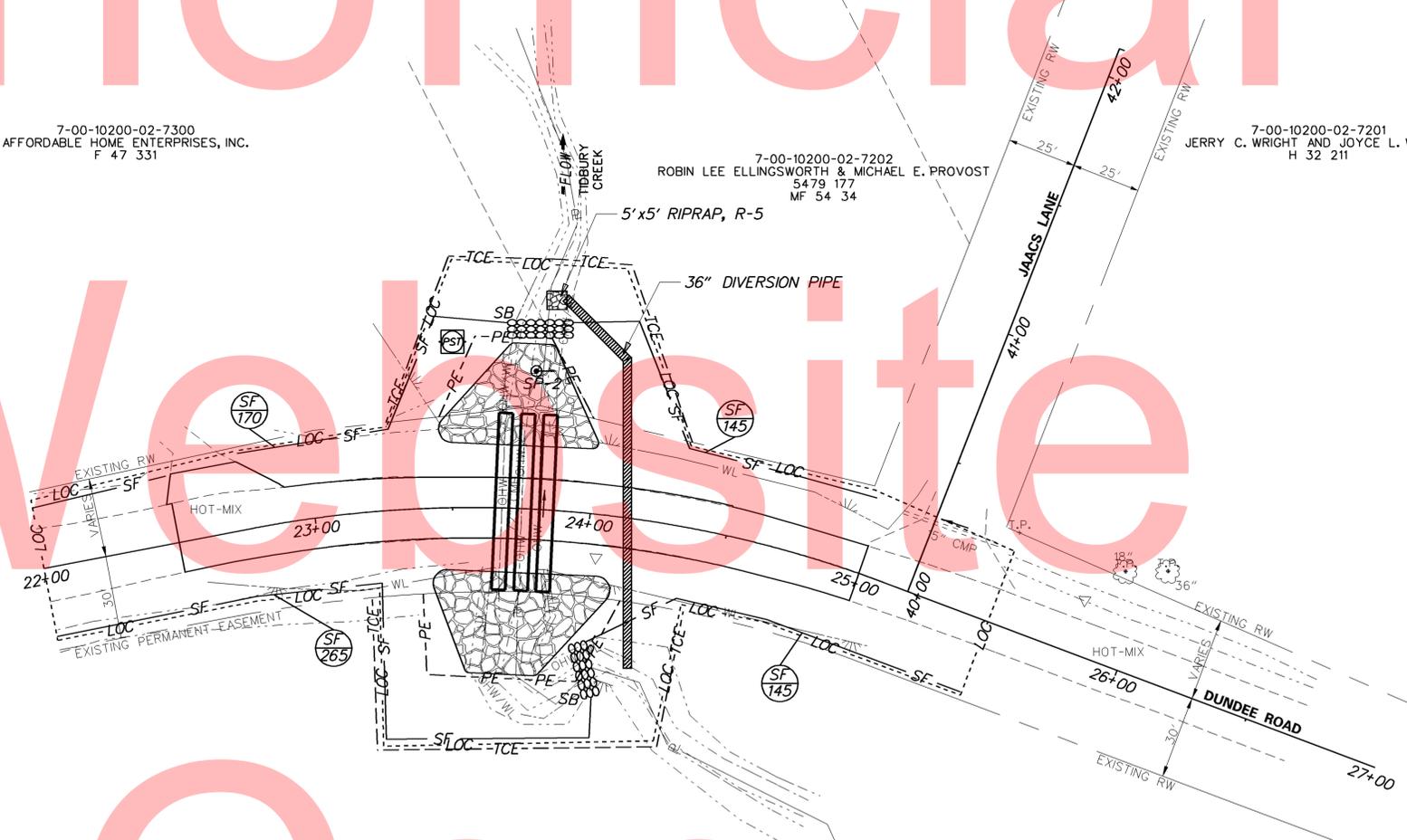


7-00-10200-02-7300
AFFORDABLE HOME ENTERPRISES, INC.
F 47 331

7-00-10200-02-7202
ROBIN LEE ELLINGSWORTH & MICHAEL E. PROVOST
5479 177
MF 54 34

7-00-10200-02-7201
JERRY C. WRIGHT AND JOYCE L. WRIGHT
H 32 211

Website



7-00-10200-02-4901
MARY ANN FRANCES BRYANT
3248 226

7-00-11008-01-1300
BARBARA TOWERS
WP005 0016
F 21 371

1. PLACE CHANGEABLE MESSAGE BOARDS AT LEAST 10 DAYS PRIOR TO ROAD CLOSURE.
2. INSTALL ALL M.O.T. ITEMS AS SHOWN ON THE DETOUR PLAN SHEET OR AS DIRECTED BY THE ENGINEER.
3. INSTALL SILT FENCE AS SHOWN ON THE PLANS. CONSTRUCT SANDBAG DIKES TO EL. 39.50 WITH A 1' DEEP BY 4' WIDE WEIR, INSTALL TEMPORARY 36" DIVERSION PIPE IN TRENCH, INSTALL RIPRAP, R-5 TO STABILIZE OUTFALL, INSTALL SUMP PIT, PORTABLE SEDIMENT TANK AND CONNECT SILT FENCE TO THE SANDBAG DIKES TO ENCLOSE THE WORK AREA.
4. DEWATER WORK AREA IN ACCORDANCE WITH SECTION 111 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL BE AWARE OF THE POSSIBLE NEED TO UNDERCUT (ITEM# 212000) AND USE A WELL-POINT SYSTEM (ITEM# 202574).
5. PERFORM ALL CONSTRUCTION ACTIVITY IN WORK AREA AS PER PLANS INCLUDING REMOVING EXISTING PIPES, PLACING NEW PIPES, AND PLACING RIPRAP.
6. RESTORE DISTURBED AREAS IN ACCORDANCE WITH THE ENVIRONMENTAL COMPLIANCE NOTE ON STREAM RESTORATION AND RIPRAP TREATMENTS. REMOVE STREAM DIVERSION INCLUDING SUMP PIT, PORTABLE SEDIMENT TANK, PIPE, AND SANDBAGS.
7. COMPLETE ALL REMAINING WORK INCLUDING ROADWAY RECONSTRUCTION, AND GRADING.
8. TOPSOIL, AND SEED DISTURBED AREAS.
9. REMOVE ALL REMAINING TEMPORARY EROSION, SEDIMENT CONTROL DEVICES AND STABILIZE AS NECESSARY.
10. REMOVE ALL M.O.T. DEVICES.



ADDENDUMS / REVISIONS	



**KENT AND SUSSEX COUNTY
PIPE REPLACEMENTS,
OPEN-END, FY 15-17**

CONTRACT T201407502	BRIDGE NO. 2-125A
COUNTY KENT	DESIGNED BY: S.M.
	CHECKED BY: C.A.S.

**CONSTRUCTION SEQUENCE
AND EROSION
CONTROL PLAN**

SHEET NO. 8
TOTAL SHTS. 25

1201207504

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

**DUNDEE RD
TO CLOSE**

**STARTING
XXXXXX**

DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-1

**DUNDEE RD
CLOSED**

**FOLLOW
DETOUR**

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

PCMS-1

XXXXXXXX
XXXXXXXX
XXXXXXXX

XXXXXXXX
XXXXXXXX
XXXXXXXX

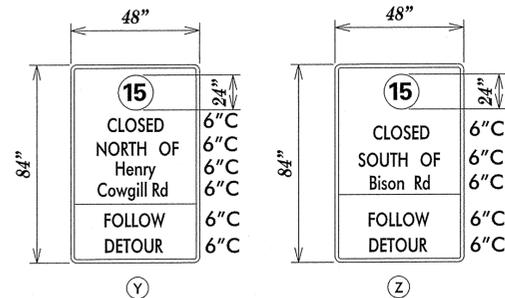
DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-1

XXXXXXXX
XXXXXXXX
XXXXXXXX

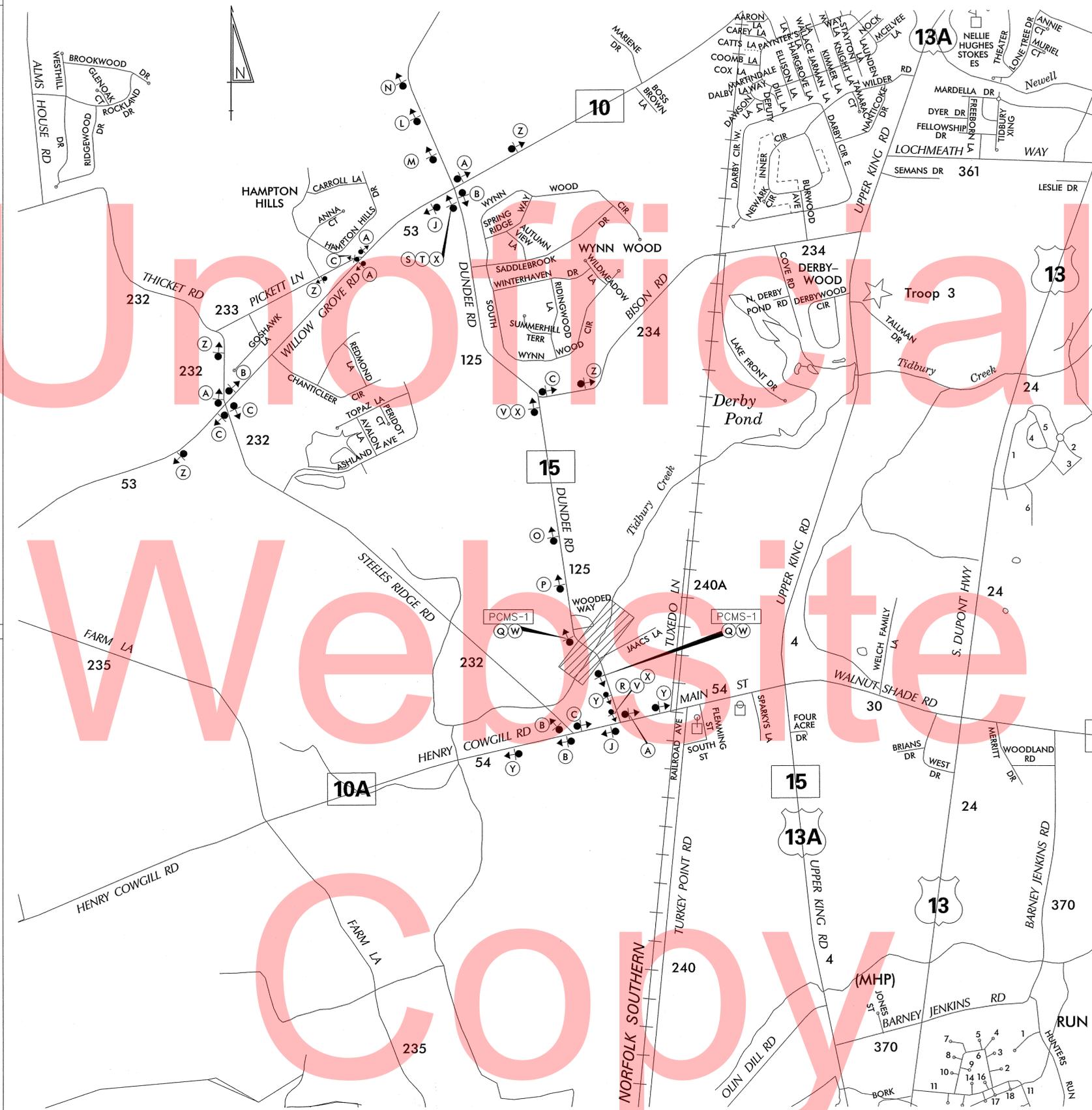
XXXXXXXX
XXXXXXXX
XXXXXXXX

SPECIAL SIGNS



***DG RETROREFLECTIVE FLUORESCENT
ORANGE BACKGROUND; BLACK LEGEND**

ROUTE SHIELD – WHITE BACKGROUND; BLACK LEGEND



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.

C:\DOCUMENTS AND SETTINGS\MICHAEL.RIVERAWY\DOCUMENTS\MICRO STATION DGN\DUNDEE RD BR2-125A.DGN

RECOMMENDED <u>Michael F. Rivera</u> DATE: <u>9/13/12</u>	RECOMMENDED <u>John C. Suckler Sr</u> DATE: <u>9/13/12</u>	RECOMMENDED _____ DATE: _____	APPROVED CHIEF SAFETY OFFICER <u>[Signature]</u> DATE: <u>9-26-12</u>
ADDENDUM / REVISIONS		NOT TO SCALE	APPROVED TRAFFIC ENGINEER <u>[Signature]</u> DATE: <u>9/27/12</u>
DELAWARE DEPARTMENT OF TRANSPORTATION		BR2-125A DUNDEE RD	K125 VEHICULAR DETOUR PLAN DUNDEE RD (K125)
		CONTRACT T201207504 COUNTY KENT	ROAD NO. K125 DESIGNED BY: MFR CHECKED BY: ASW
		SHEET NO. _____ TOTAL SHTS. _____	

Unofficial
 Website
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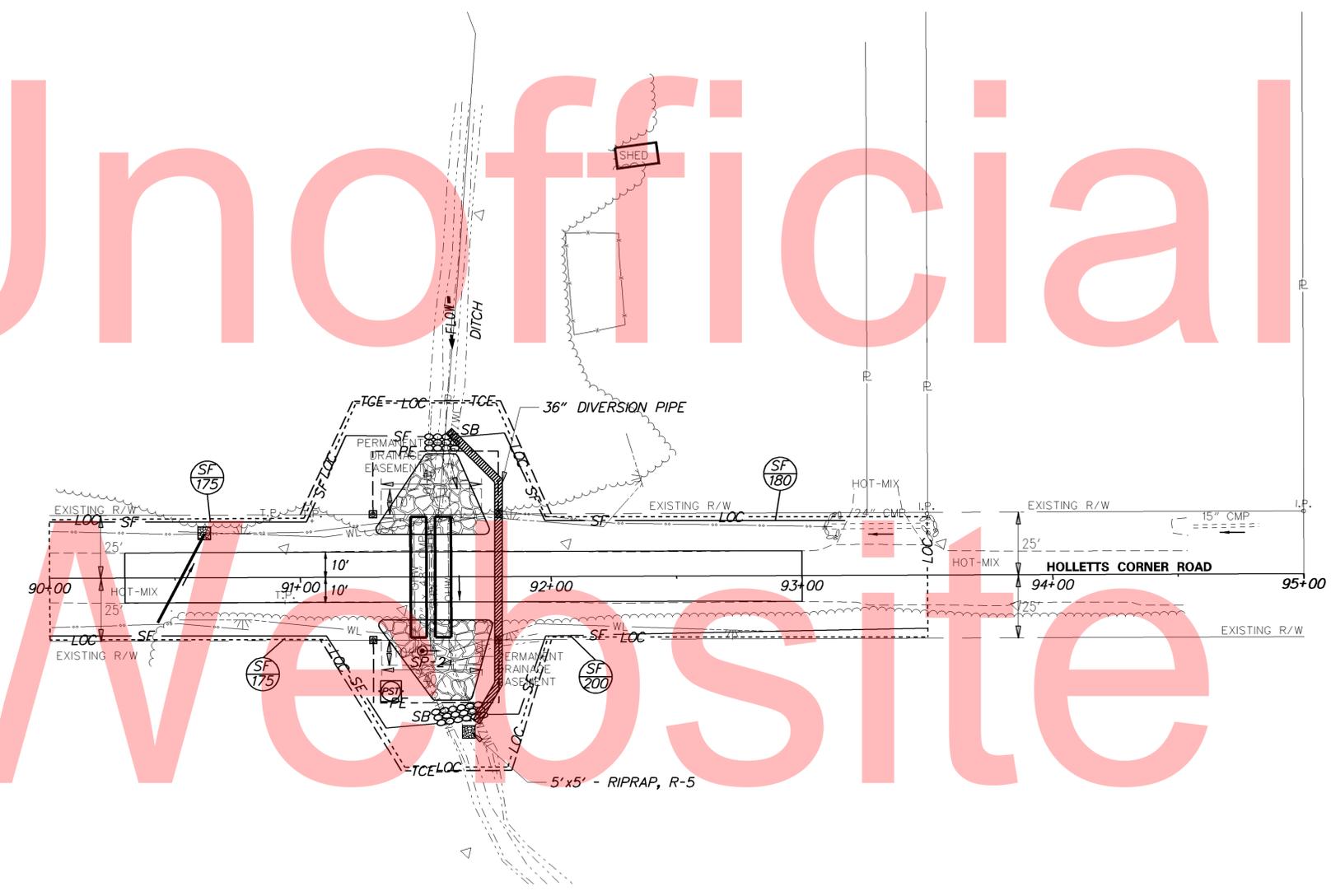
BORING: HC-1		DATE DRILLED: 10/11/12	
STATION: 91+85.22	OFFSET: -4.39'	ELEVATION: 62.23	NORTHING: 465135.014
COMMENTS: N/A			
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	REMARKS
1	0.5	6	MOIST MEDIUM DENSE BROWN COARSE TO FINE SAND AND FINE GRAVEL W/SOME SILT.
	2.0	9	
2	2.0	2	MOIST SOFT BROWN SILT W/SOME FINE SAND AND FINE GRAVEL, TRACE OF COARSE SAND AND CLAY.
	4.0	2	
3	4.0	1	WET LOOSE GRAY COARSE TO FINE SAND W/SOME SILT, TRACE OF FINE GRAVEL.
	6.0	2	
4	6.0	5	WET VERY STIFF GRAY FINE SANDY SILT W/SOME COARSE SAND AND CLAY, TRACE OF FINE GRAVEL.
	8.0	11	
5	8.0	3	WET MEDIUM DENSE BROWN FINE SAND W/SOME COARSE SAND, TRACE OF FINE GRAVEL AND SILT.
	10.0	10	
6	10.0	3	WET MEDIUM DENSE BROWN FINE GRAVELLY FINE TO COARSE SAND W/TRACE OF SILT.
	12.0	18	
7	12.0	7	WET MEDIUM DENSE BROWN FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	14.0	12	
8	14.0	5	WET MEDIUM DENSE BROWN FINE GRAVELLY COARSE TO FINE SAND W/TRACE OF SILT.
	16.0	8	
9	16.0	5	WET DENSE BROWN FINE SAND W/SOME COARSE SAND, TRACE OF FINE GRAVEL AND SILT.
	18.0	43	
10	18.0	18	WET VERY DENSE BROWN FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	20.0	50	
11	23.0	4	WET VERY DENSE LIGHT BROWN FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	25.0	18	
		50	
		10	END BORING.
		10	

BORING: HC-2		DATE DRILLED: 10/11/12	
STATION: 91+70.93	OFFSET: 2.51'	ELEVATION: 62.23	NORTHING: 465147.193
COMMENTS: N/A			
SAMPLE INFORMATION			
NO.	DEPTH	BLOWS /6"	REMARKS
1	0.5	8	MOIST MEDIUM DENSE BROWN SILTY COARSE TO FINE SAND W/SOME FINE GRAVEL.
	2.0	10	
2	2.0	4	MOIST FIRM GRAY FINE SANDY SILT W/SOME COARSE SAND, TRACE OF FINE GRAVEL AND CLAY.
	4.0	2	
3	4.0	1	WET VERY LOOSE GRAY SILTY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL.
	6.0	2	
4	6.0	2	WET MEDIUM DENSE GRAY SILTY FINE SAND W/SOME COARSE SAND AND FINE GRAVEL.
	8.0	14	
5	8.0	4	WET MEDIUM DENSE GRAY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	10.0	10	
6	10.0	5	WET MEDIUM DENSE GRAY FINE TO COARSE SAND AND FINE GRAVEL W/TRACE OF SILT.
	12.0	12	
7	12.0	1	WET MEDIUM DENSE GRAY FINE TO COARSE SAND W/SOME FINE GRAVEL, TRACE OF SILT.
	14.0	19	
8	14.0	5	WET MEDIUM DENSE GRAY COARSE TO FINE SAND W/SOME FINE GRAVEL, TRACE OF SILT.
	16.0	11	
9	16.0	3	WET MEDIUM DENSE GRAY FINE GRAVELLY FINE TO COARSE SAND W/TRACE OF SILT.
	18.0	9	
10	18.0	4	WET MEDIUM DENSE BROWN FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	20.0	16	
11	23.0	8	WET VERY DENSE BROWN FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.
	25.0	17	
		50	END BORING.

Unofficial

Worksheet

Copy



SEQUENCE OF CONSTRUCTION

1. PLACE CHANGEABLE MESSAGE BOARDS AT LEAST 10 DAYS PRIOR TO ROAD CLOSURE.
2. INSTALL ALL M.O.T. ITEMS AS SHOWN ON THE DETOUR PLAN SHEET OR AS DIRECTED BY THE ENGINEER.
3. INSTALL SILT FENCE AS SHOWN ON THE PLANS. CONSTRUCT SANDBAG DIKES TO EL. 60.50 (VARYING HEIGHT) WITH A 1" DEEP BY 3" WIDE WEIR, INSTALL 36" DIVERSION PIPE IN TRENCH, INSTALL RIPRAP, R-5 TO STABILIZE OUTFALL, INSTALL SUMP PIT, PORTABLE SEDIMENT TANK AND CONNECT SILT FENCE TO THE SANDBAG DIKES TO ENCLOSE THE WORK AREA.
4. DEWATER WORK AREA IN ACCORDANCE WITH SECTION 111 OF THE STANDARD SPECIFICATIONS.
5. PERFORM ALL CONSTRUCTION ACTIVITY IN WORK AREA AS PER PLANS INCLUDING REMOVING EXISTING PIPES, PLACING NEW PIPES, AND PLACING RIPRAP.
6. REMOVE STREAM DIVERSION INCLUDING SUMP PIT, PORTABLE SEDIMENT TANK, DIVERSION PIPE, AND SANDBAGS. RESTORE DISTURBED AREAS IN ACCORDANCE WITH THE ENVIRONMENTAL COMPLIANCE NOTE ON STREAM RESTORATION AND RIPRAP TREATMENT.
7. COMPLETE ALL REMAINING WORK INCLUDING ROADWAY RECONSTRUCTION, AND GRADING.
8. TOPSOIL AND SEED DISTURBED AREAS.
9. REMOVE ALL REMAINING TEMPORARY EROSION, SEDIMENT CONTROL DEVICES AND STABILIZE AS NECESSARY.
10. REMOVE ALL M.O.T. DEVICES.

ADDENDUMS / REVISIONS



**KENT AND SUSSEX COUNTY
PIPE REPLACEMENTS,
OPEN-END, FY 15-17**

CONTRACT	BRIDGE NO.	2-126A
T201407502	DESIGNED BY:	S.M.
COUNTY	CHECKED BY:	C.A.S.
KENT		

**CONSTRUCTION SEQUENCE
AND EROSION
CONTROL PLAN**

SHEET NO.	12
TOTAL SHTS.	25

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

**HOLLETT'S
CORNER
ROAD**

**TO CLOSE
STARTING
XXXXXX**

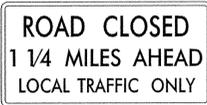
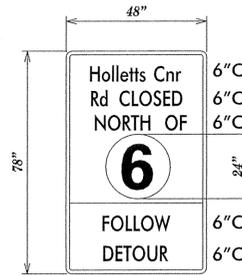
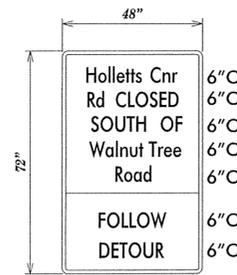
DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-1

**HOLLETT'S
CORNER
RD**

**CLOSED
FOLLOW
DETOUR**

SPECIAL SIGNS



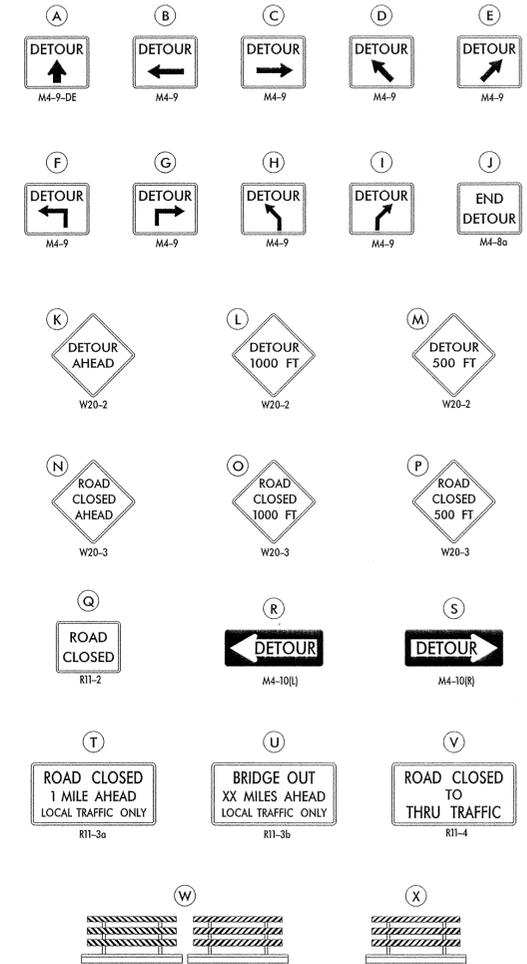
***D/G RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND**

***ROUTE SHIELD-WHITE BACKGROUND; BLACK LEGEND**

SPECIAL NOTES

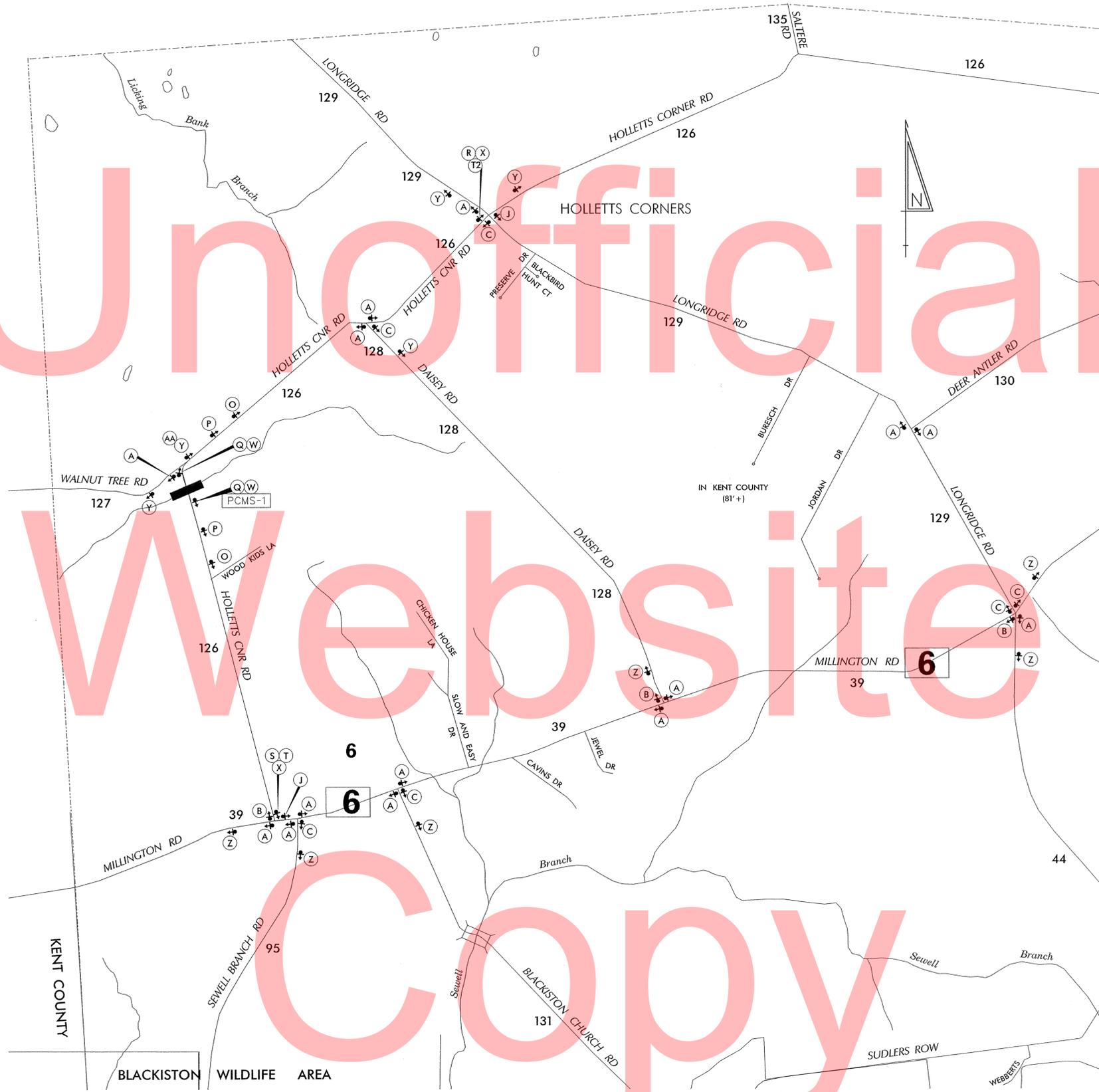
- "STARTING PLAQUE" (AA) SHALL BE USED WITH SPECIAL SIGN (Y) AT THE CLOSURE POINT TEN DAYS PRIOR TO DETOUR AND REMOVED UPON IMPLEMENTATION OF DETOUR. STARTING PLAQUE SHALL BE AFFIXED OVER THE "FOLLOW DETOUR" PORTION OF THE SPECIAL SIGN. DUE TO SPACE CONSTRAINTS, THIS SIGN COMBINATION SHALL BE USED IN LIEU OF A PCMS.

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.



RECOMMENDED Michael F. Rivera DATE: 10-26-12

RECOMMENDED John C. Subala DATE: 10-26-12

RECOMMENDED _____ DATE: _____

APPROVED CHIEF SAFETY OFFICER [Signature] DATE: 10-26-12

APPROVED TRAFFIC ENGINEER [Signature] DATE: 10/26/12



NOT TO SCALE

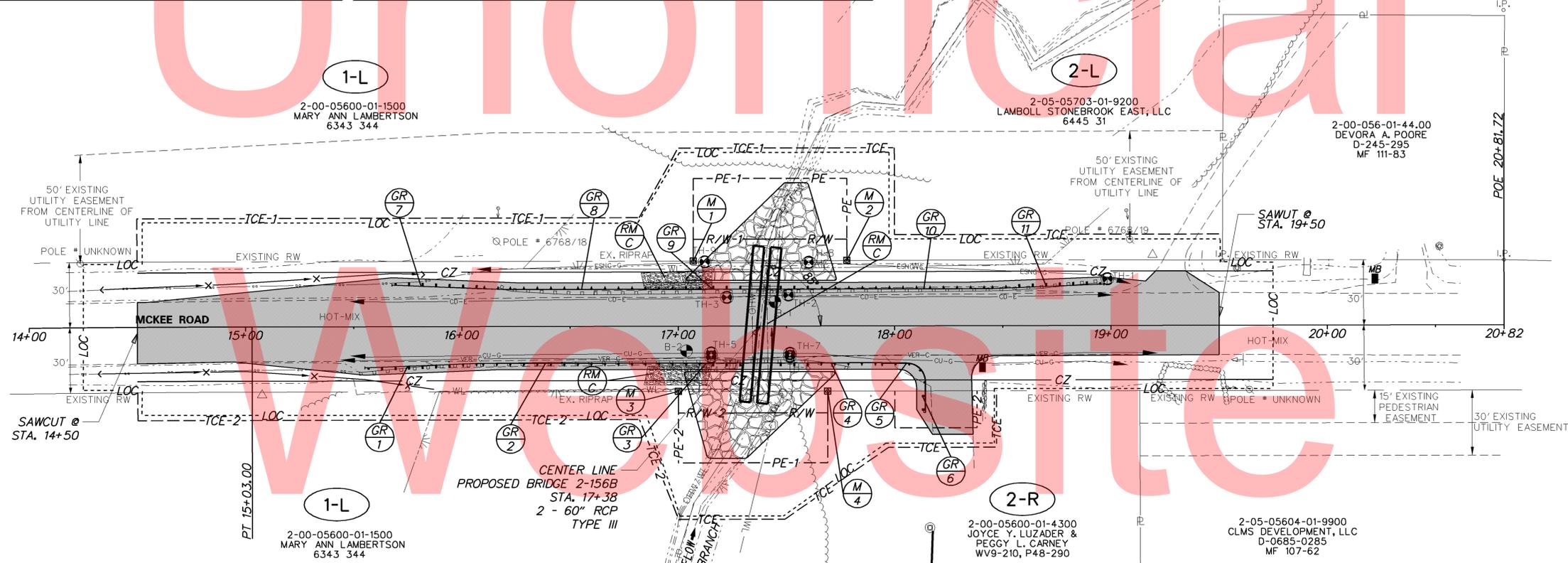
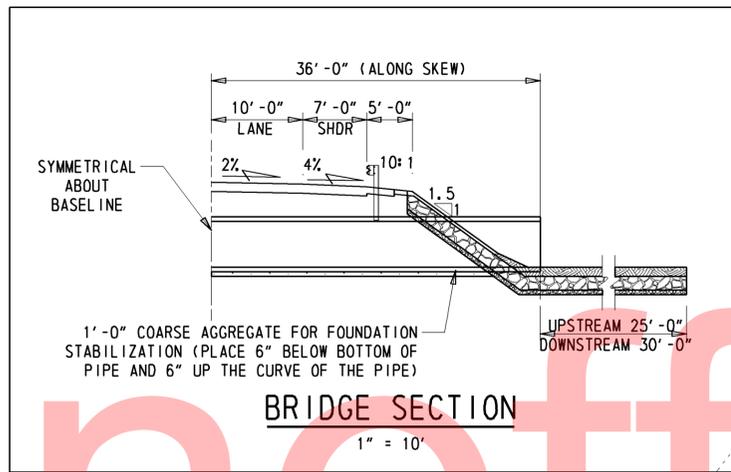
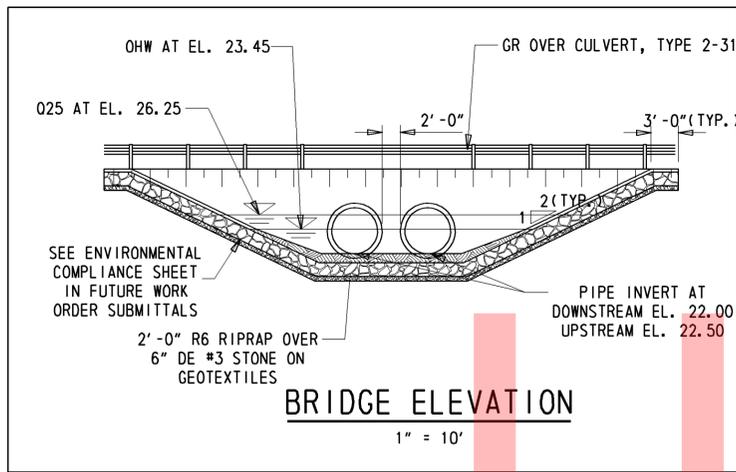
**HOLLETT'S CORNER RD
BR 2-126A**

CONTRACT	ROAD NO.	K126
T201207504	DESIGNED BY:	MFR
COUNTY	CHECKED BY:	ASW
KENT		

**VEHICULAR DETOUR PLAN
HOLLETT'S CORNER RD**

SHEET NO.
TOTAL SHTS.

C:\DOCUMENTS AND SETTINGS\MICHAEL.RIVERA\MY DOCUMENTS\MICRO STATION DGN\HOLLETT'S CORNER RD BR 2-126A.DGN



UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL
1	ESNG-G	18+98.39	-21.50'	31.05	4.85'	PIPELINE*
2	CD-E	17+50.97	-14.28'	30.38	1.18'	1" CABLE
3	CD-E	17+22.48	-13.23'	30.41	1.49'	1" CABLE
4	VER-C	17+15.18	14.22'	30.46	1.46'	1" CABLE
5	CU-G	17+15.17	12.39'	30.54	2.82'	8" PIPE
6	VER-C	17+51.59	13.99'	30.39	1.63'	1" CABLE
7	CU-G	17+51.67	12.62'	30.49	2.24'	8" PIPE
8	ESNG-G	17+60.35	-29.33'	24.95	4.82'	**
9	ESNG-G	17+12.31	-29.60'	25.81	5.78'	**

* - CONCRETE COVER, 6" T X 36" W
 ** - NO VISUAL DUE TO WATER
 NOTE 1: SHEET PILE SHALL NOT BE USED TO INSTALL/REMOVE PIPES DUE TO UNDERGROUND UTILITY CONFLICT
 NOTE 2: ALL UTILITIES SHALL BE RELOCATED IN ADVANCE OF CONSTRUCTION WITH THE EXCEPTION OF ENSG-G. ENSG-G SHALL BE RELOCATED UTILIZING THE AWARDED CONTRACTOR'S MAINTENANCE OF TRAFFIC.

SOIL BORING SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
B-1	17+44.66	-11.12'	SEE BORING LOG SHEET
B-2	17+03.79	11.35'	SEE BORING LOG SHEET

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1	END TREATMENT ATTENUATOR, TYPE 1	15+56.76	18.91'	50.00'
2	STEEL BEAM GUARDRAIL, TYPE 1-31	16+06.72	17.00'	100.00'
3	GUARDRAIL OVER CULVERTS, TYPE 2-31	17+06.72	17.00'	62.50'
4	STEEL BEAM GUARDRAIL, TYPE 1-31	17+69.22	17.00'	25.00'
5	CURVED GUARDRAIL SECTION, R=8'-6"	17+94.22	17.00'	31.68'
6	ENTRANCE SPECIAL END ANCHORAGE	18+14.09	32.31'	-
7	END TREATMENT ATTENUATOR, TYPE 1	15+69.32	-19.09'	50.00'
8	STEEL BEAM GUARDRAIL, TYPE 1-31	16+19.28	-17.00'	87.50'
9	GUARDRAIL OVER CULVERTS, TYPE 2-31	17+06.78	-17.00'	62.50'
10	STEEL BEAM GUARDRAIL, TYPE 1-31	17+69.28	-17.00'	75.00'
11	END TREATMENT ATTENUATOR, TYPE 1	18+44.28	-17.00'	50.00'

RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
1	CAPPED REBAR	17+07.00	-30.00'	434968.3937	611411.7028
2	CAPPED REBAR	17+78.00	-30.12'	434915.7984	611459.3971
3	CAPPED REBAR	17+00.00	30.00'	434933.3575	611362.4944
4	CAPPED REBAR	17+69.00	30.00'	434882.1653	611408.7584

Y:\KENT\Bridges\T201207504

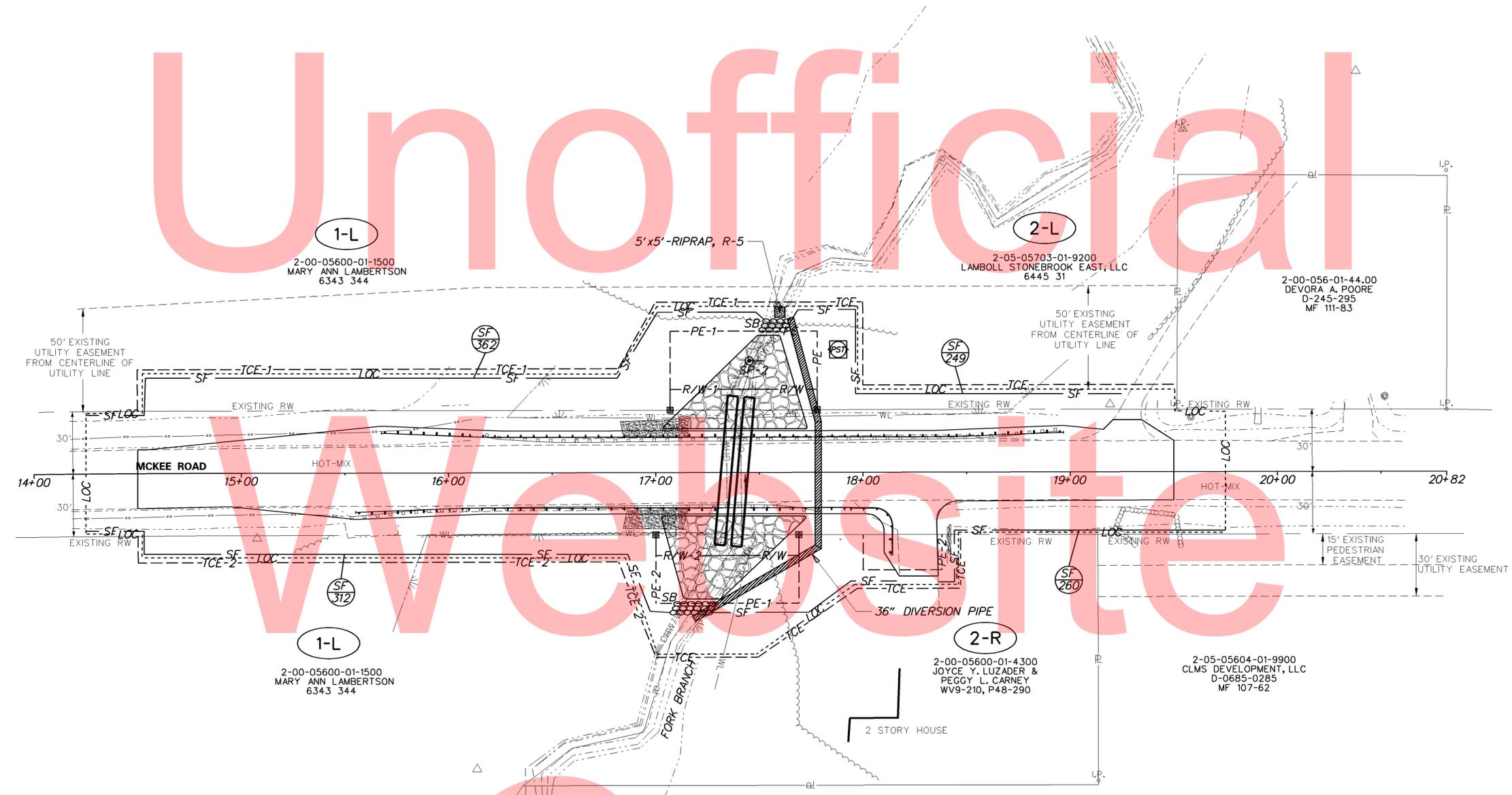
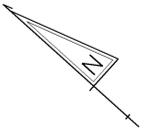
	DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	KENT AND SUSSEX COUNTY PIPE REPLACEMENTS, OPEN-END, FY 15-17	CONTRACT T201407502 COUNTY KENT & SUSSEX	BRIDGE NO. 2-156B DESIGNED BY: S.M. CHECKED BY: C.A.S.	CONSTRUCTION PLAN	SHEET NO. 14 TOTAL SHTS. 25

Unofficial

BORING: MC-1		DATE DRILLED: 10/2/12			
STATION: 17+44.66		ELEVATION: 30.52			
OFFSET: -11.12'		NORTHING: 434927.7960			
EASTING: 611422.9450		COMMENTS: N/A			
SAMPLE INFORMATION					
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS
1	0.0	2	MOIST MEDIUM DENSE BROWN SILTY FINE TO COARSE SAND W/SOME FINE GRAVEL.	A-2-4(0)	
	1.0	9			
2	1.0	2	MOIST MEDIUM DENSE BROWN SILTY FINE TO COARSE SAND W/SOME FINE GRAVEL.	A-2-4(0)	
		5			
	2.0	14			
		9			
3	2.0	5	MOIST STIFF BROWN FINE TO COARSE SANDY SILT W/TRACE OF FINE GRAVEL.	A-4(0)	
		5			
	4.0	5			
		5			
4	4.0	1	SATURATED SOFT BROWN FINE TO COARSE SANDY SILT.	A-4(0)	
		0			
	6.0	1			
U-1	6.0		SATURATED DARK GRAY ORGANIC CLAYEY COARSE TO FINE SANDY SILT.	A-5(0)	
	8.0				
6	8.0	1	SATURATED VERY LOOSE DARK GRAY SILTY FINE SAND W/TRACE OF COARSE SAND.	A-2-4(0)	9.5' - APPROX. DEPTH OF BOTTOM OF COARSE AGGREGATE
		1			
	10.0	2			
7	10.0	1	SATURATED VERY LOOSE DARK GRAY FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)	
		1			
	12.0	3			
		2			
8	12.0	1	SATURATED VERY LOOSE DARK GRAY FINE GRAVELLY COARSE SAND W/SOME FINE SAND, TRACE OF SILT.	A-1-B	
		1			
	14.0	1			
9	14.0	1	SATURATED LOOSE DARK GRAY FINE GRAVELLY COARSE SAND W/SOME FINE SAND, TRACE OF SILT.	A-1-B	
		2			
	16.0	3			
		4			
10	16.0	1	SATURATED LOOSE DARK GRAY FINE SAND W/SOME COARSE SAND AND SILT, TRACE OF FINE GRAVEL.	A-2-4(0)	
		3			
	18.0	4			
		6			
11	18.0	2	SATURATED FIRM DARK GRAY ORGANIC CLAYEY FINE SANDY SILT W/SOME COARSE SAND.	A-5(6)	
		3			
	23.0	5			
		7			
12	23.0	12	SATURATED HARD DARK GRAY FINE SANDY SILT W/SOME COARSE SAND, CLAY AND ORGANIC MATTER.	A-4(0)	
		17			
	28.0	20			
		21			
	28.0		END BORING.		
	30.0				

BORING: B-2		DATE DRILLED: 10/4/12			
STATION: 17+03.79		ELEVATION: 30.62			
OFFSET: 11.35'		NORTHING: 434943.0490			
EASTING: 611378.8730		COMMENTS: N/A			
SAMPLE INFORMATION					
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS
1	0.0	1	MOIST MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME FINE GRAVEL AND SILT.	A-1-B	
	1.0	9			
2	1.0	3	WET FIRM BROWN FINE TO COARSE SANDY SILT W/SOME CLAY, TRACE OF FINE GRAVEL.	A-4(0)	
		3			
	2.0	3			
		3			
3	2.0	2	WET SOFT BROWN CLAYEY FINE SANDY SILT W/SOME COARSE SAND, TRACE OF FINE GRAVEL.	A-4(1)	
		1			
	4.0	1			
		1			
4	4.0	WH	SATURATED SOFT BROWN CLAYEY COARSE SANDY SILT W/SOME FINE SAND.	A-5(3)	
	6.0	1			
5	6.0	1	NO SIEVE ANALYSIS - INDICATION OF SATURATED SOFT BROWN COARSE SAND W/SOME CLAY AND SAND.		
		1			
	8.0	1			
6	8.0	WH	SATURATED SOFT BROWN FINE SANDY SILT W/SOME COARSE SAND, CLAY AND ORGANIC MATTER.	A-4(0)	9.6' - APPROX. DEPTH OF BOTTOM OF COARSE AGGREGATE
		2			
	10.0	2			
7	10.0	5	SATURATED MEDIUM DENSE DARK GRAY FINE SAND W/SOME COARSE SAND AND SILT, TRACE OF FINE GRAVEL.	A-2-4(0)	
		7			
	12.0	12			
		11			
8	12.0	15	SATURATED DENSE DARK GRAY COARSE TO FINE SAND W/SOME FINE GRAVEL, TRACE OF SILT.	A-1-B	
		25			
	14.0	10			
		5			
9	14.0	3	SATURATED LOOSE DARK GRAY FINE TO COARSE SAND W/SOME FINE GRAVEL, TRACE OF SILT.	A-1-B	
		4			
	16.0	4			
		4			
10	16.0	2	SATURATED LOOSE DARK GRAY FINE TO COARSE SAND W/SOME FINE GRAVEL AND SILT.	A-2-4(0)	
		3			
	18.0	4			
		4			
11	18.0	1	SATURATED LOOSE DARK GRAY ORGANIC SILTY FINE SAND W/SOME COARSE SAND, TRACE OF FINE GRAVEL.	A-2-4(0)	
		3			
	23.0	4			
		4			
12	23.0	9	SATURATED HARD DARK GRAY FINE SANDY SILT W/SOME COARSE SAND AND CLAY, TRACE OF FINE GRAVEL.	A-4(0)	
		17			
	28.0	21			
		25			
	28.0		END BORING		
	30.0				

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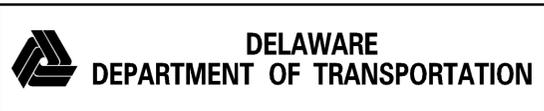
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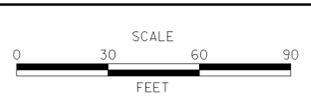
CONSTRUCTION SEQUENCE

1. PLACE CHANGEABLE MESSAGE BOARDS AT LEAST 10 DAYS PRIOR TO ROAD CLOSURE.
2. INSTALL ALL M.O.T. ITEMS AS SHOWN ON THE DETOUR PLAN SHEET OR AS DIRECTED BY THE ENGINEER.
3. INSTALL SILT FENCE AS SHOWN ON THE PLANS. CONSTRUCT SANDBAG DIKES TO EL.25.75 WITH A 1' DEEP BY 3' WIDE WEIR, INSTALL 36" DIVERSION PIPE IN TRENCH, INSTALL RIPRAP, R-5 TO STABILIZE OUTFALL, INSTALL SUMP PIT, PORTABLE SEDIMENT TANK AND CONNECT SILT FENCE TO THE SANDBAG DIKES TO ENCLOSE THE WORK AREA.
4. DEWATER WORK AREA IN ACCORDANCE WITH SECTION 111 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL BE AWARE OF THE POSSIBLE NEED TO UNDERCUT (ITEM#212000) AND USE A WELL-POINT SYSTEM (ITEM#202574).
5. PERFORM ALL CONSTRUCTION ACTIVITY IN WORK AREA AS PER PLANS INCLUDING REMOVING EXISTING PIPES, PLACING NEW PIPES, AND PLACING RIPRAP.
6. REMOVE STREAM DIVERSION INCLUDING SUMP PIT, PORTABLE SEDIMENT TANK, PUMP, AND SANDBAGS. RESTORE DISTURBED AREAS IN ACCORDANCE WITH THE ENVIRONMENTAL COMPLIANCE NOTE ON STREAM RESTORATION AND RIPRAP TREATMENTS.
7. COMPLETE ALL REMAINING WORK INCLUDING ROADWAY RECONSTRUCTION, AND GRADING.
8. TOPSOIL AND SEED DISTURBED AREAS.
9. REMOVE ALL REMAINING TEMPORARY EROSION, SEDIMENT CONTROL DEVICES AND STABILIZE AS NECESSARY.
10. REMOVE ALL M.O.T. DEVICES.

Y:\KENT\Bridg\T201207504



ADDENDUMS / REVISIONS



**KENT AND SUSSEX COUNTY
PIPE REPLACEMENTS,
OPEN-END, FY 15-17**

CONTRACT T201407502	BRIDGE NO. 2-156B
COUNTY KENT & SUSSEX	DESIGNED BY: S.M. CHECKED BY: C.A.S.

**CONSTRUCTION SEQUENCE
AND EROSION
CONTROL PLAN**

SHEET NO. 16	TOTAL SHTS. 25
-----------------	-------------------

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

MCKEE ROAD TO CLOSE

STARTING
XXXXXX

DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

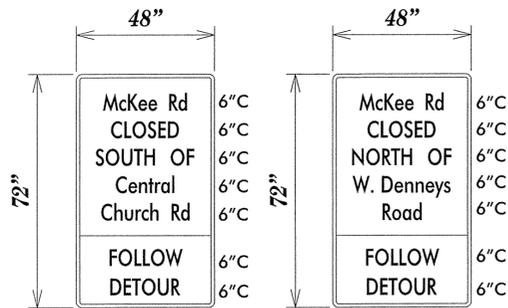
PCMS-2

MCKEE ROAD CLOSED

FOLLOW
DETOUR

*UPON IMPLEMENTATION OF DETOUR, PCMS-1 SHALL BE RELOCATED TO PCMS-2 LOCATIONS AND THE CORRESPONDING MESSAGE SHALL BE DISPLAYED.

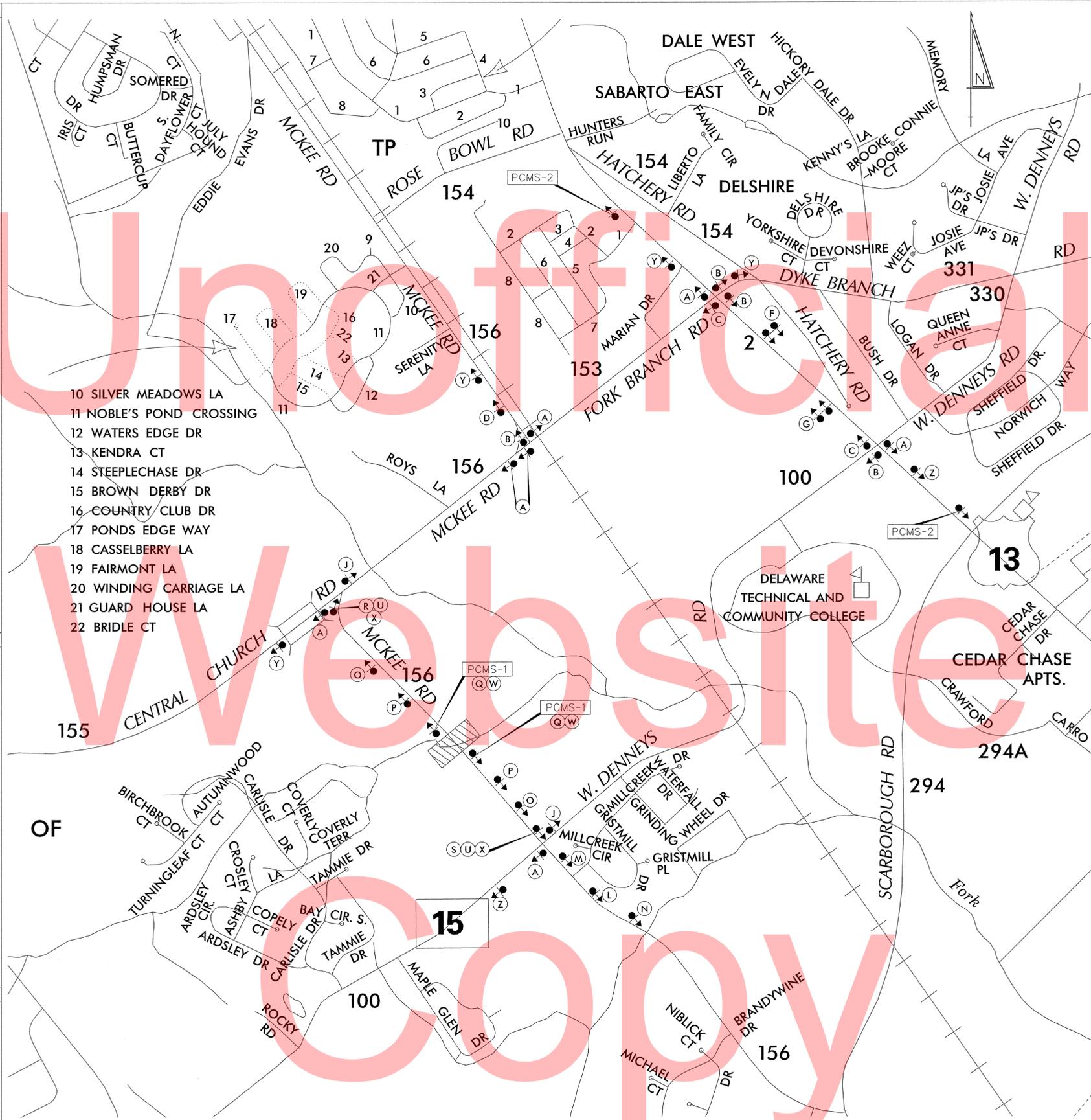
SPECIAL SIGNS



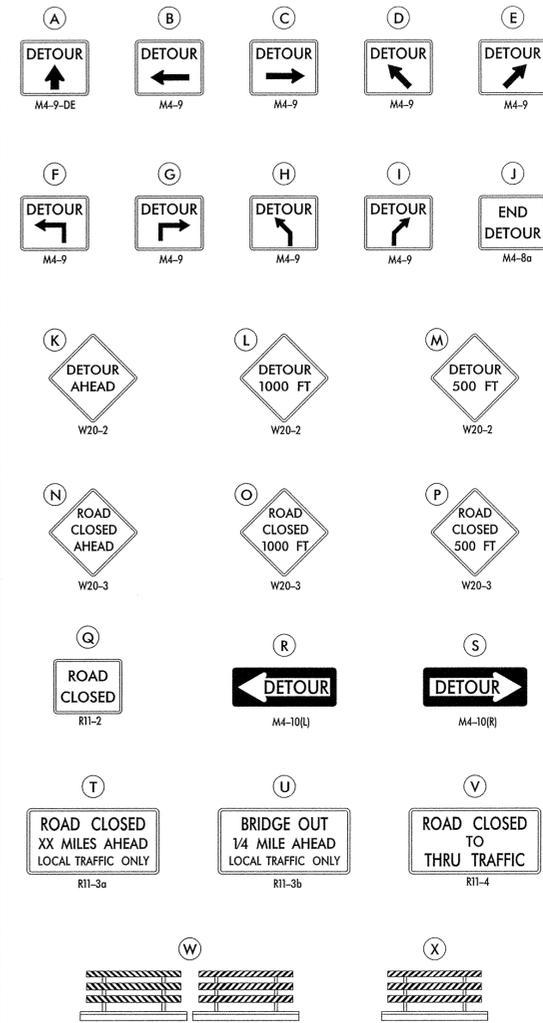
***DG RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND**

SPECIAL NOTES

1. SIGNS PLACED ON MULTI-LANE ROADWAYS SHALL BE PLACED ON BOTH SIDES OF THE DIRECTIONAL ROADWAY.



LEGEND



GENERAL NOTES

1. 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.)
2. 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.)
3. DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
4. 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.
5. SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
6. 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.
7. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
8. WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
9. "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
10. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

C:\DOCUMENTS AND SETTINGS\MICHAEL.RIVERAWAY\DOCUMENTS\MICRO STATION DGN\MCKEE RD BR 2-156B.DGN

RECOMMENDED *M* DATE: 2-20-13

RECOMMENDED _____ DATE: _____

RECOMMENDED *John C. Subida* DATE: 2-20-13

APPROVED CHIEF SAFETY OFFICER *[Signature]* DATE: 2/20/13

APPROVED TRAFFIC ENGINEER *[Signature]* DATE: 2/20/13

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

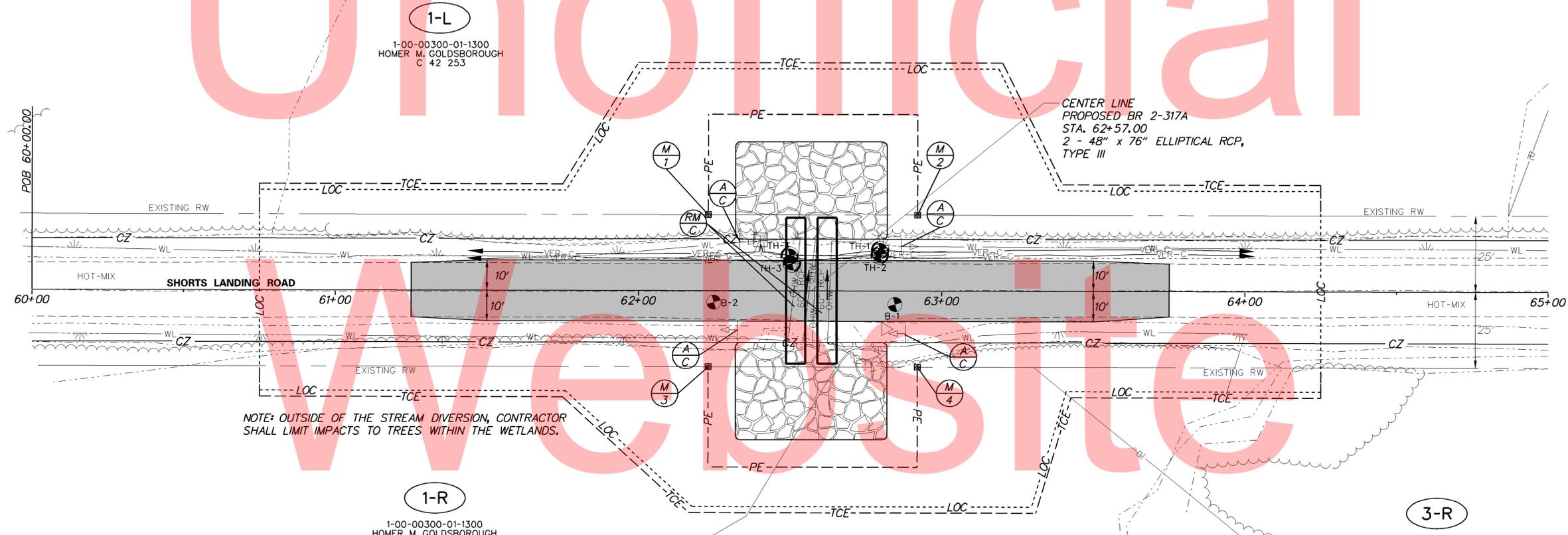
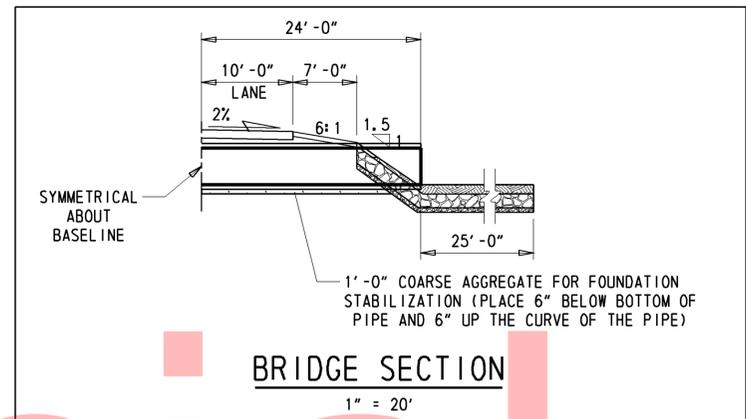
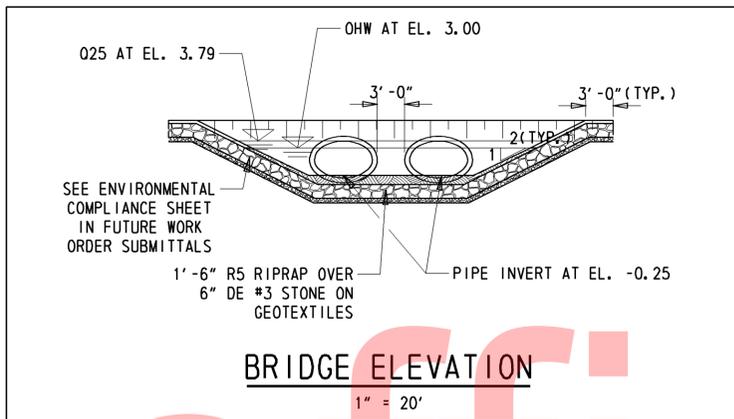
NOT TO SCALE

**PIPE REPLACEMENT
BR 2-156B
MCKEE RD**

CONTRACT T201207504	ROAD NO. K156
COUNTY KENT	DESIGNED BY: MFR
	CHECKED BY: ASW

**VEHICULAR DETOUR PLAN
MCKEE RD**

SHEET NO.
TOTAL SHTS.



RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
1	CAPPED REBAR	62+23.00	-25.00'	483069.3680	619404.9946
2	CAPPED REBAR	62+92.00	-25.00'	483135.6521	619424.1627
3	CAPPED REBAR	62+23.00	25.00'	483055.4781	619453.0266
4	CAPPED REBAR	62+92.00	25.00'	483121.7625	619472.1948

UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL
TH-1	VERIZON	62+79.65	-13.46'	4.86	2.34	3/4" BLACK CABLE
TH-2	VERIZON	62+79.53	-11.79'	5.06	1.98	3/4" BLACK CABLE
TH-3	VERIZON	62+50.58	-9.03'	5.19	2.08	3/4" BLACK CABLE
TH-4	VERIZON	62+49.80	-11.51'	5.64	1.48	3/4" BLACK CABLE

NOTE 1: ALL UTILITIES SHALL BE RELOCATED IN ADVANCE OF CONSTRUCTION.

SOIL BORING SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
B-1	62+84.60	4.42'	SEE BORING LOG
B-2	62+24.82	3.75'	SEE BORING LOG

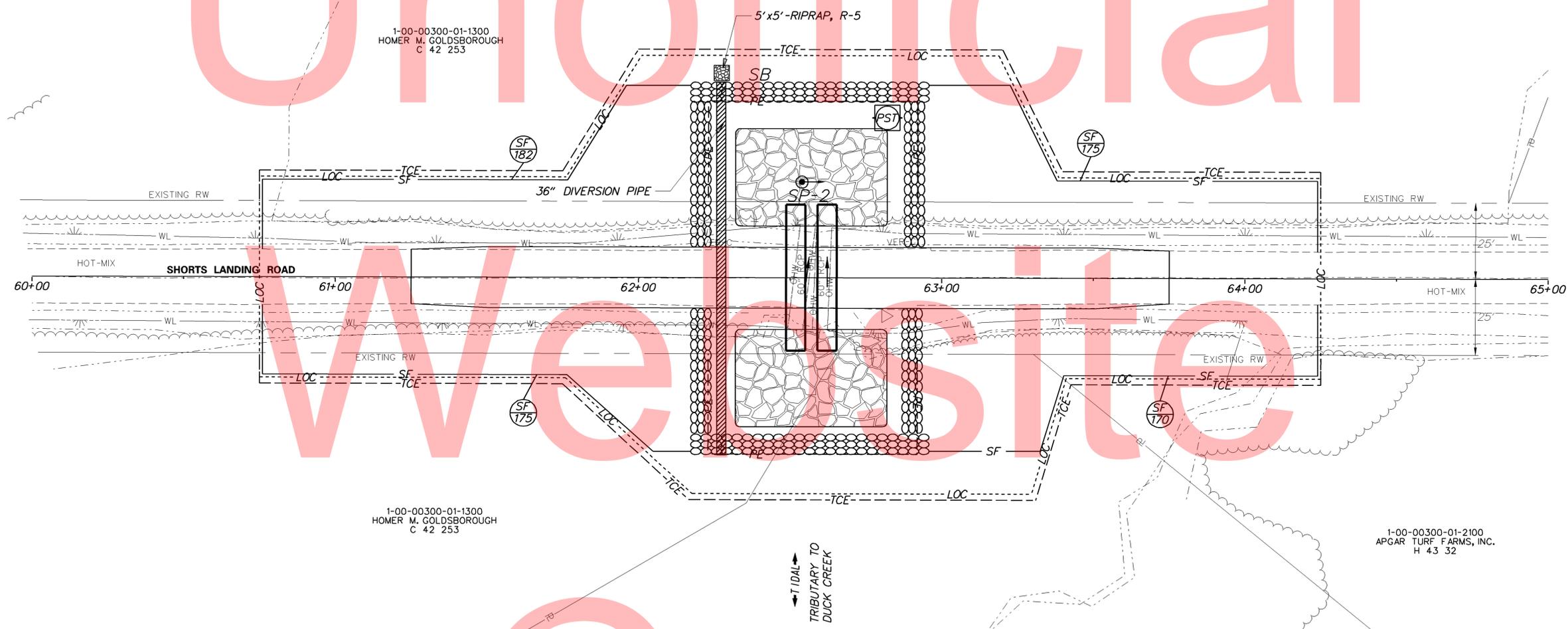
Y:\KENT\Bridg\T201207504

 DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE FEET	KENT & SUSSEX COUNTY PIPE REPLACEMENTS, OPEN-END, FY 15-17	CONTRACT T201407502	BRIDGE NO. 2-317A	CONSTRUCTION PLAN	SHEET NO. 18
	COUNTY KENT			DESIGNED BY: S.M.	CHECKED BY: C.A.S.		TOTAL SHTS. 25

BORING: B-1		DATE DRILLED: 9/7/12			
STATION: 62+84.60		ELEVATION: 5.84			
OFFSET: 4.42'		NORTHING: 483120.37			
COMMENTS: N/A		EASTING: 619450.37			
SAMPLE INFORMATION					
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS
1	0.0	3	MOIST LOOSE GRAY SILTY COARSE TO FINE SAND AND FINE GRAVEL W/SOME CLAY.	A-1-B	HOT-MIX 4". FILL
2	2.0	3	MOIST LOOSE GRAY FINE TO COARSE SAND W/SOME FINE GRAVEL AND SILT.	A-1-B	
3	4.0	3	MOIST VERY LOOSE GRAY CLAYEY FINE TO COARSE SAND W/SOME FINE GRAVEL AND SILT.	A-2-4(0)	
4	6.0	2	WET FIRM GRAY SILT W/SOME FINE TO COARSE SAND AND CLAY, TRACE OF FINE GRAVEL.	A-4(0)	7' - APPROX. DEPTH TO BOTTOM OF COARSE AGGREGATE
5	8.0	2	NO SIEVE ANALYSIS - INDICATION OF WET SOFT BROWN ORGANIC PEAT.		
6	10.0	1	SATURATED SOFT BROWN ORGANIC COARSE TO FINE SANDY CLAY W/SOME SILT.	A-7-5(10)	
7	12.0	3	SATURATED LOOSE GRAY SILTY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND CLAY.	A-2-4(0)	
8	14.0	4	SATURATED MEDIUM DENSE GRAY CLAYEY FINE GRAVEL W/SOME COARSE TO FINE SAND AND SILT.	A-2-4(0)	
9	16.0	10	SATURATED MEDIUM DENSE GRAY FINE GRAVEL W/SOME SILT AND COARSE TO FINE SAND.	A-1-A	
10	18.0	4	SATURATED FIRM GRAY CLAYEY FINE GRAVELLY SILT W/SOME FINE TO COARSE SAND.	A-4(1)	
11	23.0	3	SATURATED STIFF GRAY ORGANIC CLAYEY FINE SANDY SILT W/SOME COARSE SAND.	A-4(1)	
12	28.0	3	SATURATED MEDIUM DENSE GRAY ORGANIC CLAYEY COARSE TO FINE SAND W/SOME SILT.	A-2-7(3)	
13	33.0	17	SATURATED MEDIUM DENSE GRAY FINE SAND AND FINE GRAVEL W/TRACE OF COARSE SAND, SILT AND ORGANIC MATTER.	A-3	
14	38.0	12	SATURATED DENSE GRAY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL AND SILT.	A-3	
15	43.0	3	SATURATED STIFF GRAY SILT W/SOME FINE SAND, TRACE OF COARSE SAND.	A-4(8)	
16	48.0	3	SATURATED VERY STIFF GRAY FINE SANDY CLAY W/SOME COARSE SAND AND SILT.	A-6(6)	
17	53.0	6	SATURATED VERY STIFF GRAY CLAY W/SOME FINE TO COARSE SAND AND SILT.	A-7-6(15)	
	55.0		END BORING.		

BORING: B-2		DATE DRILLED: 9/7/12			
STATION: 62+24.82		ELEVATION: 5.83			
OFFSET: 3.75'		NORTHING: 483063.13			
COMMENTS: N/A		EASTING: 619433.12			
SAMPLE INFORMATION					
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS
1	1.0	5	MOIST MEDIUM DENSE BROWN FINE TO COARSE SAND W/SOME FINE GRAVEL AND SILT.	A-2-4(0)	HOT-MIX 8". FILL
2	2.0	2	MOIST MEDIUM DENSE BROWN SILTY COARSE TO FINE SAND W/TRACE OF FINE GRAVEL.	A-1-B	
3	4.0	5	MOIST STIFF BROWN FINE SANDY SILT W/SOME COARSE SAND AND CLAY, TRACE OF FINE GRAVEL.	A-4(0)	
4	6.0	6	WET STIFF BROWN SILT W/SOME FINE TO COARSE SAND AND CLAY, TRACE OF FINE GRAVEL.	A-4(0)	7' - APPROX. DEPTH TO BOTTOM OF COARSE AGGREGATE
5	8.0	4	NO SIEVE ANALYSIS - INDICATION OF WET LOOSE BROWN SAND.		
6	10.0	3	SATURATED LOOSE BROWN SILTY FINE TO COARSE SAND W/TRACE OF FINE GRAVEL.	A-2-4(0)	WATER TABLE
7	12.0	3	NO SIEVE ANALYSIS - INDICATION OF SATURATED LOOSE BROWN SAND.		
8	14.0	2	SATURATED LOOSE GRAY SILTY FINE GRAVELLY COARSE SAND W/SOME FINE SAND.	A-2-4(0)	
9	16.0	2	SATURATED LOOSE GRAY SILTY COARSE SAND AND FINE GRAVEL W/SOME FINE SAND.	A-2-6(0)	
10	18.0	2	SATURATED SOFT BLACK SILT W/SOME FINE TO COARSE SAND, TRACE OF FINE GRAVEL.	A-5(1)	
U-1	22.0		MATERIAL NOT SUITABLE FOR CONSOLIDATION		
11	24.0	2	SATURATED FIRM GRAY FINE SANDY SILT W/SOME COARSE SAND AND FINE GRAVEL.	A-4(0)	
12	28.0	2	SATURATED MEDIUM DENSE BROWN FINE GRAVELLY FINE SAND W/SOME SILT, TRACE OF COARSE SAND.	A-2-4(0)	
13	33.0	8	SATURATED MEDIUM DENSE GRAY COARSE SANDY FINE GRAVEL W/SOME FINE SAND, TRACE OF SILT.	A-1-B	
14	38.0	10	NO SAMPLE		
15	43.0	16	SATURATED STIFF GRAY SILT W/SOME FINE SAND AND FINE GRAVEL, TRACE OF COARSE SAND.	A-4(0)	
16	48.0	6	SATURATED STIFF GRAY CLAY W/SOME FINE TO COARSE SAND, SILT AND FINE GRAVEL.	A-6(6)	
17	53.0	8	SATURATED VERY STIFF GRAY SILTY CLAY W/SOME COARSE TO FINE SAND.	A-6(8)	
	55.0		END BORING.		

Unofficial

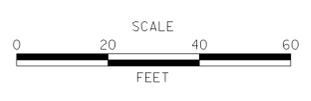


SEQUENCE OF CONSTRUCTION

1. PLACE CHANGEABLE MESSAGE BOARDS AT LEAST 10 DAYS PRIOR TO ROAD CLOSURE.
2. INSTALL ALL M.O.T. ITEMS AS SHOWN ON THE DETOUR PLAN SHEET OR AS DIRECTED BY THE ENGINEER.
3. INSTALL SILT FENCE AS SHOWN ON THE PLANS. CONSTRUCT SANDBAG DIKES TO EL. 3.25 (VARYING HEIGHT) WITH A 1' DEEP BY 4' WIDE WEIR. INSTALL 36" DIVERSION PIPE IN TRENCH, INSTALL RIPRAP, R-5 TO STABILIZE OUTFALL, INSTALL SUMP PIT, PORTABLE SEDIMENT TANK AND CONNECT SILT FENCE TO THE SANDBAG DIKES TO ENCLOSE THE WORK AREA.
4. DEWATER WORK AREA IN ACCORDANCE WITH SECTION 111 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL BE AWARE OF THE POSSIBLE NEED TO UNDERCUT (ITEM#212000) AND USE A WELL-POINT SYSTEM (ITEM#202574).
5. PERFORM ALL CONSTRUCTION ACTIVITY IN WORK AREA AS PER PLANS INCLUDING REMOVING EXISTING PIPES, PLACING NEW PIPES, AND PLACING RIPRAP.
6. RESTORE DISTURBED AREAS IN ACCORDANCE WITH THE ENVIRONMENTAL COMPLIANCE NOTE ON STREAM RESTORATION AND RIPRAP TREATMENTS. REMOVE STREAM DIVERSION INCLUDING SUMP PIT, PORTABLE SEDIMENT TANK, DIVERSION PIPE, AND SANDBAGS.
7. COMPLETE ALL REMAINING WORK INCLUDING ROADWAY RECONSTRUCTION, AND GRADING.
8. TOPSOIL AND SEED DISTURBED AREAS.
9. REMOVE ALL REMAINING TEMPORARY EROSION, SEDIMENT CONTROL DEVICES AND STABILIZE AS NECESSARY.
10. REMOVE ALL M.O.T. DEVICES.



ADDENDUMS / REVISIONS	



**KENT & SUSSEX COUNTY
PIPE REPLACEMENTS,
OPEN-END, FY 15-17**

CONTRACT T201407502	BRIDGE NO. 2-317A
COUNTY KENT	DESIGNED BY: S.M. CHECKED BY: C.A.S.

CONSTRUCTION SEQUENCE AND EROSION CONTROL PLAN	SHEET NO. 20
	TOTAL SHTS. 25

Y:\KENT\Bridg\T201207504

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

SHORTS LANDING ROAD

TO CLOSE STARTING XXXXXX

DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-1

SHORTS LANDING ROAD

CLOSED FOLLOW DETOUR

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

PCMS-1

XXXXXXXX
XXXXXXXX
XXXXXXXX

XXXXXXXX
XXXXXXXX
XXXXXXXX

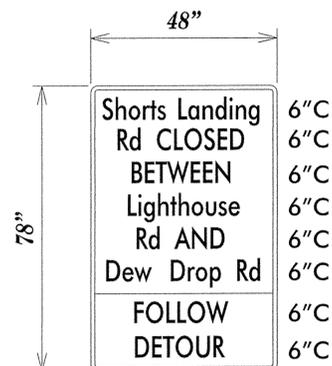
DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-1

XXXXXXXX
XXXXXXXX
XXXXXXXX

XXXXXXXX
XXXXXXXX
XXXXXXXX

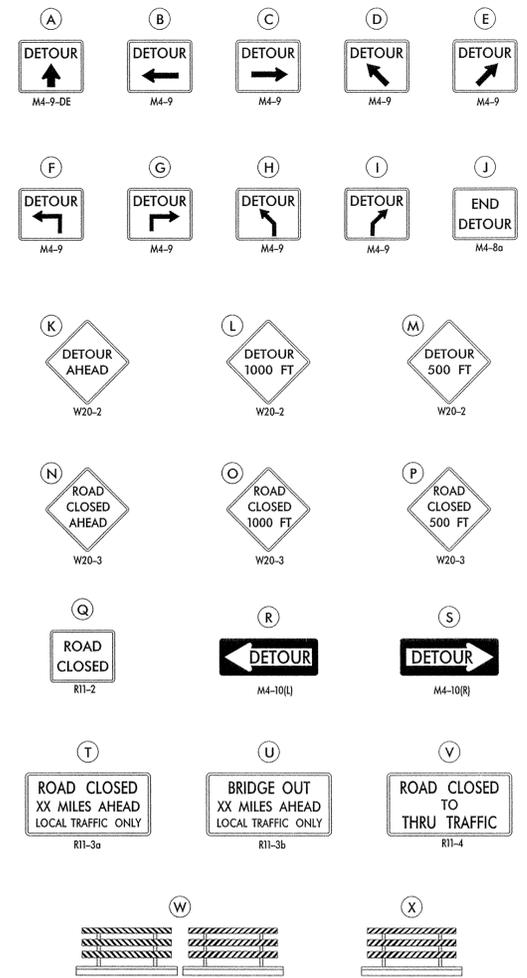
SPECIAL SIGNS



Y

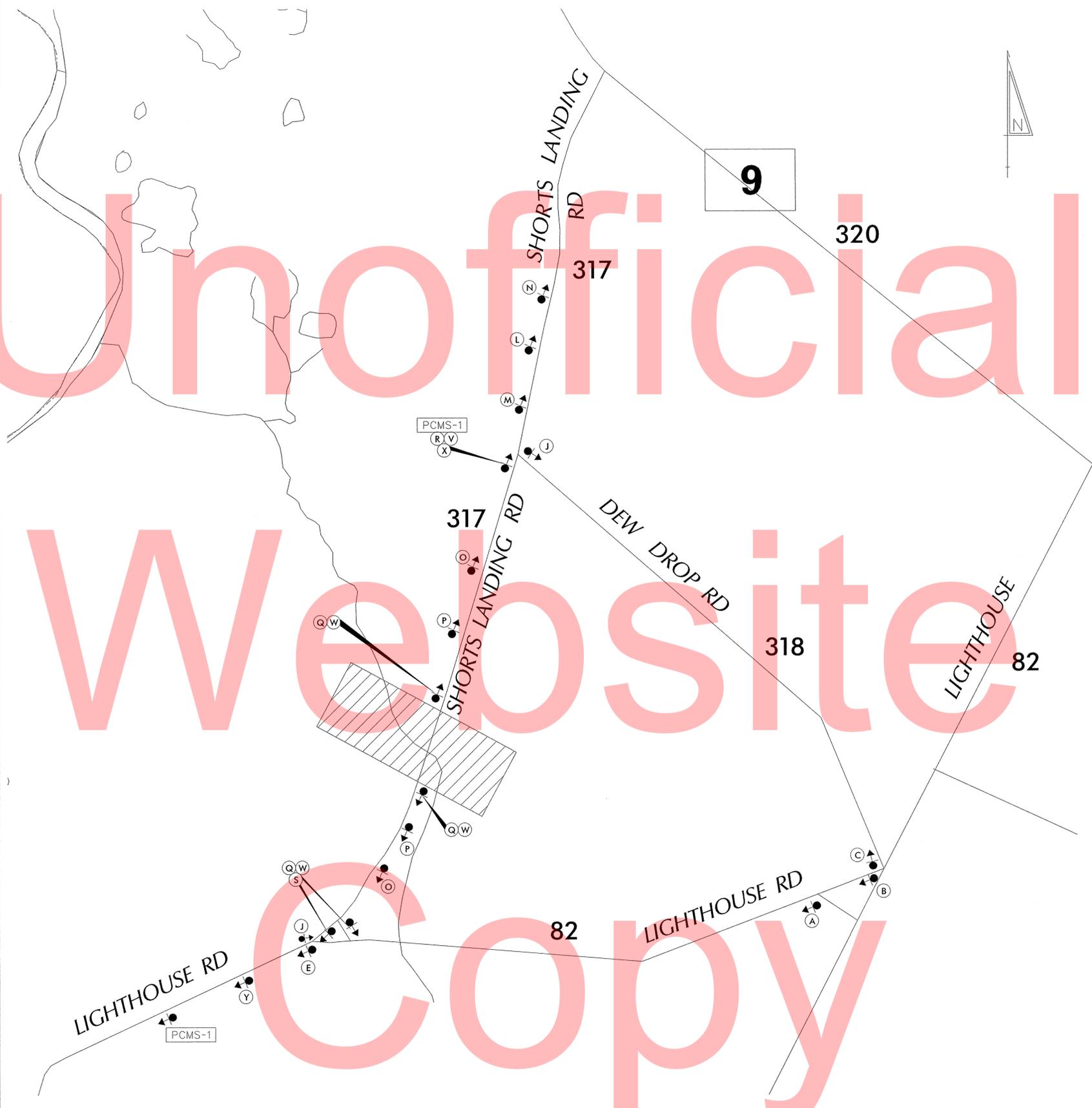
*D/G RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND

LEGEND



GENERAL NOTES

1. 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.)
2. 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.)
3. DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
4. 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.
5. SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
6. 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.
7. SIGNS "N" THROUGH "Q" AND "T" AND "V"; THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
8. WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
9. "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
10. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.



RECOMMENDED *[Signature]* DATE: 10-23-12

RECOMMENDED *[Signature]* DATE: 10-20-12

RECOMMENDED _____ DATE: _____

APPROVED CHIEF SAFETY OFFICER *[Signature]* DATE: 10-20-12

APPROVED TRAFFIC ENGINEER *[Signature]* DATE: 10/20/12

DELAWARE DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

SHORTS LANDING RD (K317)
BR 2-317A

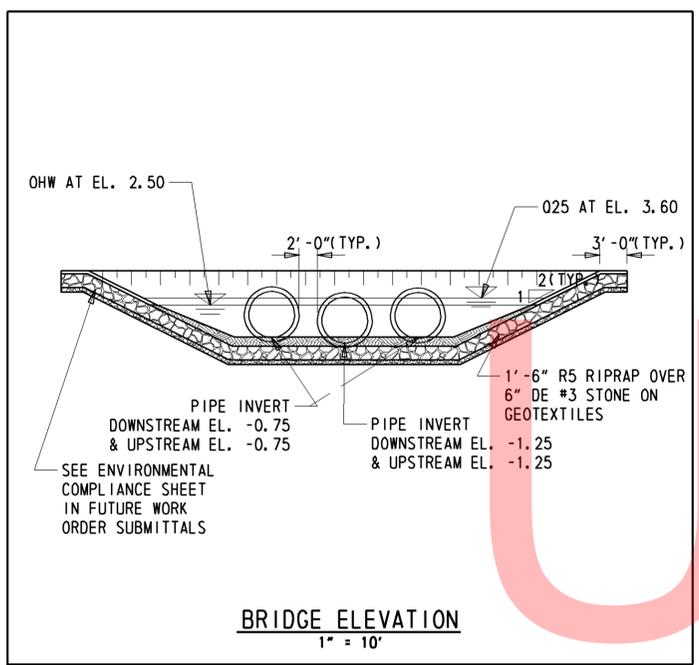
CONTRACT	ROAD NO.
T201207505	K317
COUNTY	DESIGNED BY: MFR
KENT	CHECKED BY: ASW

VEHICULAR DETOUR PLAN
SHORTS LANDING RD

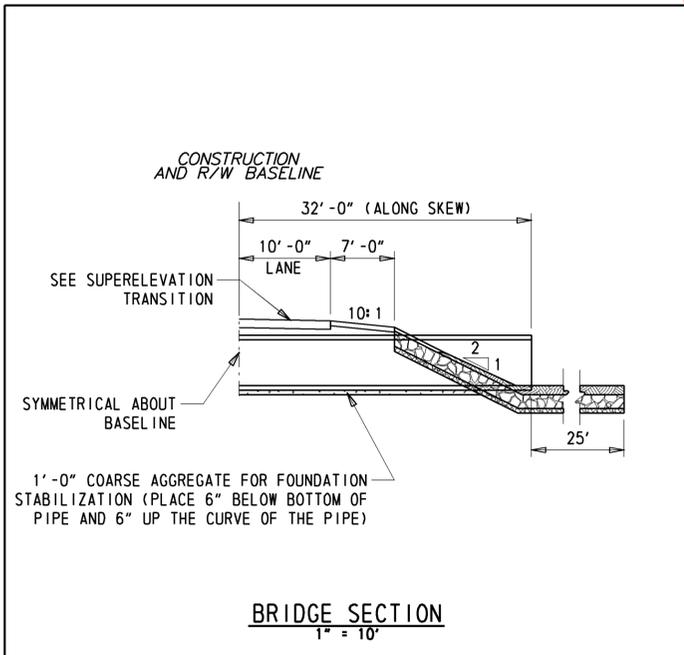
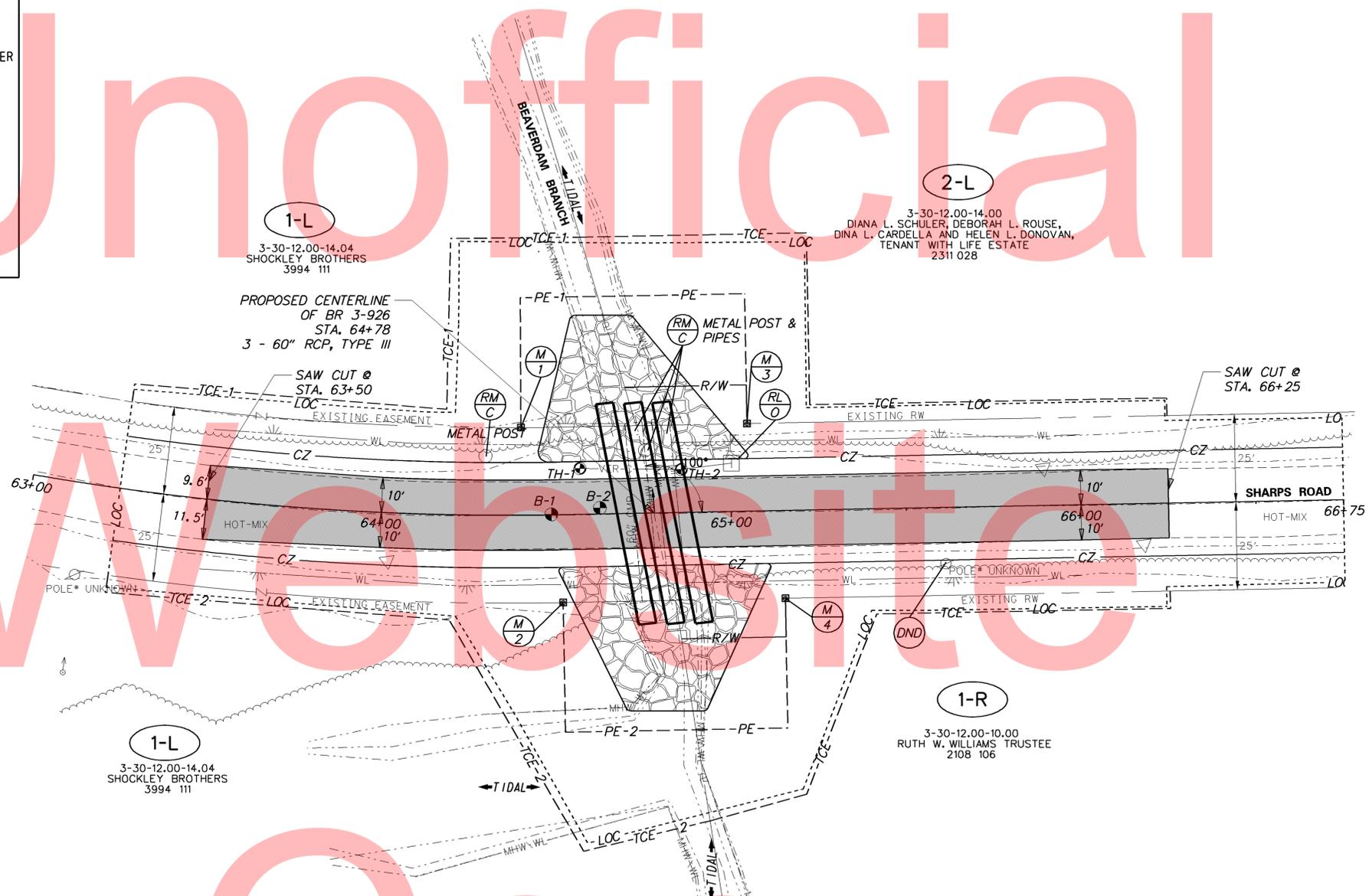
SHEET NO.
TOTAL SHTS.

UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL
TH-1	VERIZON	64+57.02	-13.11'	5.38	2.84'	1" PLASTIC
TH-2	VERIZON	64+86.96	-12.27'	4.90	2.61'	1" PLASTIC

NOTE: ALL UTILITIES SHALL BE RELOCATED IN ADVANCE OF CONSTRUCTION.



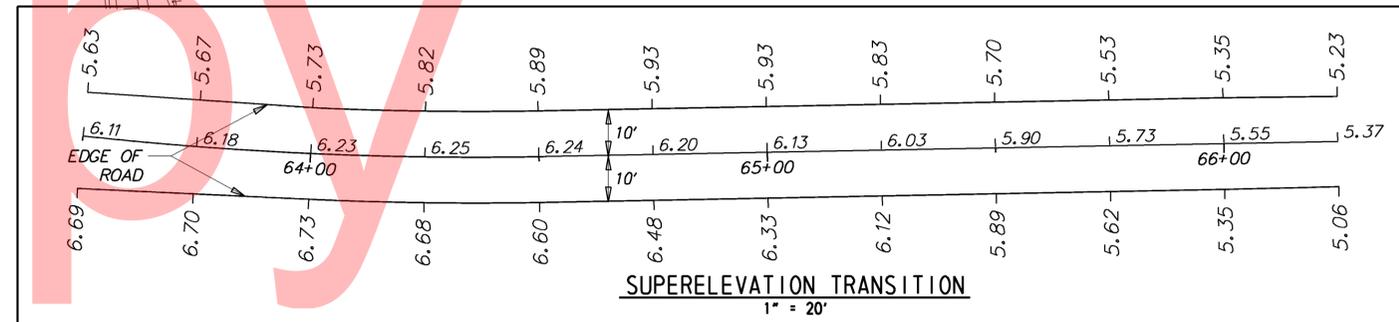
BRIDGE ELEVATION
1" = 10'



BRIDGE SECTION
1" = 10'

RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
1	CAPPED REBAR	64+40.00	-25.00'	328975.0565	671544.8022
2	CAPPED REBAR	64+51.47	25.00'	328945.1941	671503.0934
3	CAPPED REBAR	65+05.00	-25.00'	328915.5641	671570.0837
4	CAPPED REBAR	65+15.00	25.00'	328886.7536	671528.0129

SOIL BORING SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
B-1	64+48.64	-0.18'	SEE SOIL BORING SHEET
B-2	64+62.51	-1.75'	SEE SOIL BORING SHEET



SUPERELEVATION TRANSITION
1" = 20'

Y:\SUSSEX\200\BRIDGE\T201407301\PLANS\CP.DGN

Unofficial

BORING: B-1		DATE DRILLED: 12/26/13			
STATION: 64+48.64		ELEVATION: 6.22			
COMMENTS: N/A		OFFSET: -0.18'			
		NORTHING: 328957.671			
		EASTING: 671525.149			
SAMPLE INFORMATION					
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS
1	0.5	7	MOIST LOOSE ORANGE COARSE TO FINE SAND AND FINE GRAVEL	A-1-B	HOT-MIX 6", CRUSHED STONE 6"
	1.5	3	W/TRACE SILT.		
2	2.0	4	MOIST LOOSE DARK GRAY COARSE TO FINE SAND AND FINE GRAVEL	A-1-B	
		5	W/SOME SILT.		
	4.0	2			
		1			
3	4.0	3	WET VERY LOOSE GRAY FINE SAND W/SOME COARSE SAND, FINE GRAVEL	A-2-4(0)	DEPTH TO WATER FOUND AT 4.0'
		2	AND SILT.		AND AT 5.1'
	6.0	1			
4	6.0	2	WET LOOSE GRAY FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE	A-2-4(0)	
		2	GRAVEL.		
	8.0	3			
		4			
5	8.0	1	SATURATED VERY LOOSE BROWN SILTY FINE TO COARSE SAND W/TRACE	A-2-4(0)	8.47' APPROX. DEPTH TO BOTTOM
		1	FINE GRAVEL.		OF COARSE AGGREGATE
	10.0	1			
		1			
6	10.0	WH	SATURATED SOFT BLACK ORGANIC FINE SANDY CLAY W/SOME SILT,	A-7-5(12)	PEAT INDICATED ON FIELD LOG
		1	TRACE OF COARSE SAND AND FINE GRAVEL.		
	12.0	2			
		2			
7	10.0	1			SHELBY TUBE - PRESS SAMPLE
	14.0	1			NO RECOVERY
8	14.0	1	SATURATED SOFT GRAY ORGANIC CLAYEY COARSE SANDY SILT W/SOME	A-5(2)	
		1	FINE SAND.		
	16.0	1			
U-1	16.0		SATURATED GRAY ORGANIC SILTY COARSE TO FINE SANDY CLAY.	A-7-5(8)	SHELBY TUBE - PRESS SAMPLE
	18.0				
9	18.0	1	SATURATED MEDIUM DENSE GRAY FINE TO COARSE SAND W/SOME SILT,	A-2-4(0)	
		3	TRACE OF ORGANIC.		
		8			
	20.0	15			
10	23.0	5	SATURATED MEDIUM DENSE GRAY COARSE TO FINE SAND W/TRACE FINE	A-1-B	
		7	GRAVEL AND SILT.		
	25.0	7			
		9			
11	28.0	10	SATURATED MEDIUM DENSE GRAY FINE SAND W/SOME FINE GRAVEL,	A-1-B	
		13	TRACE OF FINE SAND AND SILT.		
		16			
	30.0	30			

BORING: B-2		DATE DRILLED: 12/26/13			
STATION: 64+62.51		ELEVATION: 5.99			
COMMENTS: N/A		OFFSET: -1.75'			
		NORTHING: 328945.534			
		EASTING: 671532.033			
SAMPLE INFORMATION					
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS
1	0.5	5	MOIST MEDIUM DENSE ORANGE FINE GRAVEL W/TRACE COARSE TO FINE	A-1-A	HOT-MIX 6", CRUSHED STONE 6"
		7	SAND AND SILT.		
	2.0	7			
2	2.0	3	WET VERY LOOSE GRAY FINE TO COARSE SAND W/SOME SILT AND FINE	A-2-4(0)	
		2	GRAVEL.		
	4.0	2			
3	4.0	2	WET LOOSE GRAY FINE TO COARSE SAND W/SOME FINE GRAVEL AND	A-2-4(0)	
		2	SILT.		
	6.0	3			
		3			
4	6.0	1	WET VERY LOOSE GRAY SILTY FINE SAND W/SOME COARSE SAND, TRACE	A-2-4(0)	
		1	OF FINE GRAVEL AND CLAY.		
	8.0	2			8.24' APPROX. DEPTH TO BOTTOM
		2			OF COARSE AGGREGATE
5	8.0	1	SATURATED VERY LOOSE BROWN SILTY FINE TO COARSE SAND W/TRACE	A-2-4(0)	
		1	FINE GRAVEL.		
	10.0	1			
		1			
6	10.0	2	SATURATED VERY LOOSE GRAY FINE TO COARSE SAND W/TRACE FINE	A-3	DEPTH TO WATER FOUND AT 10.5'
		1	GRAVEL AND SILT.		
	12.0	1			
		1			
7	12.0	WH	SATURATED SOFT GRAY ORGANIC COARSE TO FINE SANDY CLAY W/SOME	A-7-5(5)	
		WH	SILT.		
		WH			
		WH			
U-1	14.0		SATURATED GRAY ORGANIC SILTY CLAY W/ TRACE OF FINE TO COARSE	A-7-5(25)	SHELBY TUBE - PRESS SAMPLE
	16.0		SAND.		
8	16.0	5	SATURATED STIFF GRAY COARSE TO FINE SANDY CLAY W/SOME SILT.	A-7-5(7)	
		5			
		4			
	18.0	2			
9	18.0	7	SATURATED MEDIUM DENSE GRAY FINE TO COARSE SAND W/SOME SILT,	A-2-4(0)	
		9	TRACE OF FINE GRAVEL.		
		11			
	20.0	10			
10	23.0	5	SATURATED MEDIUM DENSE GRAY COARSE SAND W/SOME FINE SAND AND	A-1-B	
		7	FINE GRAVEL, TRACE OF SILT.		
		8			
	25.0	9			

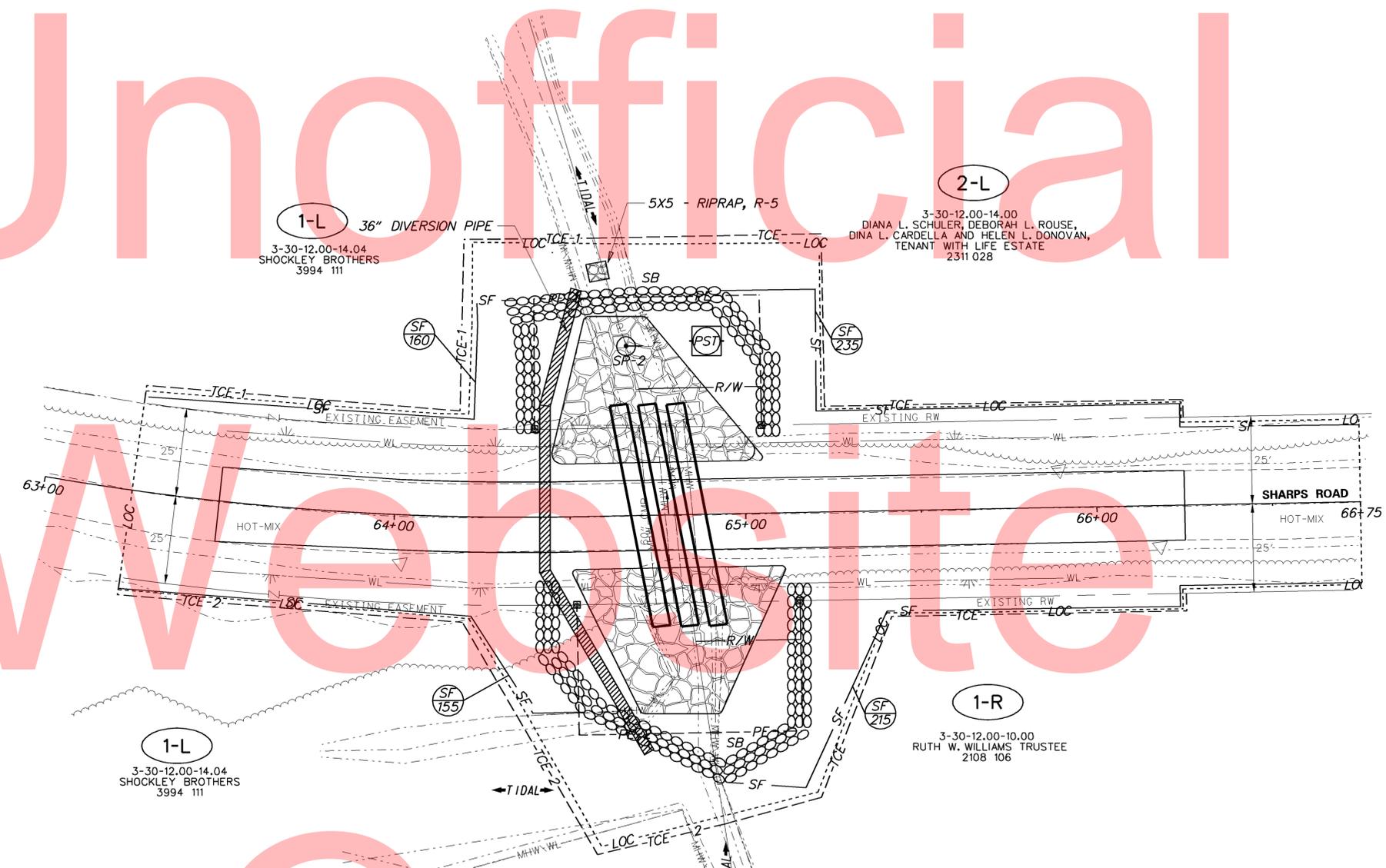
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Unofficial

Water Site

Copy



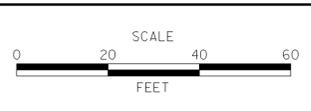
CONSTRUCTION SEQUENCE

1. PLACE CHANGEABLE MESSAGE BOARDS AT LEAST 10 DAYS PRIOR TO ROAD CLOSURE.
2. INSTALL ALL M.O.T. ITEMS AS SHOWN ON THE DETOUR PLAN SHEET OR AS DIRECTED BY THE ENGINEER.
3. INSTALL SILT FENCE AS SHOWN ON THE PLANS. CONSTRUCT SANDBAG DIKES TO EL. 4.30 (VARYING HEIGHT) WITH A 1' DEEP BY 4' WIDE WEIR, INSTALL 36" DIVERSION PIPE IN TRENCH, INSTALL RIPRAP, R-5 TO STABILIZE OUTFALL, INSTALL SUMP PIT, PORTABLE SEDIMENT TANK AND CONNECT SILT FENCE TO THE SANDBAG DIKES TO ENCLOSE THE WORK AREA.
4. DEWATER WORK AREA IN ACCORDANCE WITH SECTION 111 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL BE AWARE OF THE POSSIBLE NEED TO UNDERCUT (ITEM# 212000) AND USE A WELL-POINT SYSTEM (ITEM# 202574).
5. PERFORM ALL CONSTRUCTION ACTIVITY IN WORK AREA AS PER PLANS INCLUDING REMOVING EXISTING PIPES, PLACING NEW PIPES, AND PLACING RIPRAP.
6. RESTORE DISTURBED AREAS IN ACCORDANCE WITH THE ENVIRONMENTAL COMPLIANCE NOTE ON STREAM RESTORATION AND RIPRAP TREATMENTS. REMOVE STREAM DIVERSION INCLUDING SUMP PIT, PORTABLE SEDIMENT TANK, PUMP, AND SANDBAGS.
7. COMPLETE ALL REMAINING WORK INCLUDING ROADWAY RECONSTRUCTION, AND GRADING.
8. TOPSOIL AND SEED DISTURBED AREAS.
9. REMOVE ALL REMAINING TEMPORARY EROSION, SEDIMENT CONTROL DEVICES AND STABILIZE AS NECESSARY.
10. REMOVE ALL M.O.T. DEVICES.

Y:\SUSSEX\200\BRIDGE\T201407301\PLANS\CP.DGN

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	



KENT AND SUSSEX COUNTY
PIPE REPLACEMENTS,
OPEN-END, FY 15-17

CONTRACT	BRIDGE NO.	3-926
T201407502	DESIGNED BY:	S.M.
COUNTY	CHECKED BY:	C.A.S.
SUSSEX		

CONSTRUCTION SEQUENCE
AND EROSION
CONTROL PLAN

SHEET NO.	24
TOTAL SHTS.	25

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

SHARPS ROAD
TO CLOSE

STARTING
XXXXXX

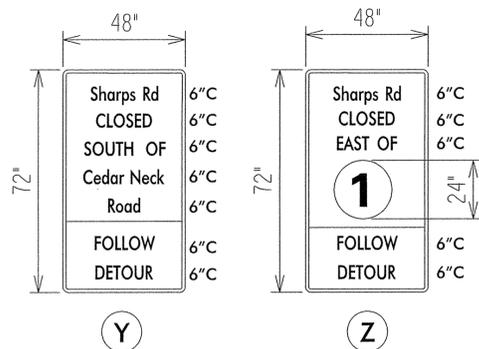
DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-2

SHARPS ROAD
CLOSED

FOLLOW
DETOUR

SPECIAL SIGNS

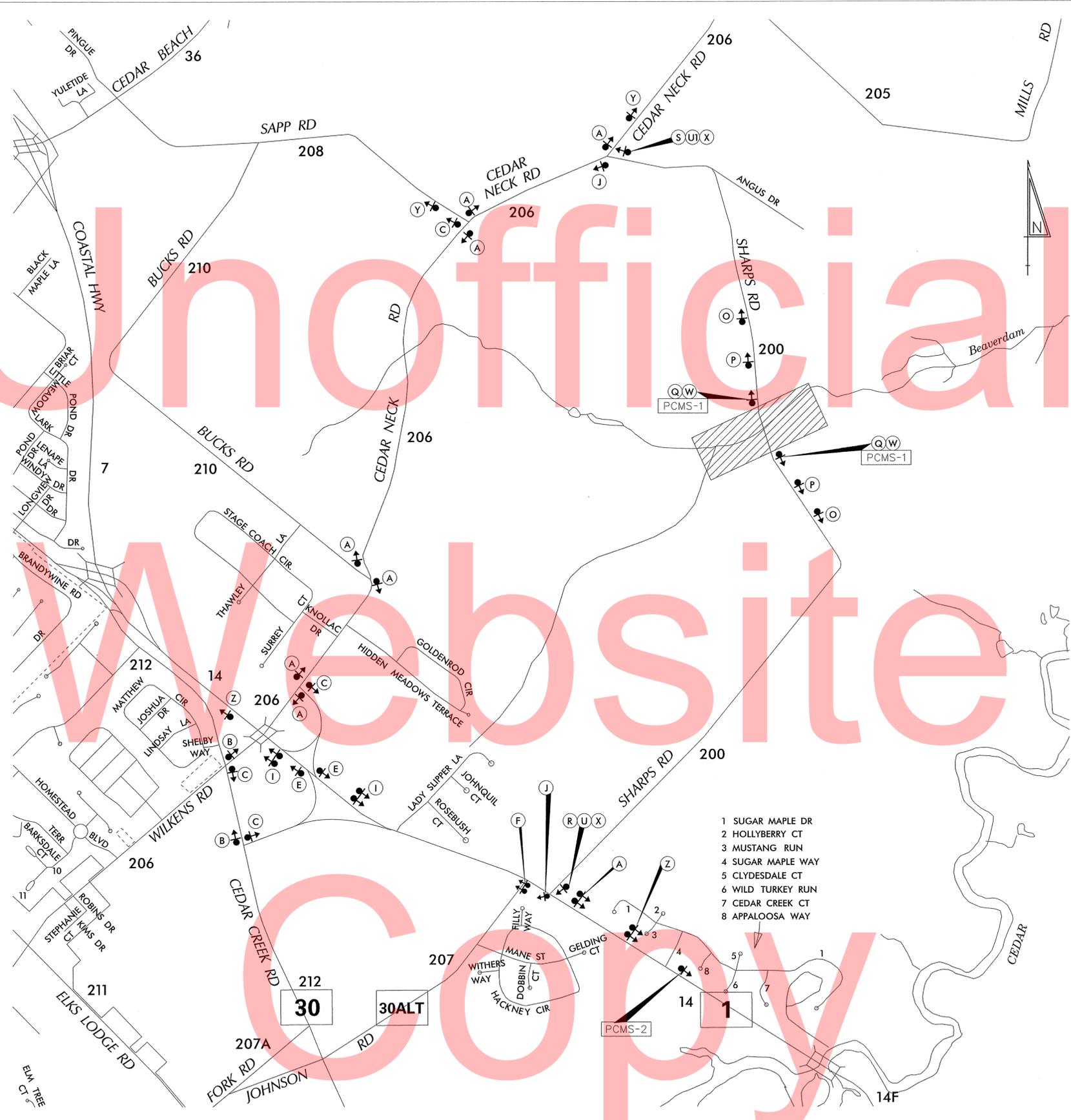


*DG RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND

1 WHITE BACKGROUND; BLACK LEGEND



*WHITE BACKGROUND; BLACK LEGEND



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 M4-8a
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 M4-10(L)	S DETOUR M4-10(R)		
T ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3a	U BRIDGE OUT 1 1/2 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.

- SUGAR MAPLE DR
- HOLLYBERRY CT
- MUSTANG RUN
- SUGAR MAPLE WAY
- CLYDESDALE CT
- WILD TURKEY RUN
- CEDAR CREEK CT
- APPALOOSA WAY

C:\DOCUMENTS AND SETTINGS\MICHAELRIVERA\MY DOCUMENTS\MICRO STATION DGN\SHARPS RD (S200) BR 3-926.DGN

RECOMMENDED *[Signature]* DATE: 11-19-13 RECOMMENDED *[Signature]* DATE: 11-19-13 RECOMMENDED *[Signature]* DATE: 11-19-13 APPROVED CHIEF SAFETY OFFICER *[Signature]* DATE: 11-19-13 APPROVED TRAFFIC ENGINEER *[Signature]* DATE: 11/20/13

<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	ADDENDUM / REVISIONS	<p>NOT TO SCALE</p>	<p>PIPE REPLACEMENT PROJECT SHARPS RD (S200) BR 3-926</p>	CONTRACT T201407301	ROAD NO. S200	<p>VEHICULAR DETOUR PLAN SHARPS RD</p>	SHEET NO.
					COUNTY SUSSEX		DESIGNED BY: MFR