

GENERAL LOCATION OF CONTRACT

THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION



U.S. CUSTOMARY
UNITS

FINAL PLANS

CONSTRUCTION AND RIGHT-OF-WAY PLANS FOR:

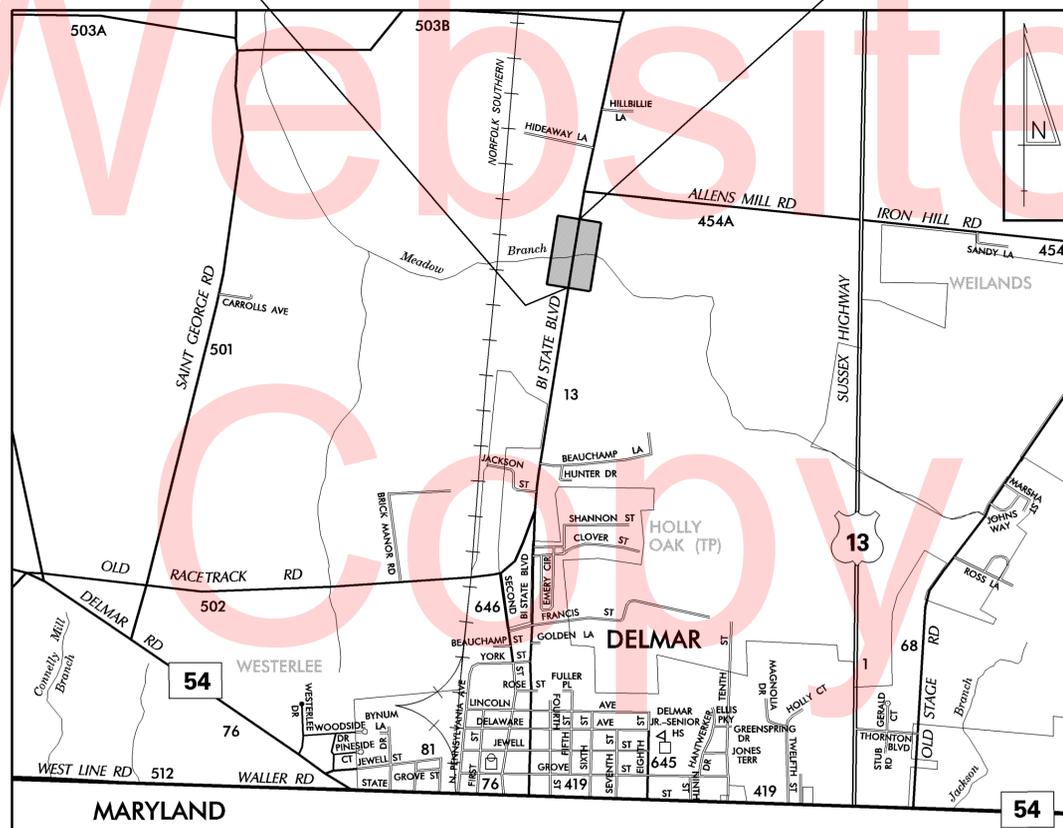
BR 3-299 ON S013 BI-STATE BLVD OVER MEADOW BRANCH

CONTRACT NUMBER: **T201507301**
FEDERAL AID PROJECT NUMBER: **EBROS-S013(04)**

COUNTY: **SUSSEX** M.R. #: **S013**

**BEGIN CONTRACT
STATION 11+80.00**

**END CONTRACT
STATION 14+20.00**



DESIGN DESIGNATION

FUNCTIONAL CLASS: RURAL MAJOR COLLECTOR	D.H.V. PROJECTED: 258	YEAR: 2040
TYPE OF CONSTRUCTION: PIPE REPLACEMENT	DESIGN SPEED: 55 M.P.H.	
A.A.D.T. CURRENT: 3445	YEAR: 2012	TRUCKS: 7 %
A.A.D.T. PROJECTED: 4300	YEAR: 2040	DIRECTION OF DISTRIBUTION: 60 %

INDEX OF SHEETS

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TOTAL SHEETS: 17

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
5	ROUTE NO. S-3 CONTRACT NO.5

RECOMMENDED

Wayne Massey
SQUAD MANAGER, CONSTRUCTION
DATE 12/16/2015

Bradford L. Schmitz
GROUP ENGINEER, CONSTRUCTION
DATE 12/16/2015

Jim A. Zujewski
ASSISTANT DIRECTOR, CONSTRUCTION
DATE 12/17/2015

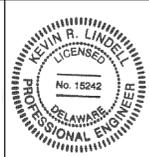
RECOMMENDED

Vincent W. Davis
STORMWATER ENGINEER
DATE 12/15/2015



RECOMMENDED

Kevin Lindell
SQUAD MANAGER, BRIDGE DESIGN
DATE 12/14/2015



RECOMMENDED

Jim Hastings
BRIDGE DESIGN ENGINEER
DATE 12/17/2015



RECOMMENDED

Jim A. Zujewski
ASSISTANT DIRECTOR BRIDGE
DATE 12/17/2015



APPROVED

Robert Brian McCleary
CHIEF ENGINEER
DATE 12/17/2015



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	
	DELMARVA POWER UNDERGROUND
	DELMARVA POWER OVERHEAD
	COMCAST CABLE OVERHEAD
	VERIZON FIBER OPTIC OVERHEAD
	VERIZON CABLE OVERHEAD
	VERIZON CABLE UNDERGROUND
	CHESAPEAKE UTILITIES GAS

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)	
	2" MILLING, HOT-MIX 2" BITUMINOUS CONCRETE, SUPERPAVE, TYPE C
	2" BITUMINOUS CONCRETE, SUPERPAVE, TYPE C 4" BITUMINOUS CONCRETE, SUPERPAVE, TYPE B 8" GRADED AGGREGATE BASE COURSE, TYPE B
	2" BITUMINOUS CONCRETE, SUPERPAVE, TYPE C 8" GRADED AGGREGATE BASE COURSE, TYPE B

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
	SEDIMENT TRAP
	SEDIMENT TRAP WITH INLET AS OUTLET
	SEDIMENT TRAP PIPE OUTLET
	STILLING WELL
	TEMPORARY SWALE
	TEMPORARY SLOPE DRAIN
	TURBIDITY CURTAIN / LENGTH
	TURBIDITY CURTAIN

UTILITY COMPANY FACILITIES	
	PROPOSED VERIZON CABLE UNDRGND

Y:\SUSSEX\013\BRIDGE\T201507301\PLANS\LG.DGN

GENERAL NOTES

1. 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.

EROSION POTENTIAL FOR THIS PROJECT	CONTRACTOR ESC SUPERVISOR REQUIREMENT
() INSIGNIFICANT	NONE
() MINOR	CONTRACTOR TRAINING PROGRAM, AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
() MEDIUM	CONTRACTOR TRAINING PROGRAM, AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
(X) MAJOR	CERTIFIED CONSTRUCTION REVIEWER (CCR), AS DEFINED IN SECTION 6.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.

3. ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR, INCLUDE:

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

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

4. PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE CONTRACTOR, INCLUDE:

(X)	CROSS SECTIONS (WILL BE AVAILABLE TO THE AWARDED CONTRACTOR)
(X)	RIGHT-OF-WAY PLANS (INCLUDED IN PLAN SET)

5. 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.
()	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 743000.
()	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE ATSSA SUPERVISOR'S SOLE JOB SHALL BE SUPERVISION OF THE INSTALLATION, OPERATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES FOR THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT SHALL NOT BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR SHALL BE PAID FOR UNDER ITEM 743031.

6. THE DISTURBED AREA FOR THIS PROJECT IS 0.5438 ACRES.

7. THE ADDITIONAL IMPERVIOUS AREA FOR THIS PROJECT IS 176 SQUARE FEET (0.0040 AC).

8. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS ARE VALID FOR A THREE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE THREE YEARS, THE CONTRACTOR WILL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS. THE STORMWATER ENGINEER WILL REVIEW THE CURRENT SEDIMENT AND STORMWATER MANAGEMENT PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

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.

SECTION 200

2. THE CONTRACTOR SHALL REMOVE AND RESET ALL MAILBOXES TO MAINTAIN MAIL SERVICE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RELOCATE MAILBOXES AS REQUIRED BY THE PROPOSED GEOMETRICS AND AS DIRECTED BY THE ENGINEER. WHEN RELOCATING MAILBOXES IN CURBED SECTIONS, THE FACE OF THE MAILBOX SHALL BE FLUSH WITH THE BACK EDGE OF CURB. WHEN RELOCATING MAILBOXES IN OPEN SECTIONS, THE FACE OF THE MAILBOX SHALL SET BACK 8 INCHES FROM THE EDGE OF THE PAVED SHOULDER. THE BOTTOM OF THE MAILBOX SHALL BE SET 46 INCHES ABOVE THE ROADWAY SURFACE. MAILBOXES LOCATED AT DRIVEWAY ENTRANCES SHALL BE PLACED ON THE FAR SIDE OF THE DRIVEWAY IN THE DIRECTION OF TRAVEL. POSTS BEING RESET IN CONCRETE SIDEWALK SHALL BE PLACED IN AN APPROPRIATE SIZE PVC SLEEVE. COST FOR ALL WORK AND MATERIALS SHALL BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.

3. ITEMS TO BE REMOVED UNDER ITEM 21000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
- EXISTING STRUCTURE CONSISTING OF TWO 60" CMP CULVERTS
 - EXISTING SANDBAGS STACKED ALONG THE INSIDE WALLS OF BOTH 60" CMP CULVERTS
 - EXISTING DRAINAGE PIPES CONSISTING OF FOUR 15" CMP'S.
 - ABANDONED METALLIC GAS LINE AS NEEDED (REFER TO UTILITY STATEMENT)

SECTION 300

4. A. THE CONTRACTOR MAY ELECT TO USE ANY OF THE FOLLOWING MATERIALS TO MEET THE REQUIREMENTS OF ITEM 302007
- GRADED AGGREGATE BASE COURSE, TYPE 'B':
 - a. CRUSHED STONE (PER STANDARD SPECIFICATION 821)
 - b. CRUSHED CONCRETE (PER STANDARD SPECIFICATION 821)
 - c. 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.

B. 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'.

C. 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.

D. HOT-MIX MILLINGS MAY BE GENERATED FROM THE FOLLOWING SOURCES:

- a. MATERIAL MADE AVAILABLE WHEN MILLED ON THIS CONTRACT UNDER ITEM 760006.
- b. MATERIAL MILLED ON THIS CONTRACT AT THE CONTRACTOR'S CHOICE UNDER ITEM 202000.
- c. 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.

E. PAYMENT CLARIFICATION:

- a. 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.
- b. 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.
- c. 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'.
- d. 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.
- e. 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

5. 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 SAWCUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. STRIPING
PROPOSED STRIPING SHALL MATCH EXISTING STRIPING PATTERN CONSISTING OF TWO SOLID YELLOW CENTERLANE STRIPES THROUGHOUT THE PROJECT LIMITS. PAYMENT FOR PERMANENT PAVEMENT STRIPING UNDER ITEM *74B54B - PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW 5".

7. MAINTENANCE OF TRAFFIC SHALL BE AS PER DETOUR. THE DETOUR SHALL REMAIN IN EFFECT UNTIL THE FINAL HOT MIX IS PLACED. ALL MOT ITEMS WITH THE EXCEPTION OF CHANGEABLE MESSAGE BOARDS AND FLAGGERS WILL BE INCLUDED IN ITEM *763643 - MAINTENANCE OF TRAFFIC, ALL INCLUSIVE.

8. REMOVAL OF EXISTING PCC PAVEMENT SHALL BE PAID FOR UNDER ITEM 75B000 - REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT.

SECTION 900

9. THIS PROJECT IS COVERED UNDER AN NPDES GENERAL PERMIT FOR CONSTRUCTION. UNDER THE GENERAL PERMIT, COMPLIANCE WITH DELDOT'S APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS WILL CONSTITUTE COMPLIANCE WITH THE NPDES INDUSTRIAL PERMITTING REQUIREMENTS FOR THIS CONSTRUCTION PROJECT. A COPY OF THE NPDES GENERAL PERMIT AND NOI IS KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S TEAM SUPPORT SECTION. A COPY OF THE GENERAL PERMIT OR THE NOI CAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.

MISCELLANEOUS

10. THE CONTRACTOR SHALL CONTACT MICHAEL ELLER, THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT (302) 576-6061.

11. DESIGN CRITERIA:
2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, USING AASHTO HL93 FOR LIVE LOAD, AND 25 PSF FOR FUTURE WEARING SURFACE.

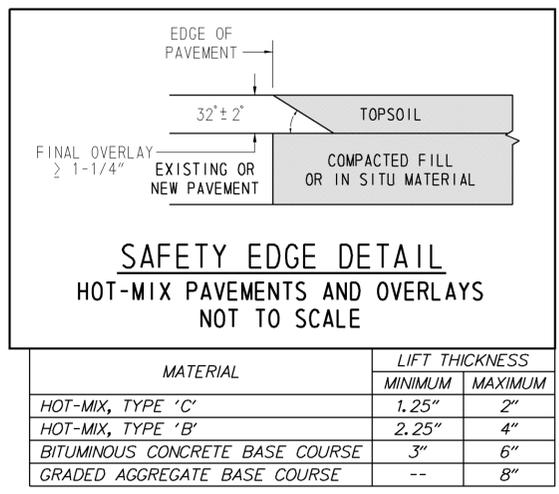
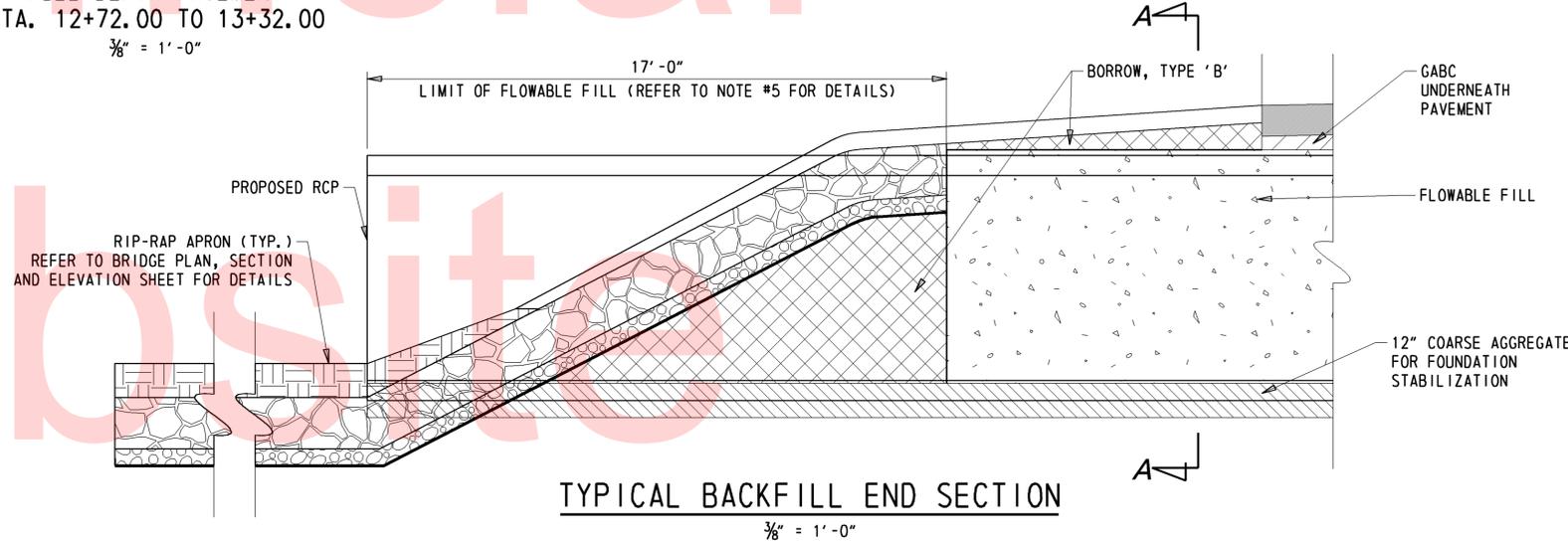
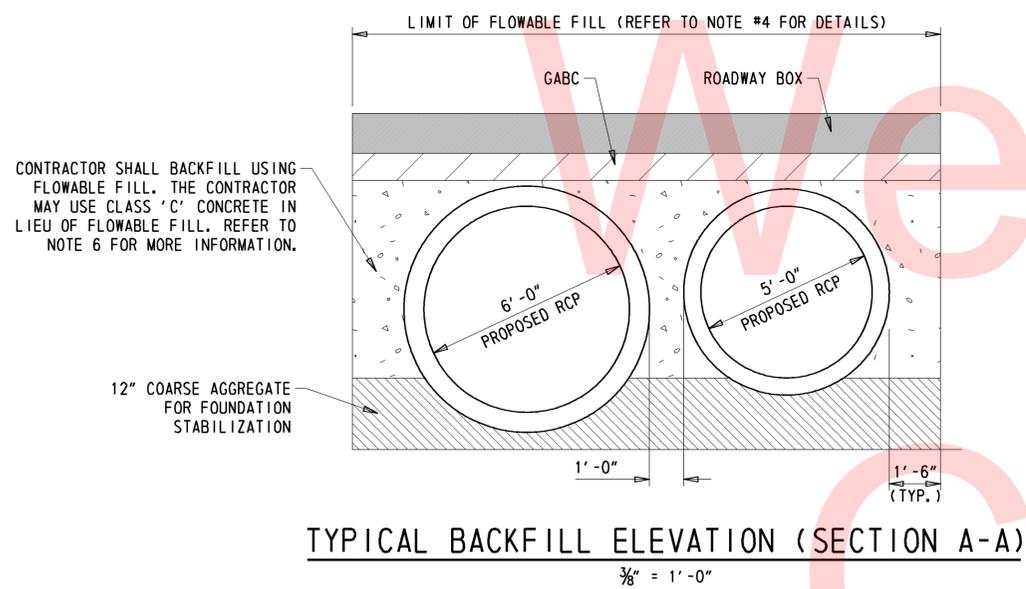
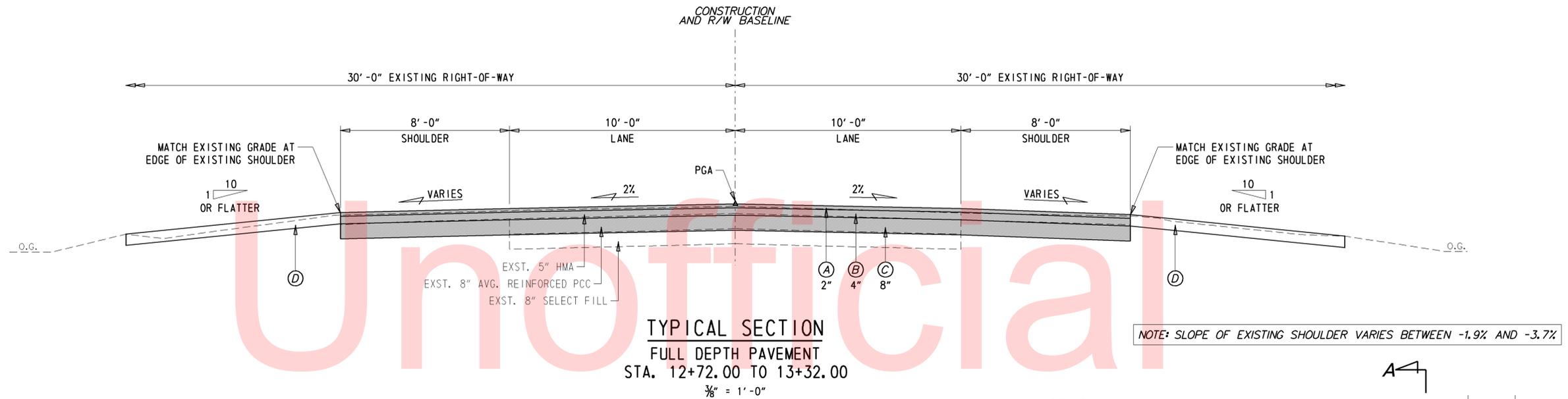
12. HYDRAULIC DATA:
DRAINAGE AREA = 0.95 SQ. MILES
DESIGN FREQUENCY = 50 YEARS
DESIGN DISCHARGE = 180 CFS
DESIGN HEADWATER ELEVATION = 44.87 FT
PROPOSED OPENING = 47.92 SQ. FT

13. SCOUR ANALYSIS
THE PROPOSED STRUCTURE HAS BEEN ANALYZED FOR THE EFFECTS OF SCOUR IN ACCORDANCE WITH HEC-14 - HYDRAULIC DESIGN OF ENERGY DISSIPATORS FOR CULVERTS AND CHANNELS AND HEC-23 - BRIDGE SCOUR AND STREAM INSTABILITY COUNTERMEASURES. SCOUR COUNTERMEASURES HAVE BEEN DESIGNED FOR THE WORST CASE SCENARIO OF THE OVERTOPPING FLOOD OR 200-yr FLOOD EVENT.
DESIGN EVENT = OVERTOPPING
DESIGN DISCHARGE = 290 CFS
DESIGN VELOCITY = 5.79 FPS
DESIGN TAILWATER DEPTH = 7.98 FT

14. ENVIRONMENTAL COMPLIANCE:
REFER TO ENVIRONMENTAL COMPLIANCE PLAN FOR FURTHER RESTRICTIONS / GUIDANCE ASSOCIATED WITH THIS PROJECT.

15. PERMITTING FOR UTILITIES:
IT IS THE RESPONSIBILITY OF THE INDIVIDUAL UTILITY COMPANY(IES) WORKING AT THIS PROJECT LOCATION TO OBTAIN ALL THE REQUIRED PERMITS/AUTHORIZATIONS FROM THE APPROPRIATE MUNICIPAL, COUNTY, STATE AND FEDERAL REGULATORY AGENCIES FOR AUTHORIZATION OF THEIR WORK. THE ENVIRONMENTAL PERMITS CITED ON THE EC SHEET DO NOT AUTHORIZE ANY PART OF THE UTILITY WORK ASSOCIATED WITH THIS PROJECT.

16. SEE UTILITY PLAN FOR MORE INFORMATION ON UTILITY WORK ASSOCIATED WITH THIS PROJECT.



- FLOWABLE FILL NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILIZING THE PIPES IN ORDER TO PREVENT ANY MOVEMENT DURING THE PLACEMENT OF FLOWABLE FILL (ITEM #208001 - FLOWABLE FILL).
 2. THE MAXIMUM DIFFERENCE IN SURFACE LEVELS OF THE FLOWABLE FILL ON OPPOSITE SIDES OF A PIPE SHALL NOT EXCEED 1'-0" DURING POUR.
 3. THE CONTRACTOR SHALL DETERMINE THE NEED TO POUR FLOWABLE FILL IN LIFTS DUE TO BUOYANCY. THE CONTRACTOR SHALL SUBMIT BUOYANCY CALCULATIONS TO THE ENGINEER FOR APPROVAL. POURING OF FLOWABLE FILL SHALL TERMINATE 2" ABOVE THE TOP OF PIPE.
 4. THE TRANSVERSE LIMITS OF THE FLOWABLE FILL AS SHOWN IN THE TYPICAL BACKFILL ELEVATION SHALL BE AT THE LIMIT OF #207000 - EXCAVATION AND BACKFILLING FOR STRUCTURES. ANY EXCAVATION OUTSIDE OF 207 LIMITS WILL BE AT CONTRACTORS EXPENSE (I.E. OUTSIDE OF 1'-6" FROM EDGE OF PROPOSED PIPES).
 5. THE LONGITUDINAL LIMITS OF THE FLOWABLE FILL SHALL BE AS SHOWN ON THE TYPICAL BACKFILL END SECTION DETAIL ON THIS SHEET. THE CONTRACTOR MAY USE FLOWABLE FILL IN LIEU OF BORROW, TYPE 'B' FOR THE SLOPED SECTION. HOWEVER, PAYMENT WILL BE MADE AT THE UNIT PRICE FOR ITEM #209002 - BORROW, TYPE 'B' AT THIS LOCATION.
 6. IF THE CONTRACTOR ELECTS TO SUBSTITUTE CLASS 'C' CONCRETE IN LIEU OF FLOWABLE FILL, PAYMENT WILL BE MADE AT THE UNIT PRICE FOR ITEM #208001 - FLOWABLE FILL. BUOYANCY CALCULATIONS WILL TAKE INTO ACCOUNT THE DIFFERENCE IN UNIT WEIGHT BETWEEN FLOWABLE FILL AND CLASS 'C' CONCRETE.

LEGEND	
(A)	ITEM 401801 - BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
(B)	ITEM 401810 - BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
(C)	ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
(D)	ITEM 908004 - TOPSOIL, 6" DEPTH ITEM 908019 - STREAMBANK SEED MIX, SEEDING

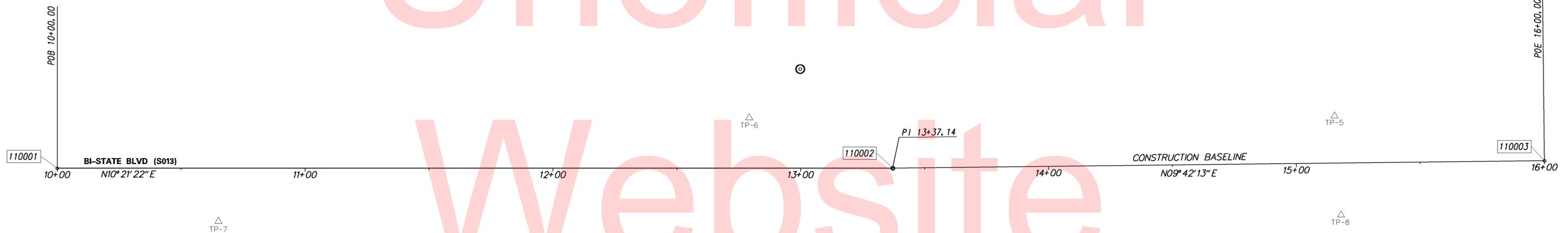
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HORIZONTAL / VERTICAL CONTROL DATA					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP-5	15+15.63	-19.02	173984.7702	611706.7394	45.79
TP-6	12+79.24	-20.28	173752.3170	611665.0447	45.87
TP-7	10+65.06	21.34	173534.1443	611667.4853	45.69
TP-8	15+17.82	20.87	173980.2063	611746.4372	45.70
TP-200	12+34.42	-109.64	173724.2918	611569.0865	45.23

DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83/91).

VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88.

CONSTRUCTION ALIGNMENT CONTROL					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
110001	10+00.00	0.00	173473.9814	611634.8007	
110002	13+37.14	0.00	173805.6299	611695.4073	
110003	16+00.00	0.00	174064.8680	611739.7369	

ADDENDUMS / REVISIONS



**BR 3-299 ON S013
BI-STATE BLVD OVER
MEADOW BRANCH**

CONTRACT	BRIDGE NO.	3-299
T201507301	DESIGNED BY:	GPH
COUNTY	CHECKED BY:	KRL
SUSSEX		

**HORIZONTAL AND
VERTICAL CONTROL**

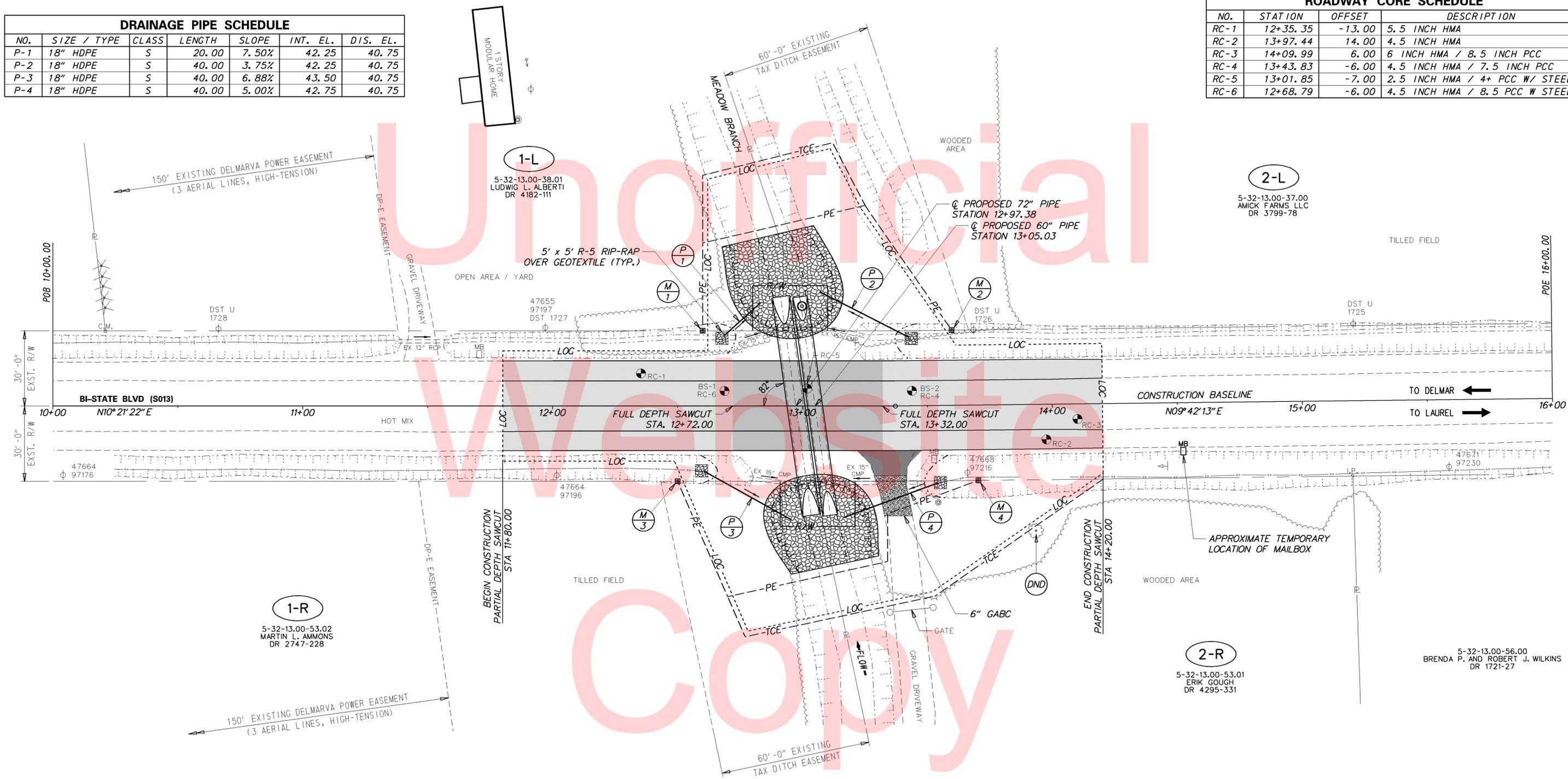
SHEET NO.	5
TOTAL SHTS.	17

RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
M-1	CAPPED REBAR	12+60.00	-30.00	173735.1385	611652.0287
M-2	CAPPED REBAR	13+60.00	-30.00	173833.2187	611669.6895
M-3	CAPPED REBAR	12+50.00	30.00	173714.5158	611709.2536
M-4	CAPPED REBAR	13+70.00	30.00	173832.9625	611730.5166

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
P-1	18" HDPE	S	20.00	7.50%	42.25	40.75
P-2	18" HDPE	S	40.00	3.75%	42.25	40.75
P-3	18" HDPE	S	40.00	6.88%	43.50	40.75
P-4	18" HDPE	S	40.00	5.00%	42.75	40.75

SOIL BORING SCHEDULE					
NO.	STATION	ELEVATION	OFFSET	NORTHING	EASTING
BS-1	12+68.79	46.29	-6.00	173739.4713	611677.2179
BS-2	13+43.83	46.39	-6.00	173813.2312	611690.6200

ROADWAY CORE SCHEDULE				
NO.	STATION	OFFSET	DESCRIPTION	
RC-1	12+35.35	-13.00	5.5 INCH HMA	
RC-2	13+97.44	14.00	4.5 INCH HMA	
RC-3	14+09.99	6.00	6 INCH HMA / 8.5 INCH PCC	
RC-4	13+43.83	-6.00	4.5 INCH HMA / 7.5 INCH PCC	
RC-5	13+01.85	-7.00	2.5 INCH HMA / 4+ PCC W/ STEEL	
RC-6	12+68.79	-6.00	4.5 INCH HMA / 8.5 PCC W STEEL	

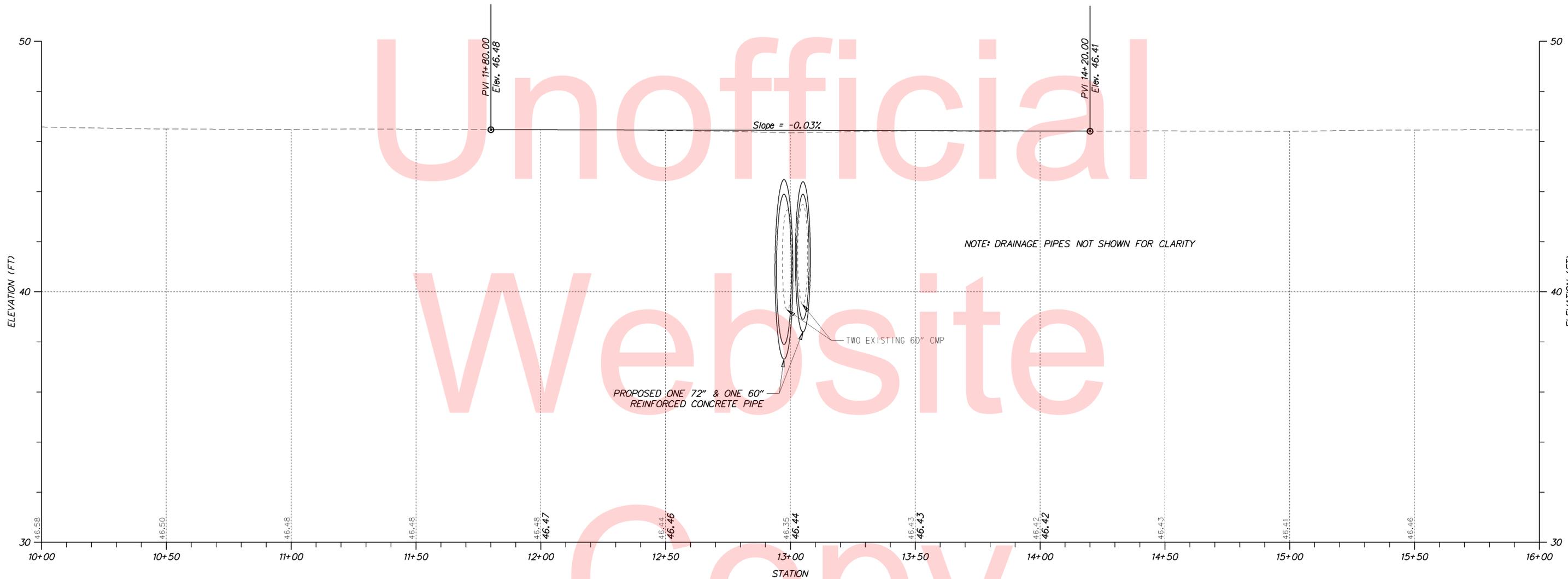


NOTE: REFER TO CONSTRUCTION SEQUENCE PLAN FOR GUIDANCE CONCERNING TEMPORARY DRIVEWAY ON PARCEL 2-R. ACCESS TO PARCEL 2-R AT APPROXIMATE MUST BE MAINTAINED AT ALL TIMES THROUGHOUT CONSTRUCTION. COORDINATE WITH PROPERTY OWNER CONCERNING TEMPORARY CLOSURES.

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	ADDENDUMS / REVISIONS			BR 3-299 ON S013 BI-STATE BLVD OVER MEADOW BRANCH	CONTRACT	BRIDGE NO.	3-299	CONSTRUCTION PLAN	SHEET NO.
	T201507301	DESIGNED BY:			GPH	6			
	SUSSEX	CHECKED BY:			KRL	TOTAL SHTS.			
						17			

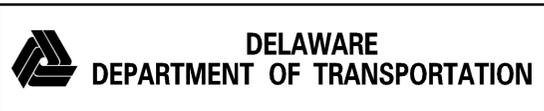
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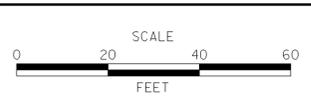
S013 - BISTATE BLVD



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ADDENDUMS / REVISIONS	

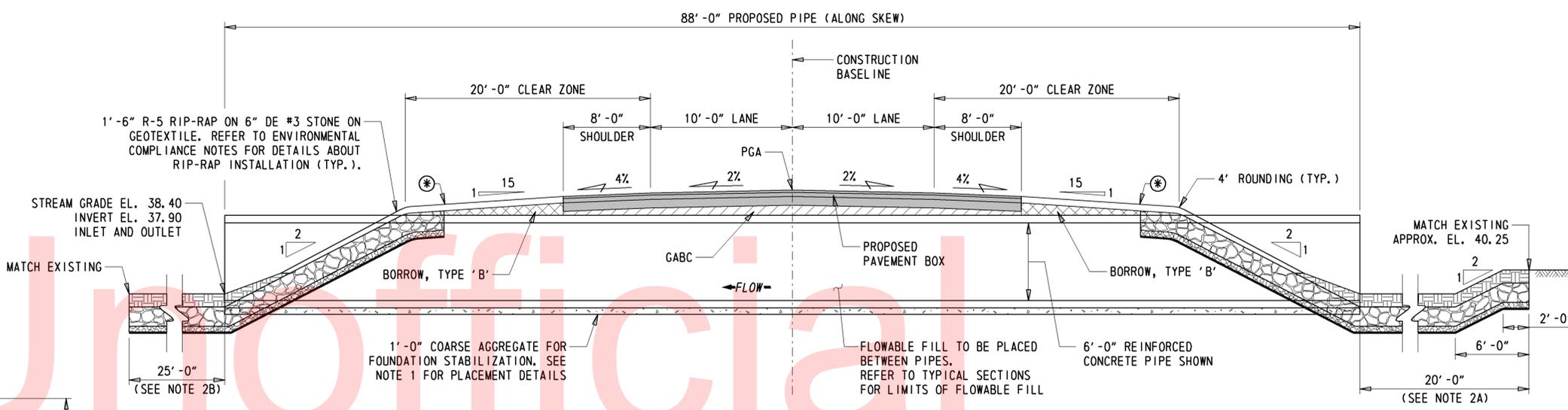
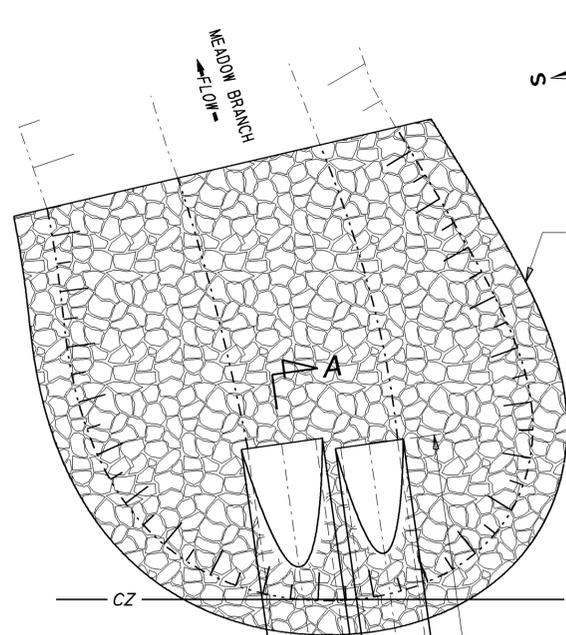


BR 3-299 ON S013
BI-STATE BLVD OVER
MEADOW BRANCH

CONTRACT T201507301	BRIDGE NO.	3-299
COUNTY SUSSEX	DESIGNED BY: GPH	
	CHECKED BY: KRL	

PROFILE

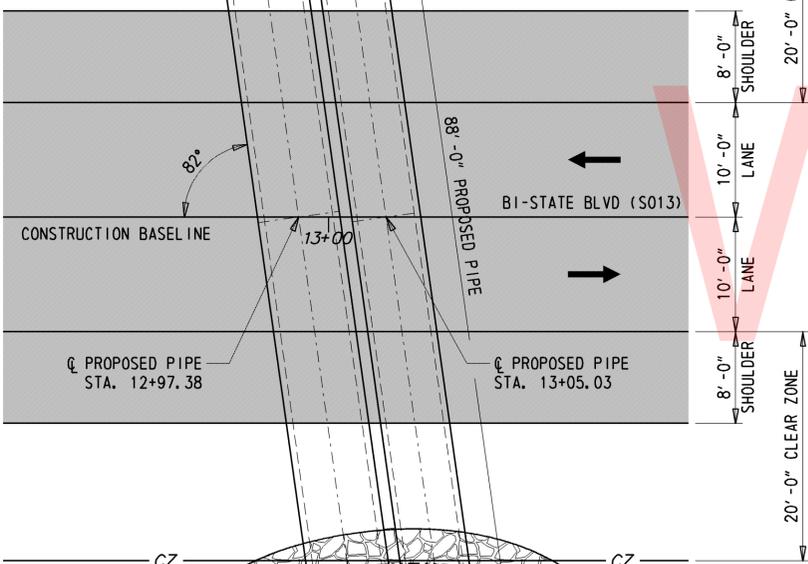
SHEET NO.	7
TOTAL SHTS.	17



BRIDGE SECTION (A-A)
1/8" = 1'-0"

NOTE: BRIDGE SECTION SHOWS THE CENTERLINE OF THE 6'-0" PIPE

* PLACE 6" TOPSOIL AND APPROPRIATE SEEDING

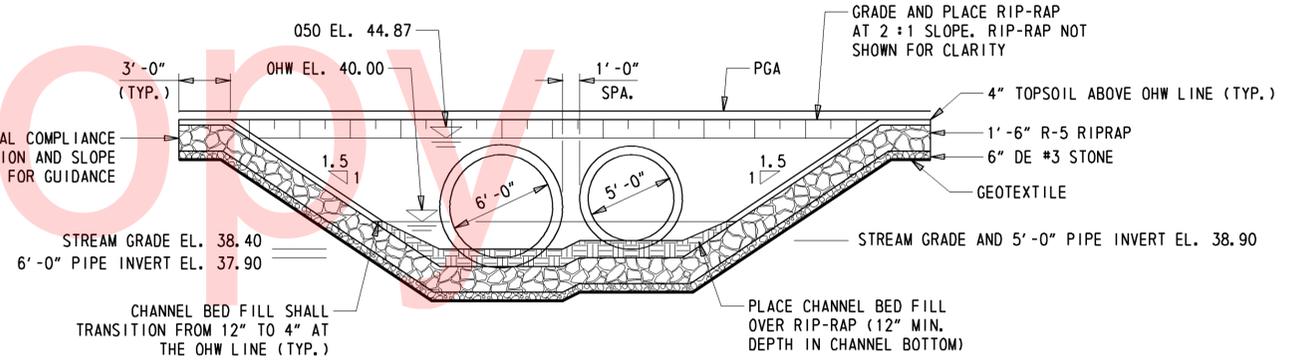


PLAN
1/8" = 1'-0"

NOTES:

1. PROPOSED STRUCTURE:
THE EXISTING (2) 5'-0" CORRUGATED METAL PIPES SHALL BE REPLACED WITH (1) 6'-0" AND (1) 5'-0" DIAMETER REINFORCED CONCRETE PIPES (88'-0" LONG, EACH). THE INVERT OF THE NORTH PIPE (5'-0" PIPE) SHALL BE PLACED AT THE SAME ELEVATION AS THE TOP OF THE CHANNEL BED FILL, EL. 38.90. THE INVERT OF THE SOUTH PIPE (6'-0" PIPE) SHALL BE PLACED AT EL. 37.90 AND THE TOP OF THE CHANNEL BED FILL SHALL BE AT EL. 38.40. PLACE PIPES WITH A 1'-0" SPACE BETWEEN THE OUTER WALLS OF EACH RUN AND PLACE FLOWABLE FILL BETWEEN THE PIPES. REFER TO TYPICAL SECTION SHEET FOR FLOWABLE FILL DETAILS. PLACE 6" OF COARSE AGGREGATE BEDDING BENEATH THE PIPES AND 6" SHAPED UP THE CURVE OF EACH PIPE FOR FOUNDATION STABILIZATION.
2. RIP-RAP PLACEMENT:
A. UPSTREAM - RIP-RAP SHALL BE PLACED IN THE CHANNEL BOTTOM 20'-0" FROM THE PIPE INLET ALONG THE STREAM CENTERLINE AND SHALL BE PLACED TO CREATE A SMOOTH BEND THAT MATCHES THE EXISTING STREAM BANKS. RIP-RAP SHALL BE SHAPED AS SHOWN IN SECTION A-A TO PROVIDE FOR GRADE DIFFERENCE IN STREAM.
B. DOWNSTREAM - RIP-RAP SHALL BE PLACED IN THE CHANNEL BOTTOM 25'-0" FROM THE PIPE OUTLET ALONG THE STREAM CENTERLINE AND SHALL BE PLACED TO CREATE A SMOOTH BEND THAT MATCHES THE EXISTING STREAM BANKS.

REFER TO ENVIRONMENTAL COMPLIANCE NOTE 4 - STREAM RESTORATION AND SLOPE RIP-RAP TREATMENTS FOR GUIDANCE



BRIDGE ELEVATION (B-B)
1/8" = 1'-0"

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BORING: BS-1		DATE DRILLED: 12/22/14			
STATION: 12+68.79	OFFSET: -6.00	ELEVATION: 46.29	NORTHING: 173739.4713	EASTING: 611677.2179	
COMMENTS: EQUIPMENT/RIG TYPE: CME 55 TRAILER RIG		DRILLER: JASON TRUVER			
		LOGGED BY: RANDY FERGUSON			
SAMPLE INFORMATION					
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS
	0.0		NO SAMPLE ACQUIRED.		
	4.0				
1	4.0	2	WET LOOSE BROWN FINE TO COARSE SAND W/TRACE FINE GRAVEL AND SILT.	A-3	
		2			
		3			
	9.0	6			
2	9.0	1	WET VERY LOOSE BROWN SILTY FINE SAND W/TRACE COARSE SAND.	A-2-4(0)	GROUND WATER ENCOUNTERED AT EL. 36.8
		2			APPROX. BTM OF COARSE AGG. FOR FOUNDATION STABILIZATION
	14.0	1			
	14.0	2	WET LOOSE BROWN FINE SAND W/SOME COARSE SAND, TRACE OF SILT.	A-3	
		4			
		5			
4	19.0	WH	WET VERY LOOSE BROWN FINE SAND W/SOME SILT, TRACE OF COARSE SAND.	A-2-4(0)	
		1			
		1			
	24.0	1			
5	24.0	3	WET LOOSE BROWN SILTY FINE SAND W/TRACE COARSE SAND.	A-2-4(0)	
		3			
		4			
	29.0	4			
6	29.0	3	WET LOOSE BROWN SILTY FINE SAND W/TRACE COARSE SAND.	A-3	
		4			
		5			
	34.0	6			
7	34.0	2	WET LOOSE BROWN COARSE TO FINE SAND W/SOME FINE GRAVEL, TRACE OF SILT.	A-1-B	
		5			
		5			
	39.0	5			
8	39.0	4	WET LOOSE BROWN COARSE TO FINE SAND W/SOME FINE GRAVEL, TRACE OF SILT.	A-1-B	
		5			
		7			
	44.0	8			
9	44.0	6	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/TRACE FINE GRAVEL AND SILT.	A-1-B	
		5			
		7			
	48.0	7			
10	48.0	7	WET MEDIUM DENSE BROWN COARSE SAND W/SOME FINE SAND, TRACE OF FINE GRAVEL AND SILT.	A-1-B	
		9			
		11			
	50.0	14			
			END BORING		

BORING: BS-2		DATE DRILLED: 12/22/14			
STATION: 13+43.83	OFFSET: -6.00	ELEVATION: 46.39	NORTHING: 173813.2312	EASTING: 611690.6200	
COMMENTS: EQUIPMENT/RIG TYPE: CME 55 TRAILER RIG		DRILLER: BILLY HOLDEN			
		LOGGED BY: RANDY FERGUSON			
SAMPLE INFORMATION					
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS
	0.0		NO SAMPLE ACQUIRED.		
	4.0				
1	4.0	3	WET LOOSE BROWN SILTY FINE SAND W/TRACE COARSE SAND AND FINE GRAVEL.	A-2-4(0)	
		3			
		4			
	9.0	6			
2	9.0	1	WET LOOSE BROWN FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)	GROUND WATER ENCOUNTERED AT EL. 34.4
		2			APPROX. BTM OF COARSE AGG. FOR FOUNDATION STABILIZATION
	14.0	1			
3	14.0	3	WET MEDIUM DENSE BROWN FINE TO COARSE SAND W/TRACE FINE GRAVEL AND SILT.	A-3	
		5			
		7			
	19.0	7			
4	19.0	9	WET LOOSE BROWN FINE SAND W/SOME COARSE SAND AND SILT, TRACE OF FINE GRAVEL.	A-2-4(0)	
		3			
		4			
	24.0	5			
5	24.0	9	WET MEDIUM DENSE BROWN SILTY FINE SAND W/SOME COARSE SAND, TRACE OF FINE GRAVEL.	A-2-4(0)	
		7			
		7			
	29.0	8			
6	29.0	5	WET LOOSE BROWN FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)	
		5			
		5			
	34.0	5			
7	34.0	7	WET MEDIUM DENSE BROWN SILTY FINE TO COARSE SAND W/TRACE FINE GRAVEL.	A-2-4(0)	
		8			
		9			
	39.0	7			
8	39.0	6	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME SILT AND FINE GRAVEL.	A-1-B	
		7			
		7			
	44.0	9			
9	44.0	20	WET MEDIUM DENSE BROWN COARSE SAND W/SOME FINE SAND AND FINE GRAVEL, TRACE OF SILT.	A-1-B	
		16			
		12			
	48.0	11			
10	48.0	11	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/TRACE SILT AND FINE GRAVEL.	A-1-B	
		9			
		8			
	50.0	8			
			END BORING		

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NOTES:

1. THE INFORMATION SHOWN ON THIS SHEET IS BASED ON LIMITED INVESTIGATIONS AND IS NO WAY WARRANTED TO BE INDICATIVE OF ACTUAL CONDITIONS WHICH MAY BE ENCOUNTER DURING CONSTRUCTION. SEE SECTION 102.05 OF THE STANDARD SPECIFICATIONS FOR MORE DETAIL.
2. BORING LOGS CREATED BY THE DELAWARE DEPARTMENT OF TRANSPORTATION. SUBSURFACE EXPLORATION COMPLETED BY WALTON CORPORATION.
2. LOCATIONS OF BORINGS ARE REFERENCED TO THE CONSTRUCTION PLAN AND LABELED AS 'BS-1' AND 'BS-2'.
3. SOIL SAMPLING: 2 IN. OUTSIDE DIA. SPLIT BARREL SAMPLER, DRIVEN WITH A 140 LB. HAMMER FALLING 30 IN.
4. ALL DEPTHS GIVEN ARE IN FEET.



ADDENDUMS / REVISIONS

NOT TO SCALE

BR 3-299 ON S013
BI-STATE BLVD OVER
MEADOW BRANCH

CONTRACT	BRIDGE NO.	3-299
T201507301	DESIGNED BY:	GPH
COUNTY	CHECKED BY:	KRL
SUSSEX		

SOIL BORING LOGS

SHEET NO.	9
TOTAL SHTS.	17

WETLANDS DELINEATED BY KEN DUNNE, DELDOT, ON MARCH 13, 2015 IN ACCORDANCE WITH THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE ATLANTIC GULF COAST REGIONAL SUPPLEMENT (2010).

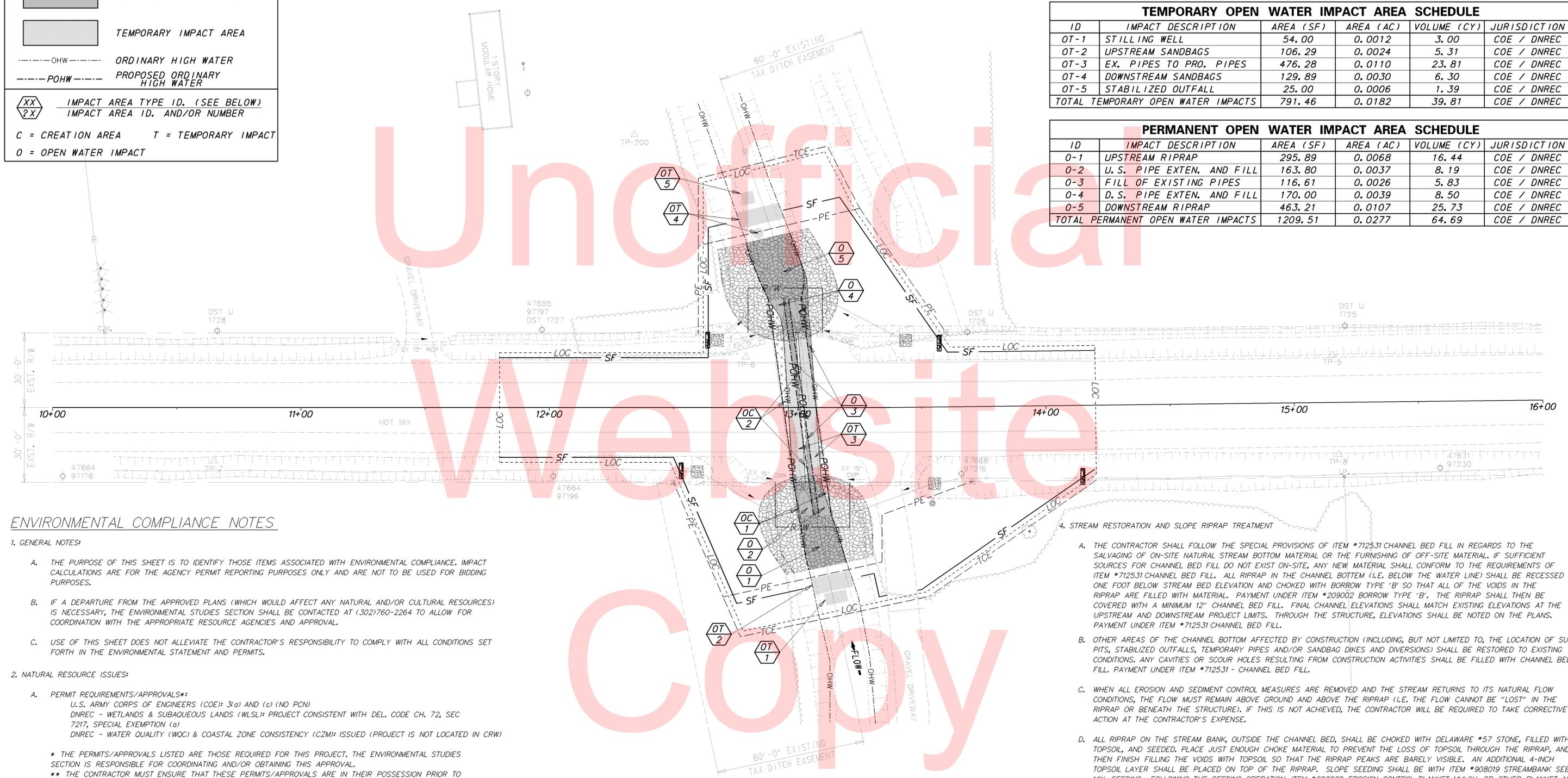


LEGEND	
	CREATION AREA
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	ORDINARY HIGH WATER
	PROPOSED ORDINARY HIGH WATER
	IMPACT AREA TYPE ID. (SEE BELOW)
	IMPACT AREA ID. AND/OR NUMBER
C	= CREATION AREA
T	= TEMPORARY IMPACT
O	= OPEN WATER IMPACT

OPEN WATER CREATION AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OC-1	PROPOSED PIPE FLOW AREA	51.77	0.0012	2.59	COE / DNREC
OC-2	PROPOSED PIPE FLOW AREA	188.09	0.0044	9.40	COE / DNREC
TOTAL OPEN WATER CREATION AREAS		239.86	0.0056	11.99	COE / DNREC

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OT-1	STILLING WELL	54.00	0.0012	3.00	COE / DNREC
OT-2	UPSTREAM SANDBAGS	106.29	0.0024	5.31	COE / DNREC
OT-3	EX. PIPES TO PRO. PIPES	476.28	0.0110	23.81	COE / DNREC
OT-4	DOWNSTREAM SANDBAGS	129.89	0.0030	6.30	COE / DNREC
OT-5	STABILIZED OUTFALL	25.00	0.0006	1.39	COE / DNREC
TOTAL TEMPORARY OPEN WATER IMPACTS		791.46	0.0182	39.81	COE / DNREC

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
O-1	UPSTREAM RIPRAP	295.89	0.0068	16.44	COE / DNREC
O-2	U.S. PIPE EXTEN. AND FILL	163.80	0.0037	8.19	COE / DNREC
O-3	FILL OF EXISTING PIPES	116.61	0.0026	5.83	COE / DNREC
O-4	D.S. PIPE EXTEN. AND FILL	170.00	0.0039	8.50	COE / DNREC
O-5	DOWNSTREAM RIPRAP	463.21	0.0107	25.73	COE / DNREC
TOTAL PERMANENT OPEN WATER IMPACTS		1209.51	0.0277	64.69	COE / DNREC



ENVIRONMENTAL COMPLIANCE NOTES

1. GENERAL NOTES:

- A. THE PURPOSE OF THIS SHEET IS TO IDENTIFY THOSE ITEMS ASSOCIATED WITH ENVIRONMENTAL COMPLIANCE. IMPACT CALCULATIONS ARE FOR THE AGENCY PERMIT REPORTING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING PURPOSES.
- B. IF A DEPARTURE FROM THE APPROVED PLANS (WHICH WOULD AFFECT ANY NATURAL AND/OR CULTURAL RESOURCES) IS NECESSARY, THE ENVIRONMENTAL STUDIES SECTION SHALL BE CONTACTED AT (302)760-2264 TO ALLOW FOR COORDINATION WITH THE APPROPRIATE RESOURCE AGENCIES AND APPROVAL.
- C. USE OF THIS SHEET DOES NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL CONDITIONS SET FORTH IN THE ENVIRONMENTAL STATEMENT AND PERMITS.

2. NATURAL RESOURCE ISSUES:

- A. PERMIT REQUIREMENTS/APPROVALS*:
 - U.S. ARMY CORPS OF ENGINEERS (COE): 3(a) AND (c) (NO PCN)
 - DNREC - WETLANDS & SUBAQUEOUS LANDS (WLSL): PROJECT CONSISTENT WITH DEL. CODE CH. 72, SEC 7217, SPECIAL EXEMPTION (a)
 - DNREC - WATER QUALITY (WQC) & COASTAL ZONE CONSISTENCY (CZM): ISSUED (PROJECT IS NOT LOCATED IN CRW)
- * THE PERMITS/APPROVALS LISTED ARE THOSE REQUIRED FOR THIS PROJECT. THE ENVIRONMENTAL STUDIES SECTION IS RESPONSIBLE FOR COORDINATING AND/OR OBTAINING THIS APPROVAL.
- ** THE CONTRACTOR MUST ENSURE THAT THESE PERMITS/APPROVALS ARE IN THEIR POSSESSION PRIOR TO BEGINNING CONSTRUCTION IN THE PERMITTED AREA(S) AND ENSURE IT IS DISPLAYED ON-SITE DURING THE ENTIRE CONSTRUCTION PERIOD.
- B. CONSTRUCTION RESTRICTIONS:
 - FISHERIES - NONE
 - ENDANGERED SPECIES - NONE
 - MIGRATORY BIRDS - NONE

3. CULTURAL RESOURCE ISSUES:

- A. ANY STAGING AND STOCKPILE AREA(S) OUTSIDE OF THE PROJECT'S LOC THAT INDIVIDUALLY OR CUMMULATIVELY ARE LARGER THAN 10,000 SQUARE FEET MUST BE APPROVED BY DELDOT'S ARCHAEOLOGIST. CONTACT THE AREA ENGINEER WHO WILL COORDINATE WITH DELDOT'S ARCHAEOLOGIST. WITHIN 30 DAYS, DELDOT WILL (1) APPROVE THE USE OF THE PROPOSED STAGING AND STOCKPILE AREA(S), REJECT THE REQUEST, OR (3) PERFORM AN ARCHAEOLOGICAL SURVEY TO DETERMINE WHETHER TO APPROVE OR REJECT THE REQUEST WHICH MAY TAKE UP TO 90 DAYS. IF AN ARCHAEOLOGICAL SURVEY IS NECESSARY, DELDOT OR A CONSULTANT ON ITS BEHALF WILL UNDERTAKE THE SURVEY.

4. STREAM RESTORATION AND SLOPE RIPRAP TREATMENT

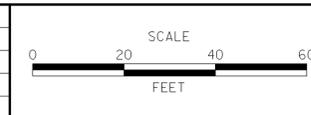
- A. THE CONTRACTOR SHALL FOLLOW THE SPECIAL PROVISIONS OF ITEM #712531 CHANNEL BED FILL IN REGARDS TO THE SALVAGING OF ON-SITE NATURAL STREAM BOTTOM MATERIAL OR THE FURNISHING OF OFF-SITE MATERIAL. IF SUFFICIENT SOURCES FOR CHANNEL BED FILL DO NOT EXIST ON-SITE, ANY NEW MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ITEM #712531 CHANNEL BED FILL. ALL RIPRAP IN THE CHANNEL BOTTEM (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 12" CHANNEL BED FILL. FINAL CHANNEL ELEVATIONS SHALL MATCH EXISTING ELEVATIONS AT THE UPSTREAM AND DOWNSTREAM PROJECT LIMITS. THROUGH THE STRUCTURE, ELEVATIONS SHALL BE NOTED ON THE PLANS. PAYMENT UNDER ITEM #712531 CHANNEL BED FILL.
- B. 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.
- C. 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.
- D. 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 CHOKER 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 #908019 STREAMBANK SEED MIX, SEEDING. FOLLOWING THE SEEDING OPERATION, ITEM #908020 EROSION CONTROL BLANKET MULCH, 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. ALL OTHER ITEMS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.
- E. 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 #909005 STREAM DIVERSION.

- 5. SILT FENCE INSTALLATION ADJACENT TO WOODED UPLANDS AND/OR WOODED WETLANDS: PROVIDED PROPER EROSION AND SEDIMENT CONTROL CAN BE MAINTAINED, IT IS RECOMMENDED THAT SANDBAGS BE USED TO SECURE SILT FENCE IN LIEU OF TRENCHING. THE ENVIRONMENTAL STUDIES SECTION (CAROL SULLIVAN, 302-760-2129) CAN PROVIDE FURTHER GUIDANCE REGARDING THIS METHOD OF INSTALLATION.

ORIGINAL SHEET PREPARED BY GPH/SMW. LAST UPDATED BY GREG HAINSWORTH ON 09-01-2015



ADDENDUMS / REVISIONS	

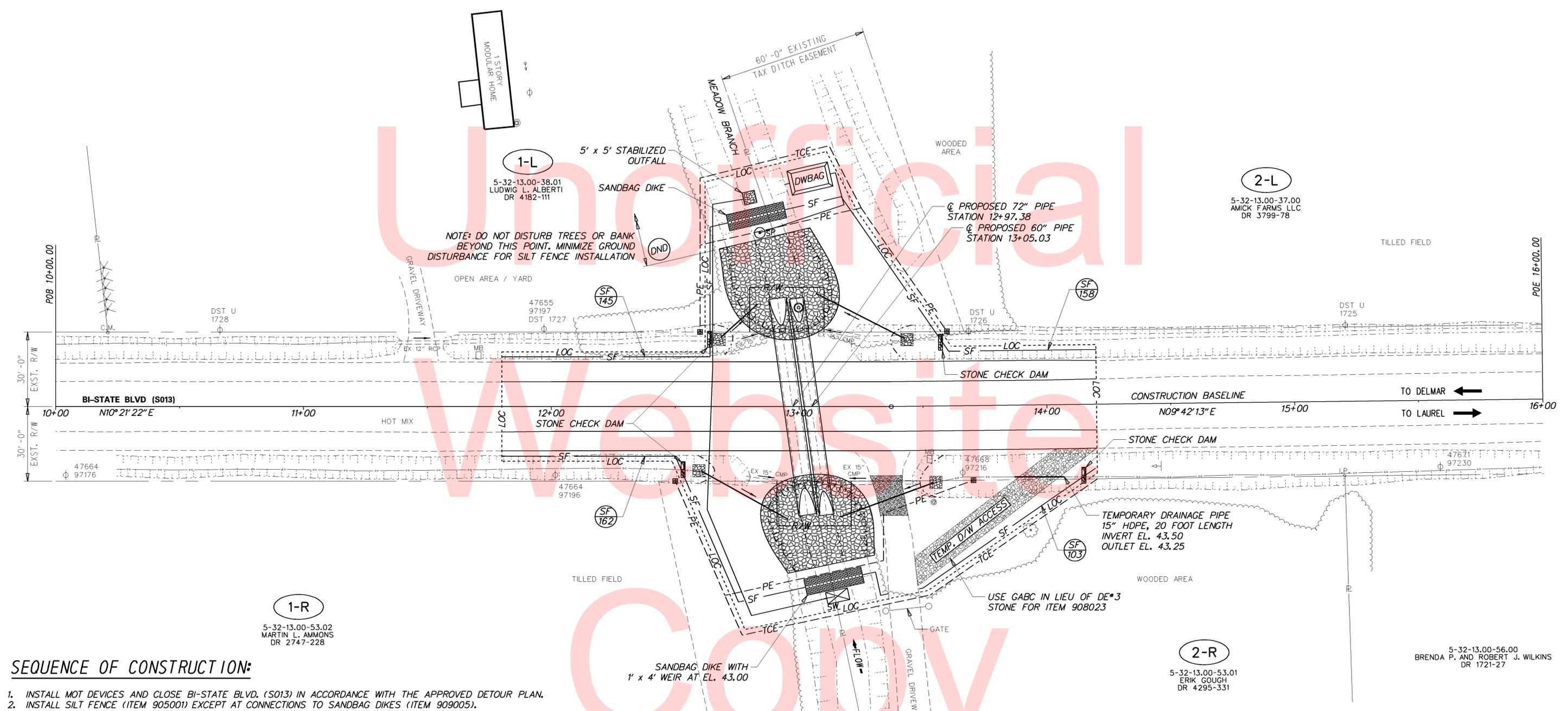


**BR 3-299 ON S013
BI-STATE BLVD OVER
MEADOW BRANCH**

CONTRACT	BRIDGE NO.	3-299
T201507301	DESIGNED BY:	GPH
COUNTY	CHECKED BY:	KRL
SUSSEX		

ENVIRONMENTAL COMPLIANCE PLAN	SHEET NO.	10
	TOTAL SHTS.	17

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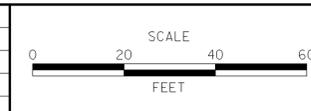


SEQUENCE OF CONSTRUCTION:

1. INSTALL MOT DEVICES AND CLOSE BI-STATE BLVD. (S013) IN ACCORDANCE WITH THE APPROVED DETOUR PLAN.
2. INSTALL SILT FENCE (ITEM 905001) EXCEPT AT CONNECTIONS TO SANDBAG DIKES (ITEM 909005).
3. INSTALL TEMPORARY DRIVEWAY ACCESS (ITEM 908023) ON PARCEL 2-R TO MAINTAIN PROPERTY ACCESS.
4. INSTALL STILLING WELL (ITEM 909005) JUST UPSTREAM OF THE PROPOSED UPSTREAM SANDBAG DIKE. PLACE 5' x 5' R-5 RIP RAP STABILIZED OUTFALL (ITEM 909005) AT THE DESIGNATED LOCATION.
5. CONSTRUCT SANDBAG DIKES AT THE LOCATIONS SHOWN ON PLAN WITH A TOP EL. OF 43.00 WITH A 1' x 4' WEIR OPENING UPSTREAM WITH THE CENTER OF THE WEIR TO MATCH THE CENTER OF THE STREAM. ELEVATION OF THE DOWNSTREAM SANDBAG DIKE SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION OF THE UPSTREAM SANDBAG DIKE. CONNECT SILT FENCE TO SANDBAG DIKES TO COMPETENTLY ENCLOSE THE WORK AREA. USE PUMP (ITEM 909005) TO DIVERT THE STREAM BASE FLOW AROUND THE ENCLOSED WORK AREA. WHEN THE FLOW IS HIGHER THAN PUMP CAPACITY DURING RAINFALL EVENTS, THE STREAM FLOW IS ALLOWED TO FLOW OVER THE SANDBAG DIKE. THEREFORE, THE ENCLOSED WORK AREA IS TO BE KEPT CLEAR OF ALL DEBRIS AND OBSTRUCTIONS AT THE END OF EACH WORKDAY. THE BASE FLOW THROUGH THE PUMPS SHALL BE 7.5 C.F.S.
6. INSTALL SUMP PIT (ITEM 906003) AND DEWATERING BAG (ITEM 906002) ON THE DOWNSTREAM SIDE OF THE WORK ZONE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE STABILIZED OUTLET OF THE PUMPING OPERATION OR ON OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER.
7. SAWCUT THE EXISTING PAVEMENT TO THE LIMITS SHOWN ON THE CONSTRUCTION PLAN. REMOVE EXISTING PAVEMENT, PIPE BACKFILL, THE EXISTING STRUCTURE THAT CONSISTS OF TWO 5'-0" CMP'S AND FOUR EXISTING 15" CORRUGATED METAL DRAINAGE PIPES.
8. ALL STOCKPILES MUST BE LOCATED WITHIN THE LOC. CHANNEL BED FILL MATERIAL WILL BE STOCKPILED SEPARATELY FROM OTHER STOCKPILED MATERIALS.
9. INSTALL PROPOSED STRUCTURE CONSISTING OF ONE 6'-0" RCP AND ONE 5'-0" RCP, RIP-RAP, CHANNEL BED FILL AND SLOPE STABILIZATION AS NOTED. INSTALL FOUR 18" HDPE DRAINAGE PIPES AND RE-GRADE SLOPES AS NECESSARY IN ACCORDANCE WITH THE APPROVED PLANS.
10. STABILIZE DISTURBED AREAS.
11. REMOVE ALL E&S DEVICES WITHIN THE STREAM AND RETURN STREAM FLOW TO THE PROPOSED STRUCTURE.
12. REMOVE TEMPORARY DRIVEWAY ACCESS (ITEM 908023). LINE SWALE WITH TEMPORARY EROSION BLANKET CENTERED ON THE CENTERLINE OF THE SWALE.
13. STABILIZE ANY REMAINING DISTURBED AREAS.
14. COMPLETE ALL REMAINING PAVEMENT CONSTRUCTION AND STRIPE ROADWAY.
15. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER VEGETATION HAS STABILIZED ALL DISTURBED AREAS IN ACCORDANCE WITH THESE PLANS AND AS DIRECTED BY THE ENGINEER.
16. REMOVE ALL TEMPORARY MOT DEVICES AND REOPEN BI-STATE BLVD. REMOVAL OF MOT DEVICES MAY OCCUR PRIOR TO REMOVAL OF TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.

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ADDENDUMS / REVISIONS



CONTRACT	BRIDGE NO.	3-299
T201507301	DESIGNED BY:	GPH
COUNTY	CHECKED BY:	KRL
SUSSEX		

CONSTRUCTION SEQUENCE AND EROSION AND SEDIMENT CONTROL PLAN	SHEET NO.	11
	TOTAL SHTS.	17

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

ALT US13
TO CLOSE

STARTING
XXXXXX

DURING DETOUR

(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-2

ALT US13
CLOSED

SOUTH OF
ALLENS
MILL RD

DURING DETOUR

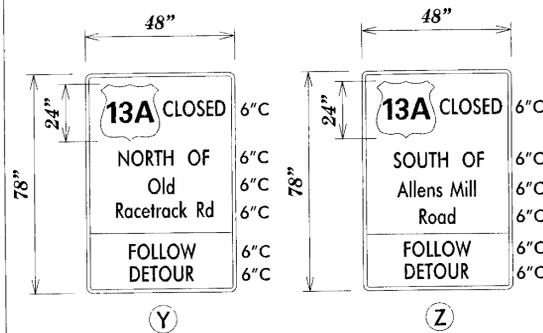
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-3

ALT US13
CLOSED

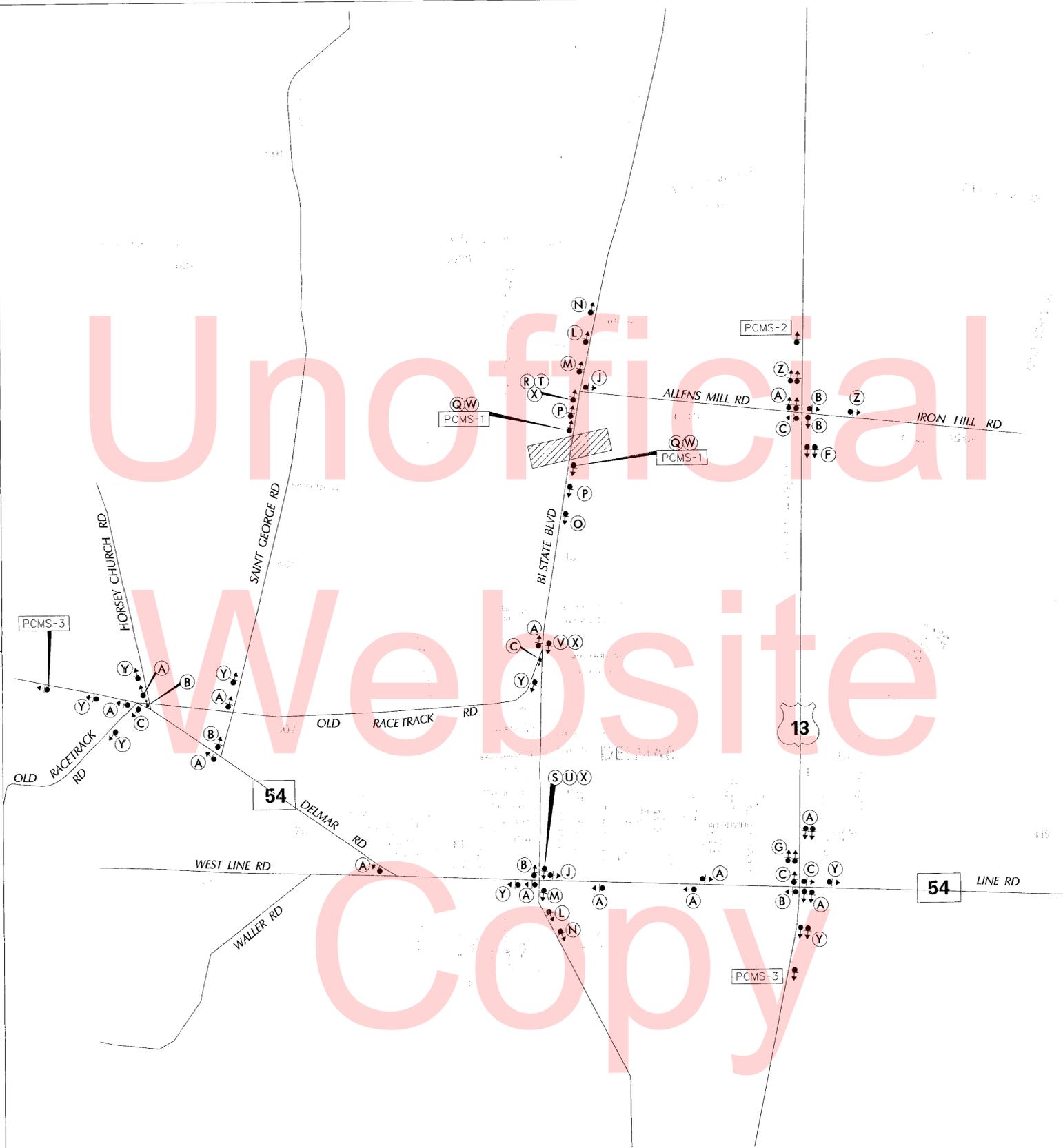
NORTH OF
OLD RACE
TRACK RD

SPECIAL SIGNS



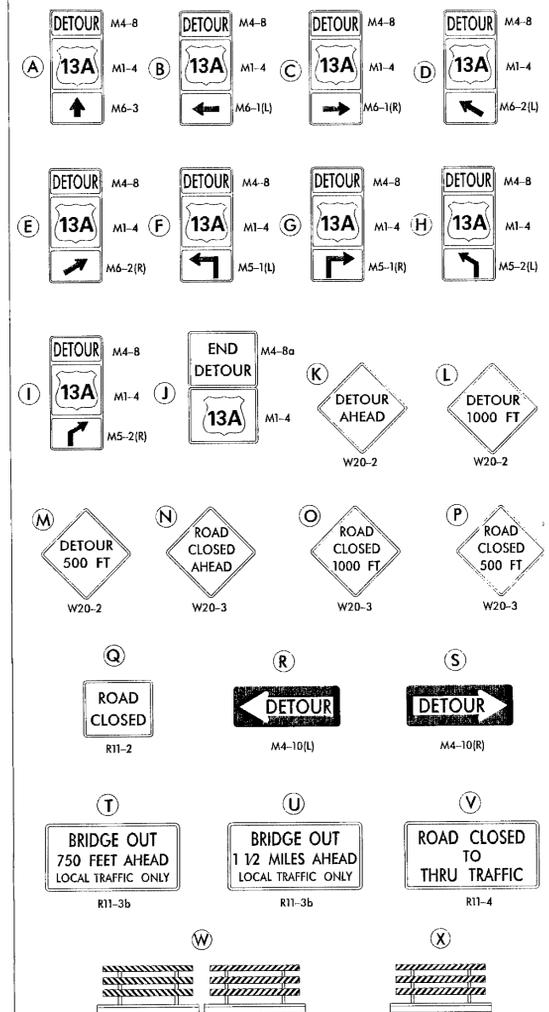
***DG RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND**

ROUTE SHIELDS - WHITE BACKGROUND; BLACK LEGEND



LEGEND

*ROUTE SHIELDS - WHITE BACKGROUND; BLACK 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) 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.
- THE COLORS, DIMENSIONS, AND CHARACTERISTICS OF ALL INTERSTATE, U.S. ROUTE, AND STATE ROUTE SHIELD SIGNS SHALL BE IN ACCORDANCE WITH SECTION 2D.11 OF "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD).
- 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 *MAR* DATE: 12-22-14

RECOMMENDED *[Signature]* DATE: 1-6-15

RECOMMENDED _____ DATE: _____

APPROVED CHIEF SAFETY OFFICER *[Signature]* DATE: 1-6-15

APPROVED TRAFFIC ENGINEER *[Signature]* DATE: 1/6/2015



ADDENDUM / REVISIONS

NOT TO SCALE

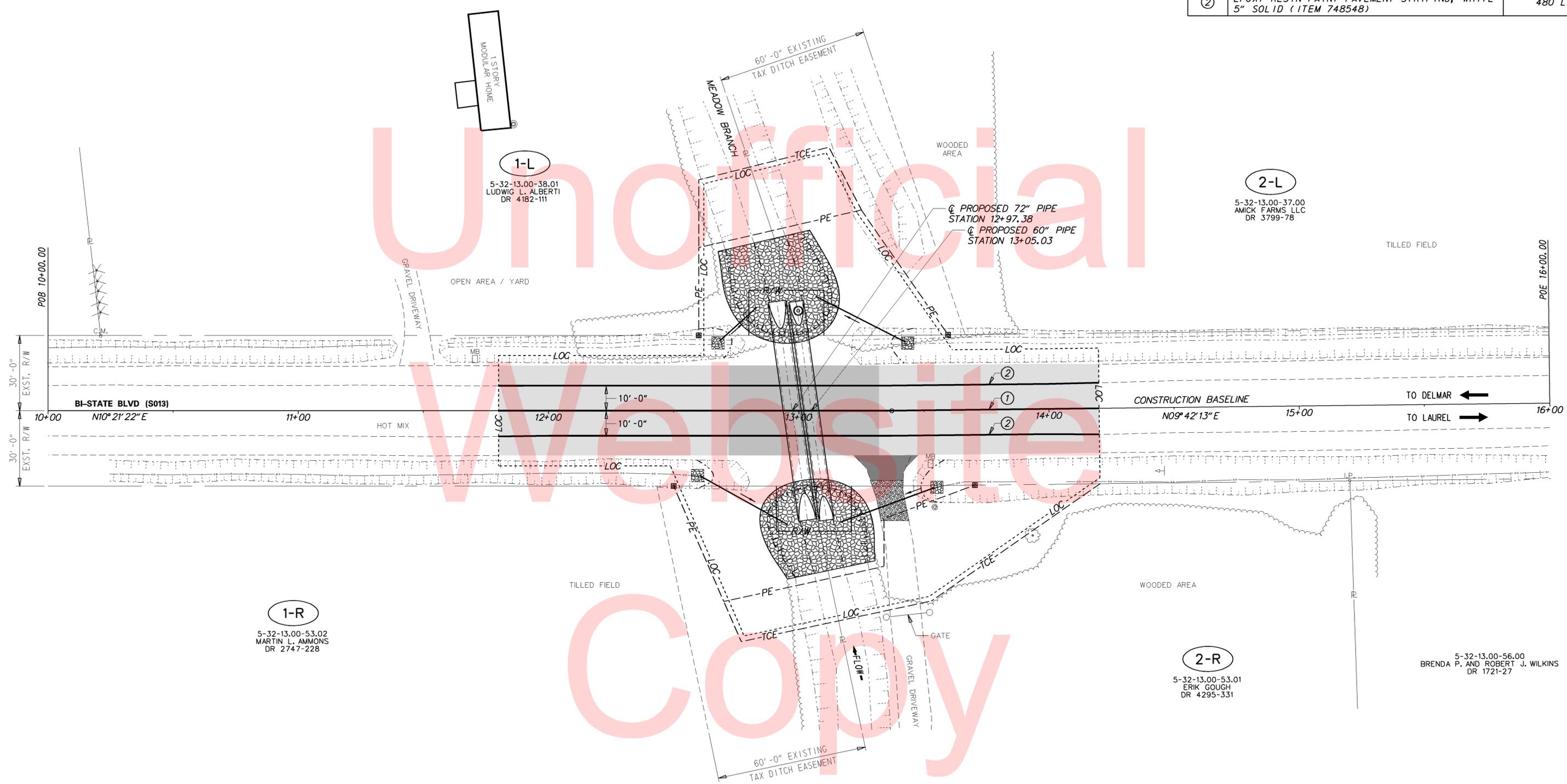
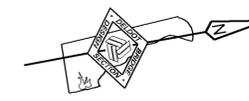
**BR 3-299 ON
BI-STATE BLVD OVER
MEADOW BRANCH**

CONTRACT	ROAD NO.	S013
T201507301	DESIGNED BY: MFR	
COUNTY	CHECKED BY: ASW	
SUSSEX		

DETOUR PLAN

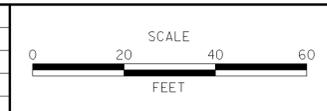
SHEET NO.	12
TOTAL SHTS.	17

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
①	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	480 LF
②	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	480 LF



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ADDENDUMS / REVISIONS



BR 3-299 ON S013
BI-STATE BLVD OVER
MEADOW BRANCH

CONTRACT T201507301	BRIDGE NO. 3-299
COUNTY SUSSEX	DESIGNED BY: GPH CHECKED BY: KRL

SIGNING AND STRIPING PLAN

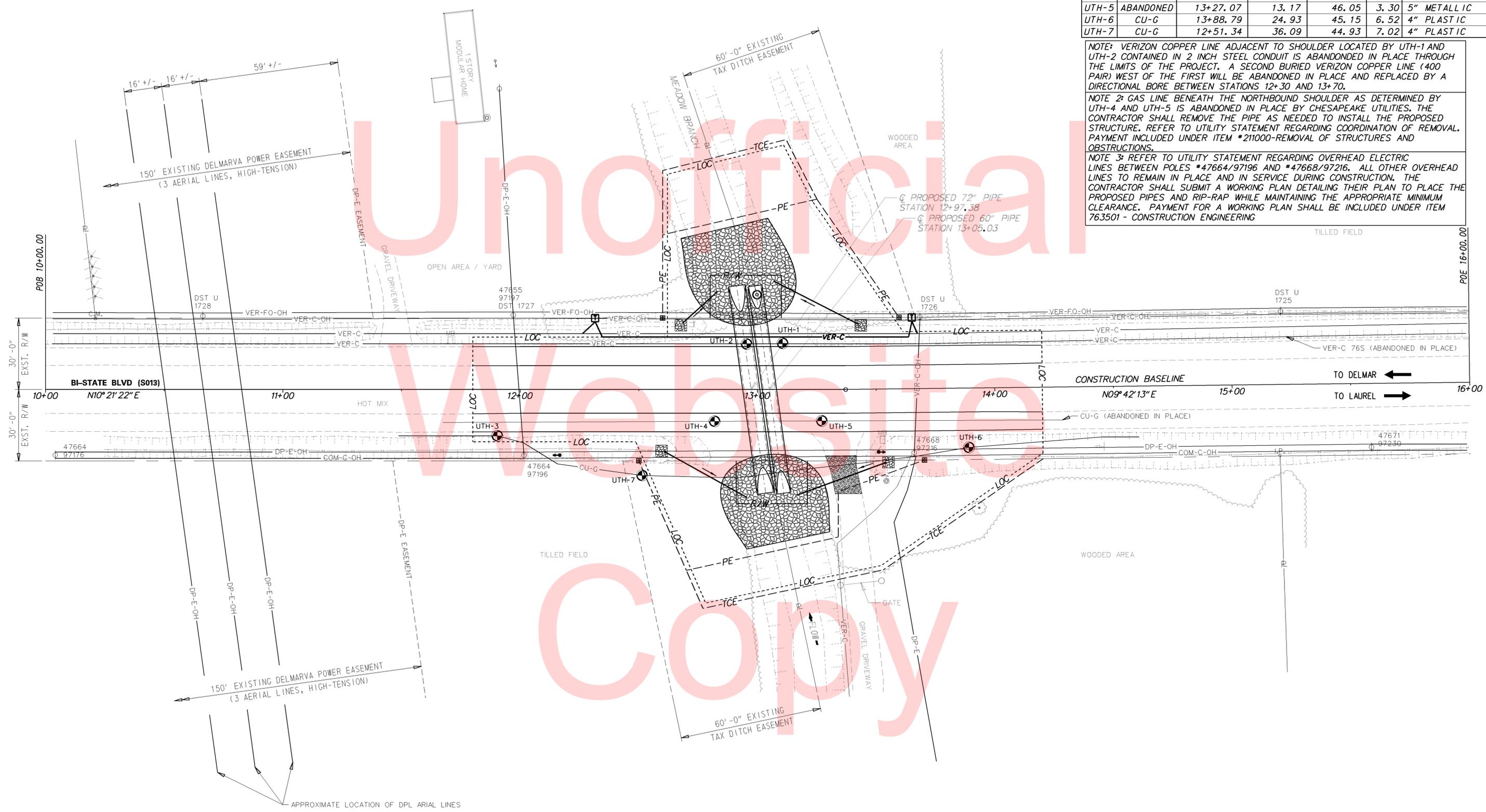
SHEET NO. 13
TOTAL SHTS. 17

UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL
UTH-1	VER-C	13+10.59	-19.42	45.93	1.93	2" METAL CONDUIT
UTH-2	VER-C	12+95.43	-19.10	45.91	2.63	2" METAL CONDUIT
UTH-3	CU-G	11+90.38	19.47	45.92	2.60	4" PLASTIC
UTH-4	ABANDONED	12+81.92	13.36	46.05	3.08	5" METALLIC
UTH-5	ABANDONED	13+27.07	13.17	46.05	3.30	5" METALLIC
UTH-6	CU-G	13+88.79	24.93	45.15	6.52	4" PLASTIC
UTH-7	CU-G	12+51.34	36.09	44.93	7.02	4" PLASTIC

NOTE: VERIZON COPPER LINE ADJACENT TO SHOULDER LOCATED BY UTH-1 AND UTH-2 CONTAINED IN 2 INCH STEEL CONDUIT IS ABANDONED IN PLACE THROUGH THE LIMITS OF THE PROJECT. A SECOND BURIED VERIZON COPPER LINE (400 PAIR) WEST OF THE FIRST WILL BE ABANDONED IN PLACE AND REPLACED BY A DIRECTIONAL BORE BETWEEN STATIONS 12+30 AND 13+70.

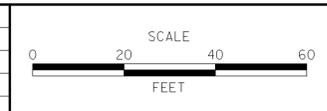
NOTE 2: GAS LINE BENEATH THE NORTHBOUND SHOULDER AS DETERMINED BY UTH-4 AND UTH-5 IS ABANDONED IN PLACE BY CHESAPEAKE UTILITIES. THE CONTRACTOR SHALL REMOVE THE PIPE AS NEEDED TO INSTALL THE PROPOSED STRUCTURE. REFER TO UTILITY STATEMENT REGARDING COORDINATION OF REMOVAL. PAYMENT INCLUDED UNDER ITEM *211000-REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

NOTE 3: REFER TO UTILITY STATEMENT REGARDING OVERHEAD ELECTRIC LINES BETWEEN POLES #47664/97196 AND #47668/97216. ALL OTHER OVERHEAD LINES TO REMAIN IN PLACE AND IN SERVICE DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A WORKING PLAN DURING THEIR PLAN TO PLACE THE PROPOSED PIPES AND RIP-RAP WHILE MAINTAINING THE APPROPRIATE MINIMUM CLEARANCE. PAYMENT FOR A WORKING PLAN SHALL BE INCLUDED UNDER ITEM 763501 - CONSTRUCTION ENGINEERING

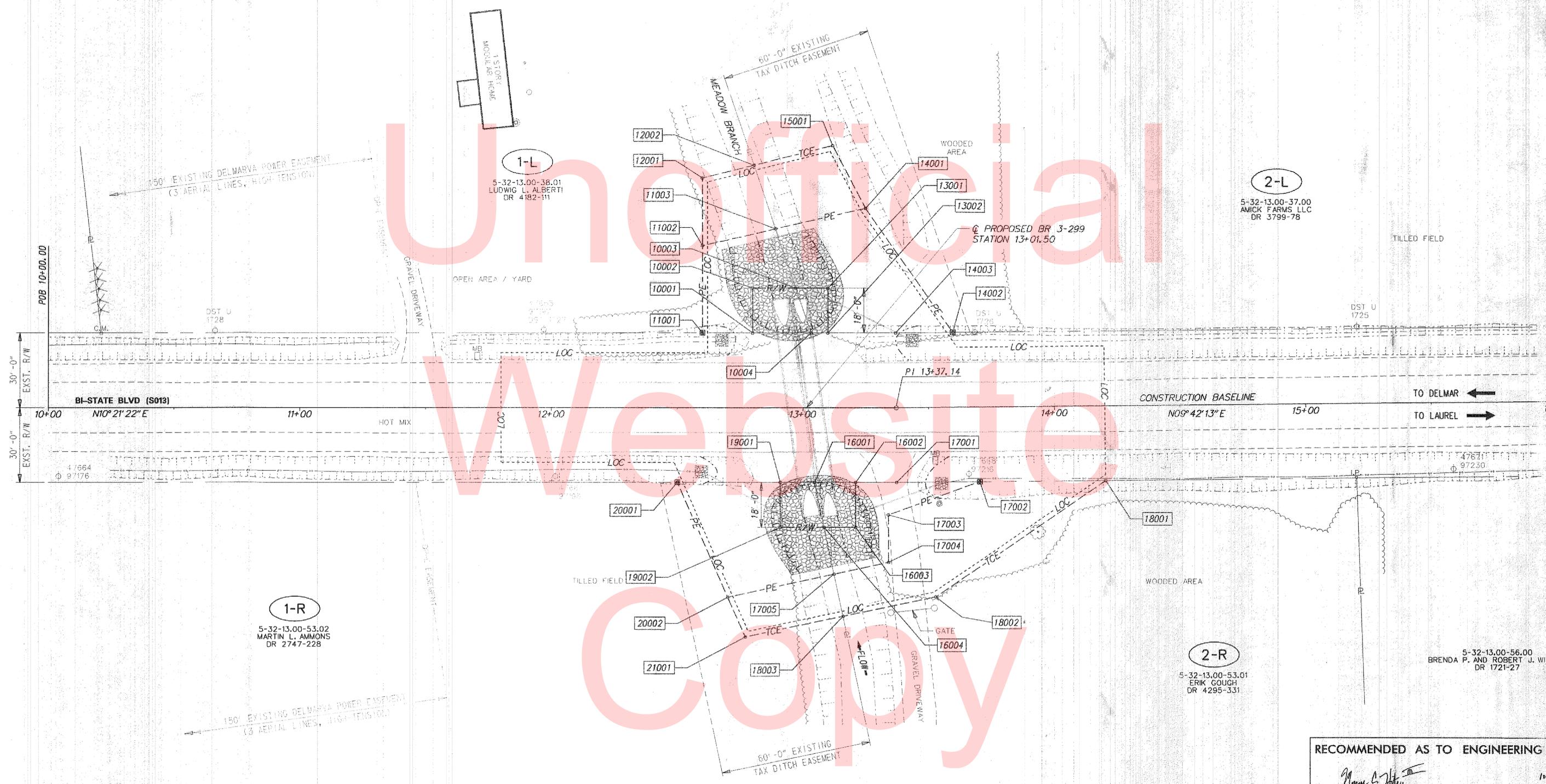


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ADDENDUMS / REVISIONS



CONTRACT	BRIDGE NO.	3-299
T201507301	DESIGNED BY:	GPH
COUNTY	CHECKED BY:	KRL
SUSSEX		

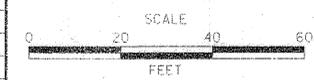


1-R
5-32-13.00-53.02
MARTIN L. AMMONS
DR 2747-228

2-R
5-32-13.00-53.01
ERIK GOUGH
DR 4295-331

RECOMMENDED AS TO ENGINEERING NEED	
<i>James L. Hilly</i> MANAGER, TEAM SUPPORT	11/4/16 DATE
<i>Shelly Claunch</i> PROGRAM MANAGER, TEAM SUPPORT	10/6/15 DATE
<i>Robert Red</i> TECHNICAL REVIEWER, TEAM SUPPORT	10-6-15 DATE

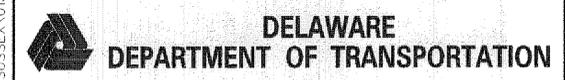
ADDENDUMS / REVISIONS



BR 3-299 ON S013
BI-STATE BLVD OVER
MEADOW BRANCH

CONTRACT	BRIDGE NO.	3-299
T201507301	DESIGNED BY:	GPH
COUNTY	CHECKED BY:	KRL
SUSSEX		

RIGHT-OF-WAY SHEET 1 OF 3	
RIGHT-OF-WAY PLAN	SHEET NO. 15
	TOTAL SHTS. 17



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ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-38.01	(1-L) LUDWIG L. ALBERTI	FEE	4182-111	4.190							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
10001	1000	12+80.00	-30.00	173754.8130	611655.6240	N 79°38'37.85" W	18.00				
10002	1000	12+80.00	-48.00	173758.0488	611637.9173	N 10°21'22.15" E	17.24				
10003	1000	12+97.24	-48.00	173775.0052	611641.0159	N 81°45'05.16" E	18.99				
10004	1000	13+03.30	-30.00	173777.7300	611659.8120	S 10°21'22.15" W	23.30				
10001	1000	12+80.00	-30.00	173754.8130	611655.6240						
FIGURE 10000 AREA = 364.8026 SQ. FT. (0.0084 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-38.01	(1-L) LUDWIG L. ALBERTI	P/E	4182-111	4.190							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
11001	1000	12+60.00	-30.00	173735.1385	611652.0287	N 79°38'35.87" W	35.00				
11002	1000	12+60.00	-65.00	173741.4307	611617.5989	N 2°38'18.47" W	30.01				
11003	1000	12+89.24	-71.75	173771.4102	611616.2174	N 81°45'05.16" E	25.06				
10003	1000	12+97.24	-48.00	173775.0052	611641.0159	S 10°21'22.15" W	17.24				
10002	1000	12+80.00	-48.00	173758.0488	611637.9173	S 79°38'37.85" E	18.00				
10001	1000	12+80.00	-30.00	173754.8130	611655.6240	S 10°21'22.06" W	20.00				
11001	1000	12+60.00	-30.00	173735.1385	611652.0287						
FIGURE 11000 AREA = 1050.7297 SQ. FT. (0.0241 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-38.01	(1-L) LUDWIG L. ALBERTI	TCE	4182-111	4.190							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
12001	1000	12+60.00	-92.00	173746.2844	611591.0387	N 3°40'48.33" W	21.32				
12002	1000	12+80.68	-97.17	173767.5617	611589.6702	N 81°45'05.16" E	26.82				
11003	1000	12+89.24	-71.75	173771.4102	611616.2174	S 2°38'18.47" E	30.01				
11002	1000	12+60.00	-65.00	173741.4307	611617.5989	N 79°38'37.85" W	27.00				
12001	1000	12+60.00	-92.00	173746.2844	611591.0387						
FIGURE 12000 AREA = 679.8372 SQ. FT. (0.0156 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-37.00	(2-L) AMICK FARMS LLC	FEE	3799-78	31.560							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
13001	1000	13+10.00	-48.00	173787.5601	611643.3103	S 79°38'37.85" E	18.00				
13002	1000	13+10.00	-30.00	173784.3243	611661.0170	S 10°21'22.15" W	6.70				
10004	1000	13+03.30	-30.00	173777.7300	611659.8120	S 81°45'05.16" E	18.99				
10003	1000	12+97.24	-48.00	173775.0052	611641.0159	N 10°21'22.15" E	12.76				
13001	1000	13+10.00	-48.00	173787.5601	611643.3103						
FIGURE 13000 AREA = 175.1974 SQ. FT. (0.0040 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-37.00	(2-L) AMICK FARMS LLC	P/E	3799-78	31.560							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
14001	1000	13+25.00	-80.00	173808.0683	611614.5281	N 65°29'23.11" E	60.62				
14002	1000	13+60.00	-30.00	173833.2187	611669.6895	S 9°42'13.29" W	22.69				
14003	1000	13+37.31	-30.00	173810.8549	611665.8653	S 10°21'22.15" W	26.97				
13002	1000	13+10.00	-30.00	173784.3243	611661.0170	N 79°38'37.85" W	18.00				
13001	1000	13+10.00	-48.00	173787.5601	611643.3103	S 10°21'22.15" W	12.76				
10003	1000	12+97.24	-48.00	173775.0052	611641.0159	S 81°45'05.16" W	25.06				
11003	1000	12+89.24	-71.75	173771.4102	611616.2174	N 2°38'18.47" W	36.70				
14001	1000	13+25.00	-80.00	173808.0683	611614.5281						
FIGURE 14000 AREA = 2039.7450 SQ. FT. (0.0468 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-37.00	(2-L) AMICK FARMS LLC	TCE	3799-78	31.560							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
15001	1000	13+12.00	-105.00	173799.7742	611587.5984	N 72°52'54.19" E	28.18				
14001	1000	13+25.00	-80.00	173808.0683	611614.5281	S 2°38'18.47" E	36.70				
11003	1000	12+89.24	-71.75	173771.4102	611616.2174	S 81°45'05.16" W	26.82				
12002	1000	12+80.68	-97.17	173767.5617	611589.6702	N 3°40'48.33" W	32.28				
15001	1000	13+12.00	-105.00	173799.7742	611587.5984						
FIGURE 15000 AREA = 932.1628 SQ. FT. (0.0214 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-53.02	(1-R) MARTIN L. AMMONS	FEE	2747-228	9.740							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
19001	1000	12+91.00	30.00	173754.8479	611716.6240	N 10°21'22.15" E	13.64				
16001	1000	13+04.64	30.00	173768.2612	611719.0752	N 88°27'12.39" E	18.40				
16004	1000	13+08.43	48.00	173768.7577	611737.4640	S 10°21'22.15" W	17.43				
19002	1000	12+91.00	48.00	173751.6121	611734.3308	N 79°38'37.85" W	18.00				
19001	1000	12+91.00	30.00	173754.8479	611716.6240						
FIGURE 19000 AREA = 279.5851 SQ. FT. (0.0064 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-53.02	(1-R) MARTIN L. AMMONS	P/E	2747-228	9.740							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20001	1000	12+50.00	30.00	173714.5158	611709.2536	N 10°21'22.15" E	41.00				
19001	1000	12+91.00	30.00	173754.8479	611716.6240	S 79°38'37.85" E	18.00				
19002	1000	12+91.00	48.00	173751.6121	611734.3308	N 10°21'22.15" E	17.43				
16004	1000	13+08.43	48.00	173768.7577	611737.4640	N 88°27'12.39" E	19.14				
17005	1000	13+12.38	66.73	173769.2743	611756.5986	S 1°58'58.57" E	43.38				
20002	1000	12+70.00	76.00	173725.9207	611758.0996	S 76°51'27.31" W	50.16				
20001	1000	12+50.00	30.00	173714.5158	611709.2536						
FIGURE 20000 AREA = 1791.1761 SQ. FT. (0.0411 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-53.02	(1-R) MARTIN L. AMMONS	TCE	2747-228	9.740							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
21001	1000	12+77.00	92.00	173729.9304	611775.0973	S 76°43'36.39" W	17.46				
20002	1000	12+70.00	76.00	173725.9207	611758.0996	N 1°58'58.57" W	43.38				
17005	1000	13+12.38	66.73	173769.2743	611756.5986	N 88°27'12.39" E	17.34				
18003	1000	13+15.95	83.70	173769.7422	611773.9303	S 1°40'44.37" E	39.83				
21001	1000	12+77.00	92.00	173729.9304	611775.0973						
FIGURE 21000 AREA = 716.7424 SQ. FT. (0.0165 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-53.01	(2-R) ERIK GOUGH	FEE	4295-331	6.020							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
16001	1000	13+04.64	30.00	173768.2612	611719.0752	N 10°21'22.15" E	16.36				
16002	1000	13+21.00	30.00	173784.3591	611722.0170	S 79°38'37.85" E	18.00				
16003	1000	13+21.00	48.00	173781.1234	611739.7238	S 10°21'22.15" W	12.57				
16004	1000	13+08.43	48.00	173768.7577	611737.4640	S 88°27'12.39" W	18.40				
16001	1000	13+04.64	30.00	173768.2612	611719.0752						
FIGURE 16000 AREA = 260.4149 SQ. FT. (0.0060 ACRES)											

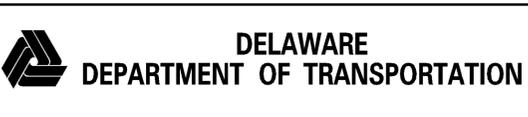
ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-32-13.00-53.01	(2-R) ERIK GOUGH	P/E	4295-331	6.020							
ALIGNMENT NUMBER & DESCRIPTION: 1000 - BR3299 BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
17002	1000	13+70.00	30.00	173802.4050	611724.9493	N 9°42'13.29" E	33.03				
17003	1000	13+34.00	43.00	173794.8104	611737.1422	S 79°38'37.85" E	19.00				
17004	1000	13+34.00	62.00	173791.3948	611755.8327	S 1°58'58.57" E	22.13				
17005	1000	13+12.38	66.73	173769.2743	611756.5986	S 88°27'12.39" W	19.14				
16004	1000	13+08.43	48.00	173768.757							

COUNTY ASSESSMENT PARCEL NUMBER	PLAN SHEET NUMBER	OWNERSHIP OF RECORD	TITLE SOURCE	PROPERTY AREA BEFORE ACQUISITION (ACRE) D=DEED C=CALCULATED A=ASSESSMENT	ACQUISITION CODE FEE, R/W, P/E, TCE	AREA TO BE ACQUIRED			PROPERTY AREA REMAINING (SQ. FEET /ACRES)	DEED RECORD OF ACQUISITION	REMARKS	
						ACQUISITION (SQ. FEET /ACRES)	AREA OCCUPIED BY EXISTING RIGHT OF WAY (SQ. FEET /ACRES)	EASEMENT				
								PERMANENT (SQ. FEET /ACRES)				TEMPORARY (SQ. FEET /ACRES)
5-32-13.00-38.01	15	(1-L) LUDWIG L. ALBERTI	4182-111	D - 4.19	FEE P/E TCE	364,8026 / 0.01		1050,7297 / 0.02	679,8372 / 0.02	182151,5974 / 4.18		
5-32-13.00-37.00	15	(2-L) AMICK FARMS LLC	3799-78	D - 31.56	FEE P/E TCE	175,1974 / 0.00		2039,745 / 0.05	932,1628 / 0.02	1374578,4026 / 31.56	AREA OF FEE OCCUPIED BY TAX DITCH EASEMENT = 175,1974 SF AREA OF PE OCCUPIED BY TAX DITCH EASEMENT = 2039,745 SF AREA OF TCE OCCUPIED BY TAX DITCH EASEMENT = 932,1628 SF	
5-32-13.00-53.02	15	(1-R) MARTIN L. AMMONS	2747-228	D - 9.74	FEE P/E TCE	279,5851 / 0.01		1791,1761 / 0.04	716,7424 / 0.02	423994,8149 / 9.73	AREA OF FEE OCCUPIED BY TAX DITCH EASEMENT = 279,5851 SF AREA OF PE OCCUPIED BY TAX DITCH EASEMENT = 1791,1761 SF AREA OF TCE OCCUPIED BY TAX DITCH EASEMENT = 716,7424 SF	
5-32-13.00-53.01	15	(2-R) ERIK GOUGH	4295-331	D - 6.02	FEE P/E TCE	260,4149 / 0.01		860,4078 / 0.02	2573,0787 / 0.06	261970,7851 / 6.01		

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 Website
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ACQUISITION CODES
 FEE - ACQUISITION P/E - PERMANENT EASEMENT
 R/W - AREA OCCUPIED BY EXISTING R/W TCE - TEMPORARY EASEMENT

RIGHT-OF-WAY SHEET 3 OF 3



ADDENDUMS / REVISIONS

NOT TO SCALE

**BR 3-299 ON S013
BI-STATE BLVD OVER
MEADOW BRANCH**

CONTRACT T201507301	BRIDGE NO. 3-299
COUNTY SUSSEX	DESIGNED BY: SMW CHECKED BY: KRL

**RIGHT-OF-WAY
TABULATION SHEET**

SHEET NO. 17
TOTAL SHTS. 17

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