

GENERAL LOCATION OF CONTRACT

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION



CONSTRUCTION AND RIGHT-OF-WAY PLANS FOR:

BR3-463 ON S396 WEST LINE ROAD OVER
BUNTINGS BRANCH (EMERGENCY REPLACEMENT)

CONTRACT NUMBER: T201347202
FEDERAL AID PROJECT NUMBER: EBROS-S396(02)
COUNTY: SUSSEX M.R. #: S396

U.S. CUSTOMARY
UNITS

DESIGN DESIGNATION		
FUNCTIONAL CLASS: MINOR COLLECTOR ROAD	D.H.V. PROJECTED: 45	YEAR: 2040
TYPE OF CONSTRUCTION: BRIDGE REPLACEMENT	DESIGN SPEED: 55 M.P.H.	
A.A.D.T. CURRENT: 431	YEAR: 2012	TRUCKS: 11%
A.A.D.T. PROJECTED: 625	YEAR: 2040	DIRECTION OF DISTRIBUTION: 60%

INDEX OF SHEETS	
SHEET NO	TABLE OF CONTENTS
1	TITLE SHEET
2	LEGEND
3	NOTES & TYPICAL SECTION
4	HORIZONTAL AND VERTICAL CONTROL
5	CONSTRUCTION PLAN
6	PROFILES
7	BRIDGE PLAN, SECTION, & ELEVATION
8	BRIDGE DETAILS
9	ENVIRONMENTAL COMPLIANCE NOTES
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11	CONSTRUCTION SEQUENCE AND EROSION CONTROL PLAN
12	DETOUR PLAN
13	RIGHT-OF-WAY PLAN
14	RIGHT-OF-WAY DATA SHEET
15	RIGHT-OF-WAY TABULATION SHEET

TOTAL SHEETS: 15

APPROVED DESIGN EXCEPTIONS

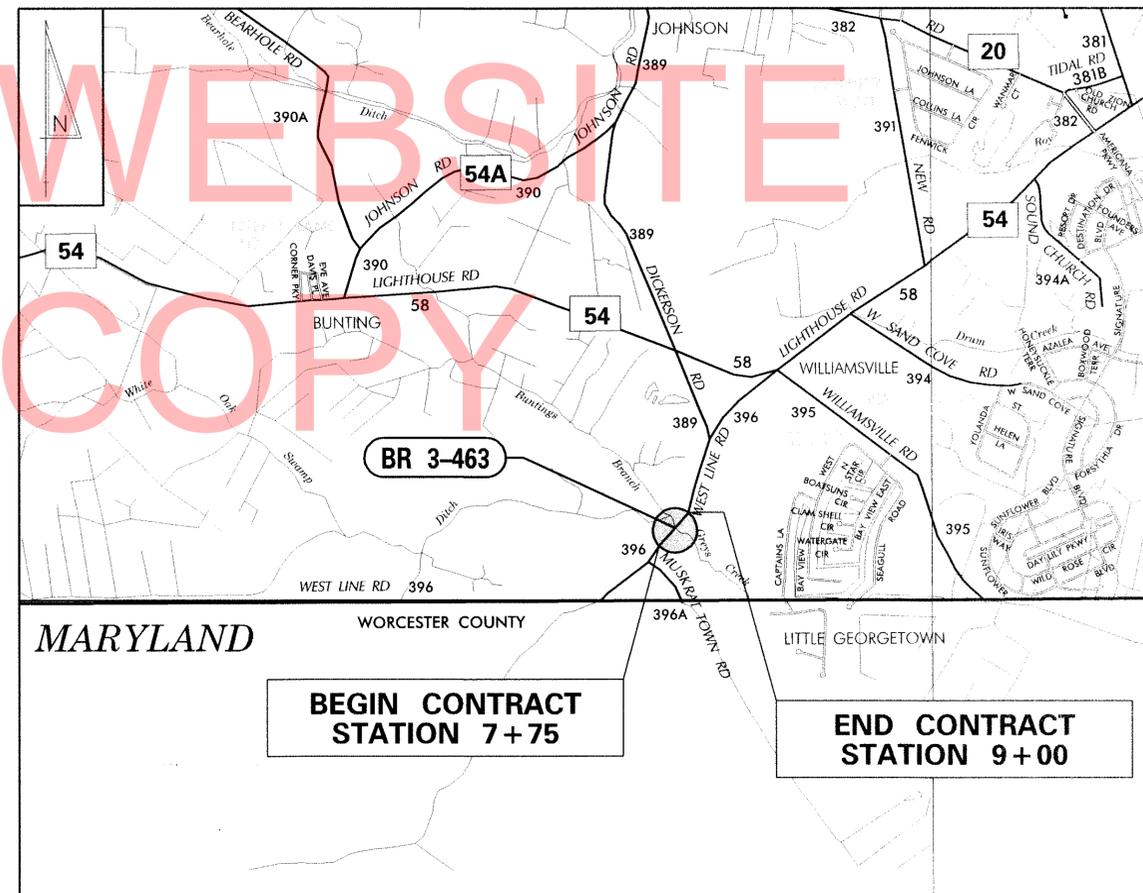
DESIGN PARAMETER	REQUIRED	PROVIDED	DATE
MINIMUM HORIZONTAL CURVE RADIUS	1060'	780'	12/18/12
SUPERELEVATION RATE	6%	2.04%	12/18/12
MINIMUM K (CREST)	114	23	12/18/12
STOPPING SIGHT DISTANCE	495'	380'	12/18/12

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
T201347204	PROVIDE PRECAST ELEMENTS FOR BR3-463 ON S396 WEST LINE ROAD OVER BUNTINGS BRANCH (EMERGENCY REPAIRS)



PREPARED BY
THE CONSULTING FIRM OF

SEAL

RECOMMENDED

DATE

RECOMMENDED

Wayne Massey
SQUAD MANAGER, CONSTRUCTION

1/30/13
DATE

Bradford L. Salinas
GROUP ENGINEER, CONSTRUCTION

1/30/2013
DATE

ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS
(CONSTRUCTION)

DATE

RECOMMENDED

Vincent W. Davis
STORMWATER ENGINEER

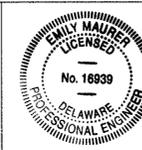
DATE 4 FEB 2013



RECOMMENDED

Emile M. ...
SQUAD MANAGER, BRIDGE DESIGN

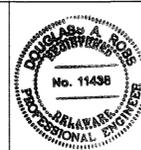
DATE 2/4/2013



RECOMMENDED

Douglas R. ...
BRIDGE DESIGN ENGINEER

DATE 2/4/2013



RECOMMENDED

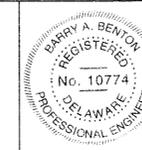
GROUP ENGINEER, PROJECT DEVELOPMENT

DATE

RECOMMENDED

Barry A. Benton
ASSISTANT DIRECTOR,
BRIDGE DESIGN

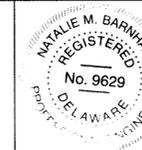
DATE FEBRUARY 4, 2013



APPROVED

Natalie M. Barnhart
CHIEF ENGINEER

DATE 2/4/13



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	
	VERIZON
	MEDIACOM

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)	
	1 1/2" SUPERPAVE, TYPE C HOT-MIX 2 1/4" SUPERPAVE, TYPE B HOT-MIX 8" GRADED AGGREGATE BASE COURSE, TYPE B

UTILITY COMPANY FACILITIES	
	VERIZON

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

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

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

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

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

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

(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 THE 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 THE ATSSA SUPERVISOR SHALL BE PAID FOR UNDER ITEM 743031.

- THE DISTURBED AREA FOR THIS PROJECT IS 0.4231 ACRES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE CONSTRUCTION SITE POLLUTION PREVENTION SPECIFICATIONS AS DETAILED IN SECTION 3.6 OF THE "DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK". ALL COSTS ASSOCIATED WITH ADHERING TO THE STANDARDS SHALL BE INCIDENTAL TO THE OVERALL CONTRACT COSTS.
- THE EROSION AND SEDIMENT CONTROL PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE EROSION AND SEDIMENT CONTROL PLANS ARE VALID FOR A THREE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE THREE YEARS, THE CONTRACTOR SHALL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE EROSION AND SEDIMENT CONTROL PLAN APPROVAL. DELDOT WILL REVIEW THE CURRENT EROSION AND SEDIMENT CONTROL PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

PROJECT NOTES

SECTION 100

- 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:
 - RELOCATE THE FENCE AT THE PASTURE AT THE BEGINNING OF CONSTRUCTION.
 - REMOVAL OF EXISTING BRIDGE CONSISTING OF 3 - 6'-0" DIA. CORRUGATED METAL PIPES
 - OTHER DRAINAGE PIPES AS NOTED
 - REMOVE SPLIT RAIL FENCE ON SOUTH SIDE OF DRIVEWAY. RESET AT FINISH OF PROJECT. DO NOT DISTURB FENCE AND SHRUBS ON THE NORTH SIDE OF THE DRIVEWAY.
 - ANY REMAINING DEBRIS FROM HURRICANE SANDY WITHIN THE WORK AREA
- ALL EXISTING PAVEMENT FROM STA. 7+75 TO STA. 9+00 AS SHOWN ON THE PLAN SHALL BE EXCAVATED IN ITS ENTIRETY. PAYMENT FOR HOTMIX REMOVAL UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT.

SECTION 600

- PORTLAND CEMENT CONCRETE
STRUCTURAL ELEMENTS OF PORTLAND CEMENT CONCRETE SHALL BE AS NOTED: (F'c = 28 DAY COMPRESSIVE STRENGTH)
 - PRECAST - RIGID FRAME AND WINGWALLS (F'c = 5,000 PSI)
 - MIX REQUIREMENTS SHALL CONFORM TO SECTION 812 OF THE SPECIFICATIONS.
 - ALL EXPOSED EDGES SHALL BE CHAMFERED 3/8" UNLESS OTHERWISE NOTED.
 - ALL KEYPED CONSTRUCTION JOINTS SHALL BE 2" x 4" UNLESS OTHERWISE NOTED.
 - ALL EXPOSED CONSTRUCTION JOINTS EDGES SHALL HAVE A 3/4" V-NOTCH.
- BAR REINFORCEMENT
REINFORCING STEEL SHALL CONFORM TO AASHTO M31 (ASTM A615), GRADE 60. ALL REINFORCING STEEL SHALL HAVE A CLEAR COVER OF 2", UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL REINFORCING STEEL SHALL BE PROTECTED WITH FUSION BONDED EPOXY. EPOXY COATED REINFORCING STEEL SHALL CONFORM TO AASHTO M284 (ASTM D3963) AND IS DENOTED WITH A SUFFIX 'E' IN THE BAR MARKS.
- LIMITS OF COARSE AGGREGATE FOR FOUNDATION STABILIZATION SHALL EXTEND 18" OUTSIDE OF THE NEAT LINE PERIMETER OF THE VERTICAL FACES OF ANY FOOTER, ENCASEMENT OR STRUCTURAL UNIT.

SECTION 700

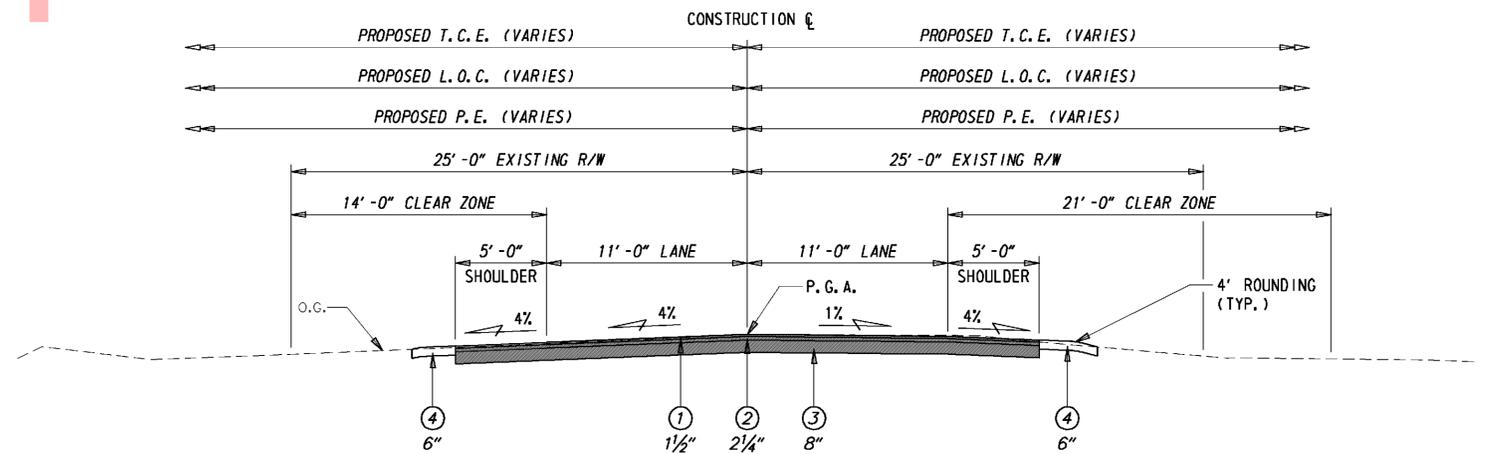
- ALL PAVED AREAS TO BE RECONSTRUCTED OR WIDENED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT. ALL HOT-MIX SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- ALL GEOTEXTILES SHALL BE KEYED UNDER ADJACENT SOIL OR RIPRAP A MINIMUM OF 6" IN LENGTH TO PREVENT FREE EDGES.
- STRIPING
PROPOSED STRIPING SHALL MATCH EXISTING (DOUBLE YELLOW CENTERLINE) AND BE IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT SHALL BE MADE UNDER ITEM *748548.
- VARIABLE MESSAGE SIGNS SHALL BE PLACED 10 DAYS PRIOR TO DETOUR. REFER TO THE DETOUR PLAN FOR MESSAGE DETAILS. PAYMENT SHALL BE UNDER ITEM * 743004 - FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN.
- MAINTENANCE OF TRAFFIC SHALL BE AS PER DETOUR. THE DETOUR SHALL REMAIN IN EFFECT UNTIL THE FINAL HOT MIX IS PLACED. PAYMENT SHALL BE UNDER ITEM * 763643 - MAINTENANCE OF TRAFFIC, ALL INCLUSIVE. CONTRACTOR SHALL CONTACT KENNETH L. CIMINO WITH THE MARYLAND STATE HIGHWAY ADMINISTRATION, DISTRICT 1 AT (410)-677-4040 TO NOTIFY HIM WHEN THE ROAD IS CLOSED. CONTRACTOR SHALL ALSO MAINTAIN ACCESS TO THE DRIVEWAY OF PARCEL 2-R.

MISCELLANEOUS

- DESIGN CRITERIA: 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION, USING AASHTO HL93 FOR LIVE LOAD, AND 25 PSF FOR FUTURE WEARING SURFACE.
- HYDRAULIC DATA:
 - DRAINAGE AREA = 4.40 SQ. MILES
 - DESIGN FREQUENCY = 25 YEARS
 - DESIGN DISCHARGE = 543 CFS
 - DESIGN HEADWATER ELEVATION = 4.08 FEET
 - PROPOSED OPENING = 132.00 SQ. FEET
- THE PROPOSED STRUCTURE HAS BEEN ANALYZED FOR THE EFFECTS OF SCOUR IN ACCORDANCE WITH HEC-18 - 'EVALUATING SCOUR AT BRIDGES' AND HEC-23 - 'BRIDGE SCOUR AND STREAM INSTABILITY COUNTERMEASURES.' SCOUR COUNTERMEASURES HAVE BEEN DESIGNED FOR THE WORST CASE OF THE OVERTOPPING FLOOD OR THE 500-YEAR FLOOD EVENT.
 - DESIGN EVENT = 500-YEAR STORM
 - DESIGN HEADWATER ELEVATION = 6.43 FEET
 - DESIGN DISCHARGE = 1,222 CFS
 - DESIGN VELOCITY (500-YEAR STORM) = 5.67 FT/S
- ENVIRONMENTAL COMPLIANCE: SEE ENVIRONMENTAL COMPLIANCE PLAN FOR FURTHER RESTRICTIONS/GUIDANCE ASSOCIATED WITH THIS PROJECT.

TYPICAL SECTION LEGEND

- ITEM 401800 - WMA, SUPERPAVE, TYPE C, 115 GYRATIONS, PG 64-22, (CARBONATE STONE)
- ITEM 401809 - WMA, SUPERPAVE, TYPE B, 115 GYRATIONS, PG 64-22
- ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'
- ITEM 732004 - TOPSOIL
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND



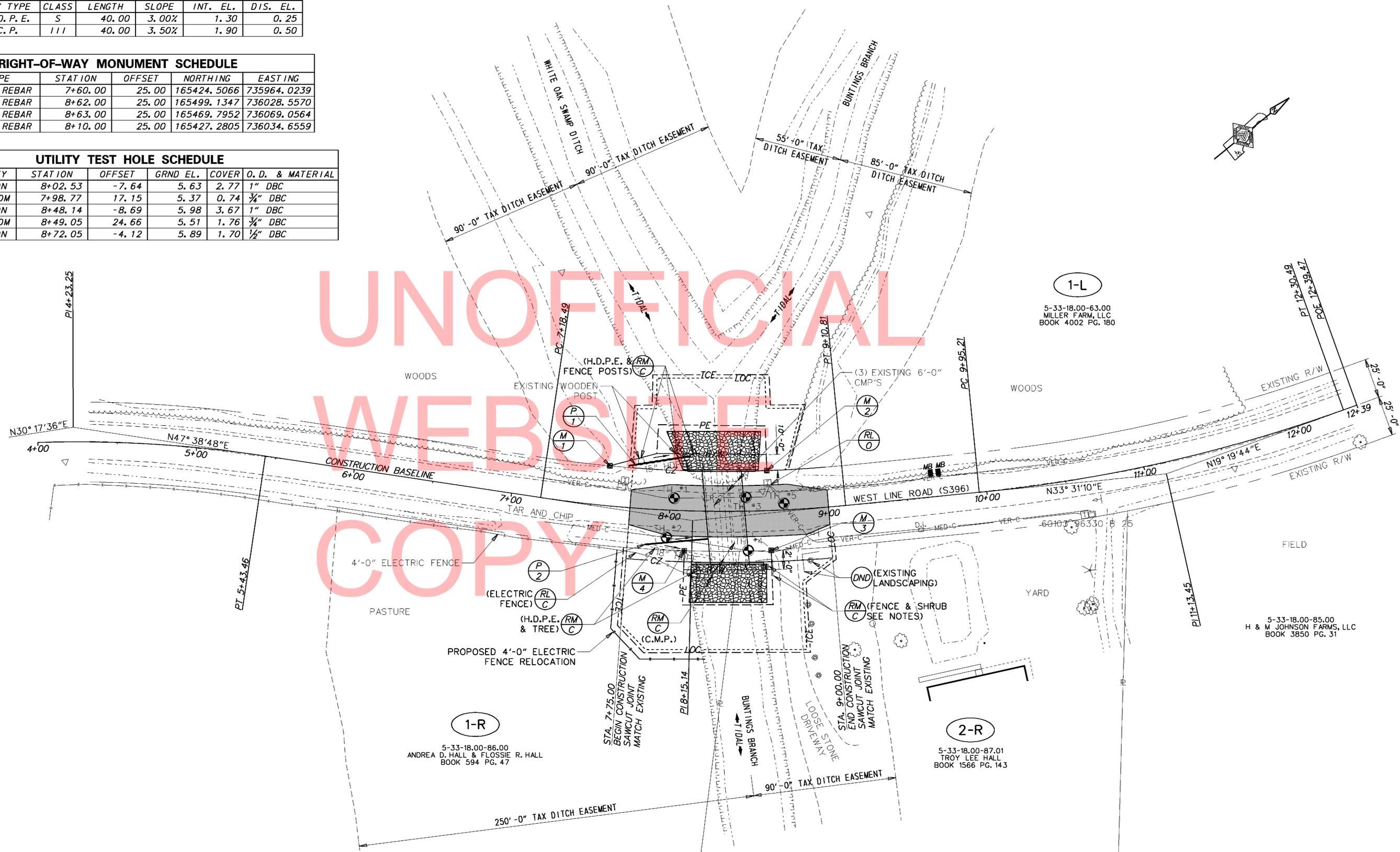
TYPICAL ROADWAY SECTION



DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	15" H. D. P. E.	S	40.00	3.00%	1.30	0.25
2	18" R. C. P.	III	40.00	3.50%	1.90	0.50

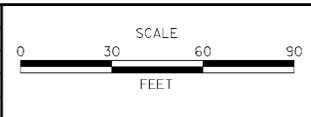
RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
1	CAPPED REBAR	7+60.00	25.00	165424.5066	735964.0239
2	CAPPED REBAR	8+62.00	25.00	165499.1347	736028.5570
3	CAPPED REBAR	8+63.00	25.00	165469.7952	736069.0564
4	CAPPED REBAR	8+10.00	25.00	165427.2805	736034.6559

UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL
TH-1	VERIZON	8+02.53	-7.64	5.63	2.77	1" DBC
TH-2	MEDiacom	7+98.77	17.15	5.37	0.74	3/4" DBC
TH-3	VERIZON	8+48.14	-8.69	5.98	3.67	1" DBC
TH-4	MEDiacom	8+49.05	24.66	5.51	1.76	3/4" DBC
TH-5	VERIZON	8+72.05	-4.12	5.89	1.70	1/2" DBC



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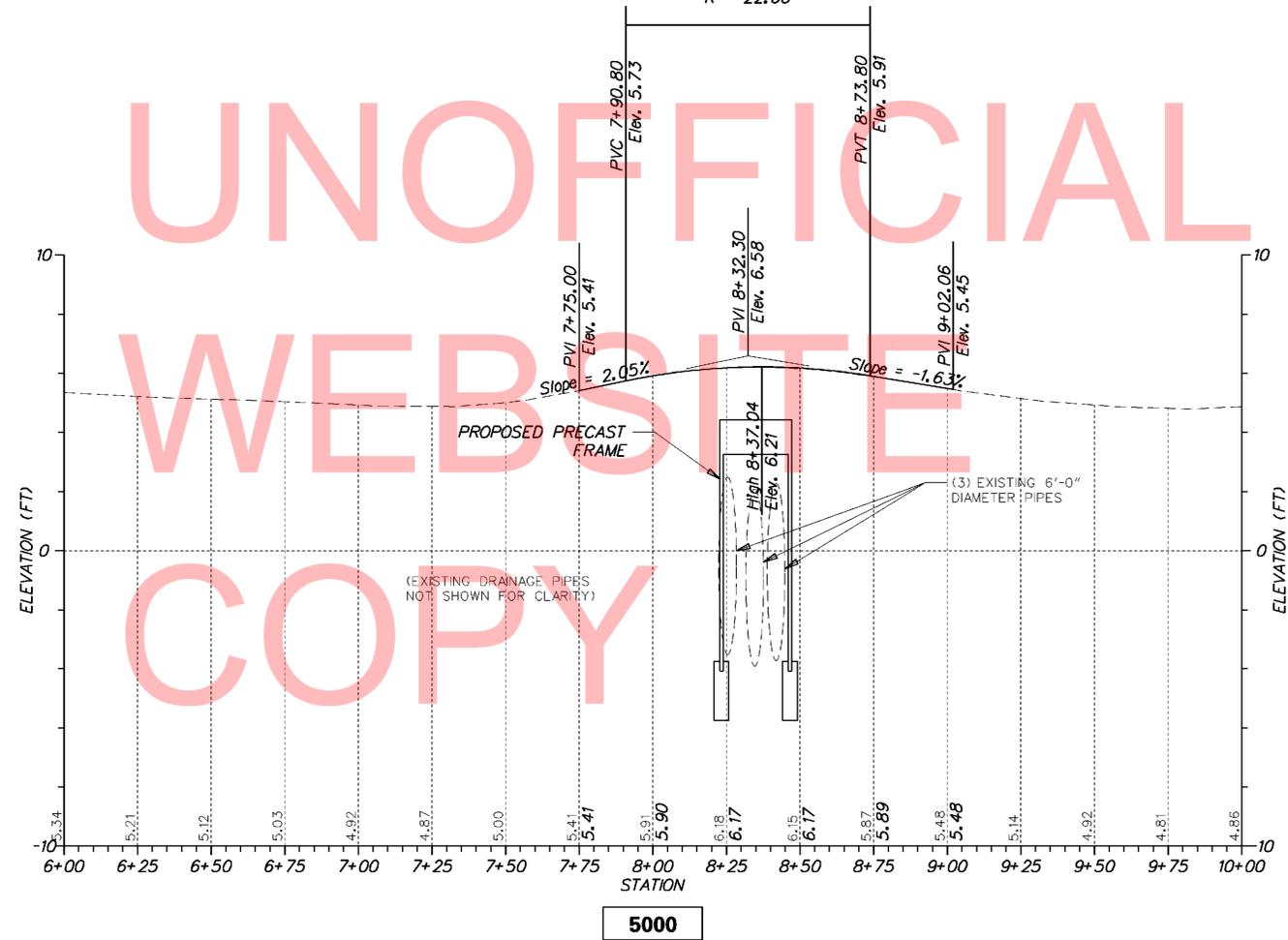
ADDENDUMS / REVISIONS	



CONTRACT	BRIDGE NO.	3-463
T201347202	DESIGNED BY:	NEB
COUNTY	CHECKED BY:	EM
SUSSEX		

SHEET NO.	5
TOTAL SHTS.	15

Type of Curve = Symmetric Parabola
 Direction = Crest
 Length = 83.00'
 L1 = 41.50'
 L2 = 41.50'
 G1 = 2.05%
 G2 = -1.63%
 SSD = 335.33'
 K = 22.60

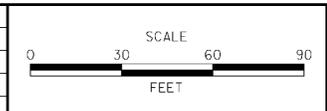


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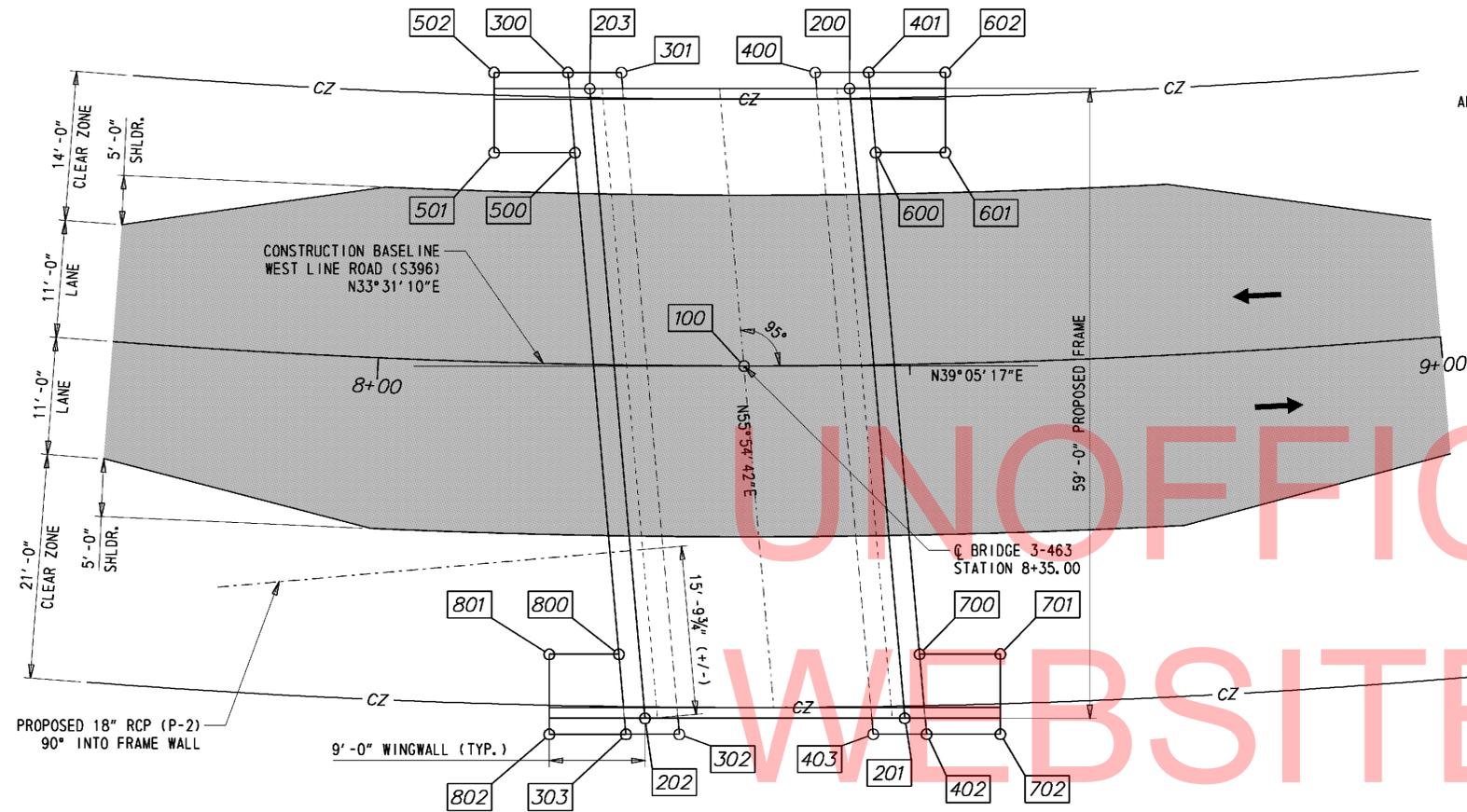


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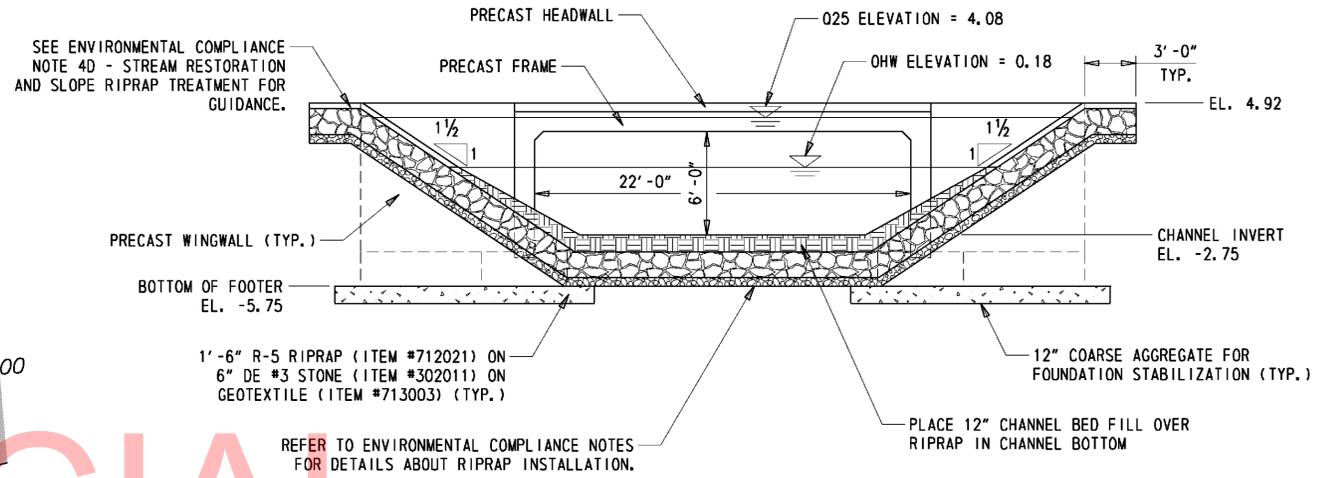
ADDENDUMS / REVISIONS	



CONTRACT	BRIDGE NO.	3-463
T201347202	DESIGNED BY:	NED
COUNTY	CHECKED BY:	EM
SUSSEX		



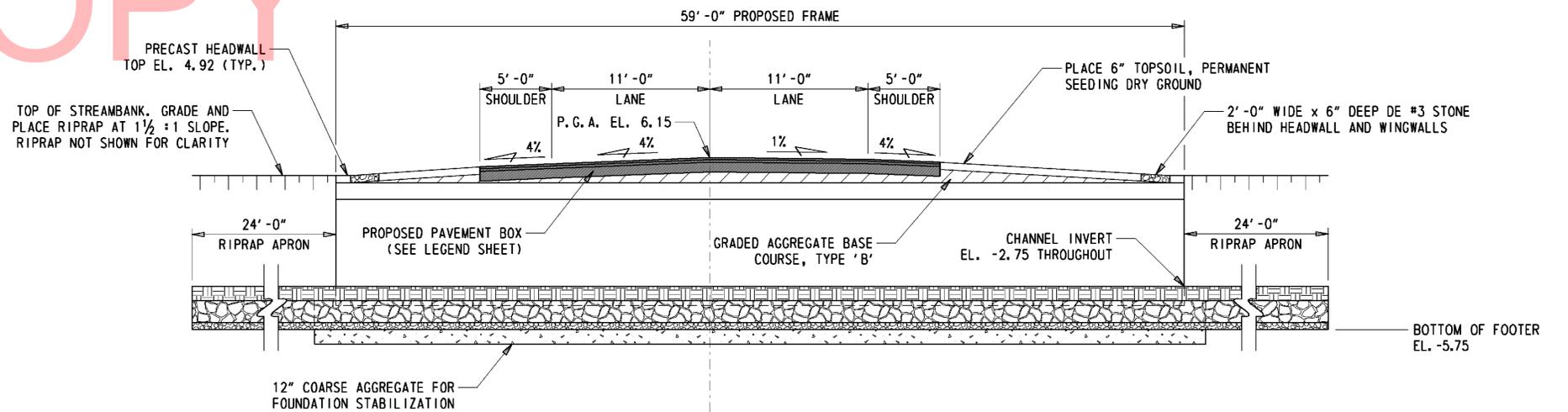
PLAN
1/8" = 1'-0"



BRIDGE ELEVATION
1/8" = 1'-0"

FRAME LAYOUT COORDINATES				
PT.	STATION	OFFSET	NORTHING	EASTING
100	8+35.00	0.00	165462.81	736031.84
200	8+45.29	-25.93	165486.92	736017.93
201	8+49.49	33.14	165453.72	736066.98
202	8+26.06	33.05	165434.76	736051.57
203	8+20.02	-25.86	165467.96	736002.53
300	8+17.86	-27.32	165467.31	736000.07
301	8+23.06	-27.41	165471.20	736003.23
302	8+29.16	34.52	165436.32	736054.77
303	8+24.36	34.58	165432.43	736051.61
400	8+41.96	-27.47	165485.36	736014.73
401	8+47.16	-27.41	165489.25	736017.89
402	8+51.43	34.68	165454.37	736069.44
403	8+46.63	34.59	165450.48	736066.27

WINGWALL LAYOUT COORDINATES				
PT.	STATION	OFFSET	NORTHING	EASTING
500	8+18.70	-19.83	165463.0879	736006.3011
501	8+10.90	-19.64	165457.1863	736001.5070
502	8+10.67	-27.13	165461.9176	735995.6877
600	8+47.72	-19.90	165485.0338	736024.1285
601	8+54.44	-19.76	165490.1166	736028.2574
602	8+54.63	-27.26	165494.8479	736022.4381
700	8+50.95	27.17	165458.5912	736063.2015
701	8+58.29	27.36	165464.4928	736067.9956
702	8+58.08	34.86	165459.7615	736073.8149
800	8+23.62	27.09	165436.6453	736045.3741
801	8+17.30	27.21	165431.5625	736041.2452
802	8+17.46	34.71	165426.8312	736047.0645



BRIDGE SECTION
1/8" = 1'-0"

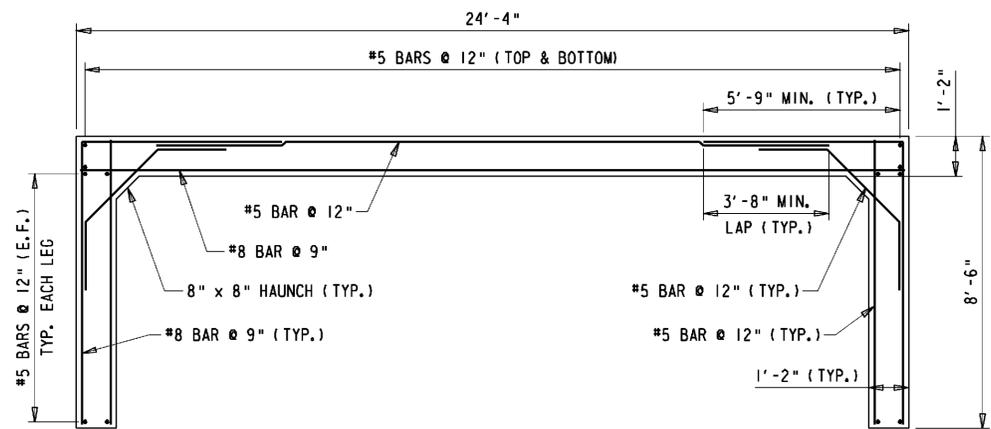
ADDENDUMS / REVISIONS

BR3-463 ON S396 WEST LINE ROAD OVER BUNTINGS BRANCH (EMERGENCY REPLACEMENT)

CONTRACT T201347202	BRIDGE NO. 3-463
COUNTY SUSSEX	DESIGNED BY: NED
	CHECKED BY: EM

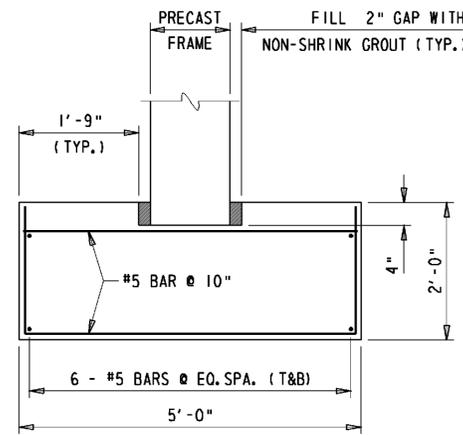
BRIDGE PLAN, SECTION & ELEVATION

SHEET NO. 7
TOTAL SHTS. 15



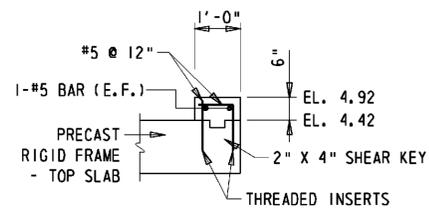
PRECAST RIGID FRAME SECTION

3/8" = 1'-0"



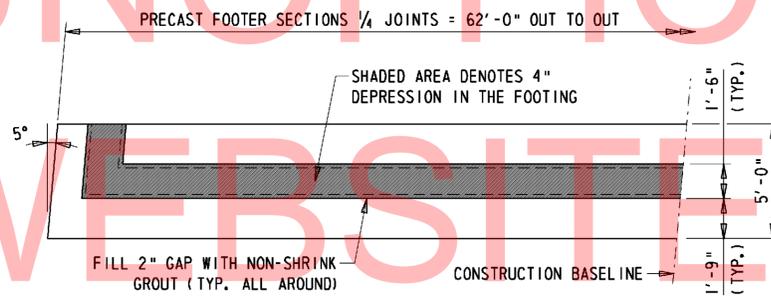
PRECAST FOOTER SECTION

3/4" = 1'-0"



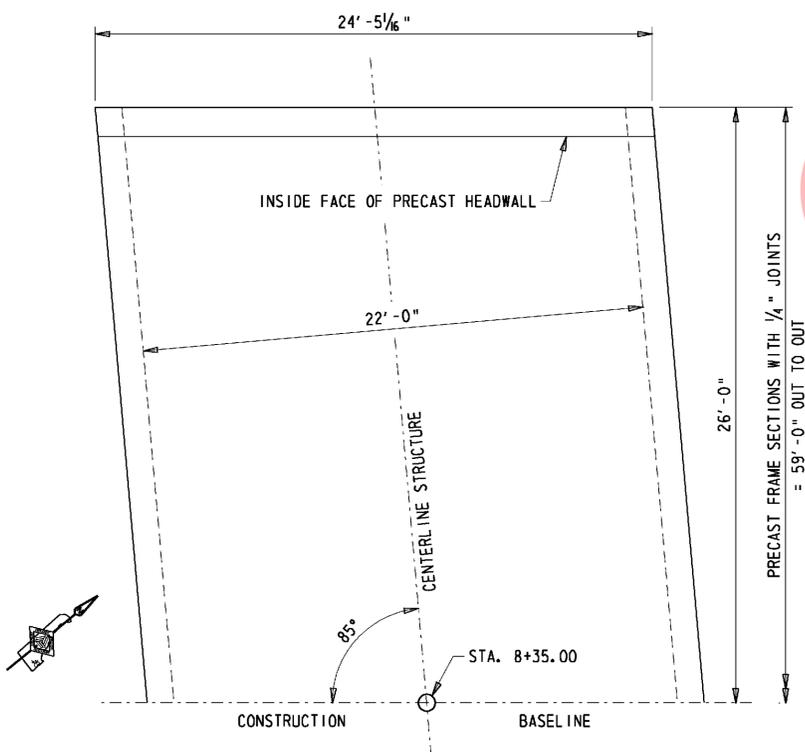
HEADWALL DETAIL

1/2" = 1'-0"



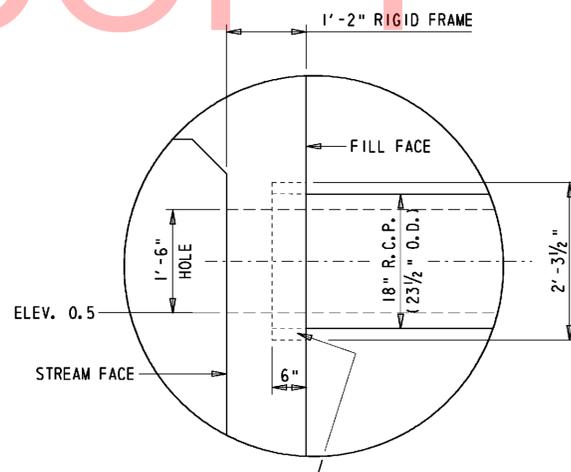
PRECAST FOOTER HALF PLAN

1/4" = 1'-0"



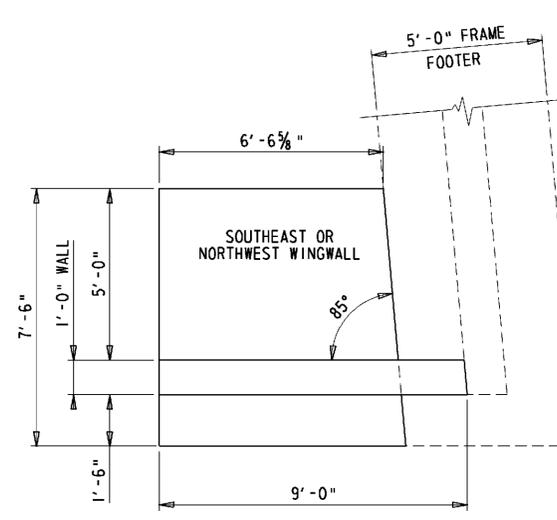
PRECAST RIGID FRAME HALF PLAN

1/4" = 1'-0"



PIPE COLLAR DETAIL

1/2" = 1'-0"



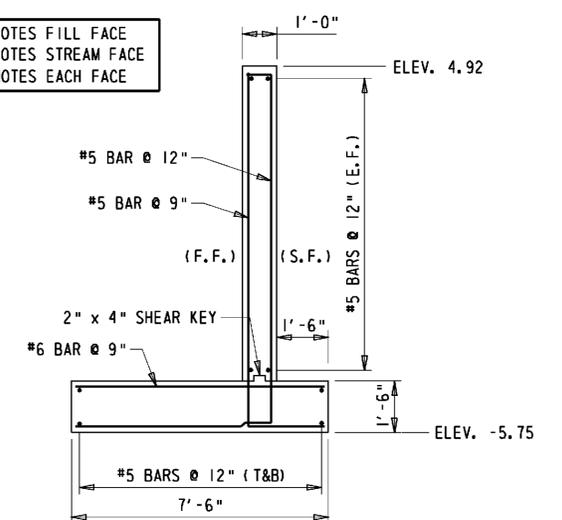
WINGWALL PLAN

3/8" = 1'-0"

PRECAST ELEMENT NOTES

- DESIGN PLANS / WORKING DRAWINGS
INFORMATION PERTAINING TO THE PRECAST REINFORCED CONCRETE RIGID FRAME AND WINGWALL SECTIONS IS INTENDED TO SERVE AS AN INDICATION OF THE TYPE OF CONSTRUCTION ACCEPTABLE FOR USE. THE FABRICATOR WILL BE REQUIRED TO PREPARE AND SUBMIT FOR APPROVAL A COMPLETE SET OF DETAILED SHOP DRAWINGS FOR THE PRECAST CONCRETE UNITS THEY PROPOSE TO FURNISH. THE SHOP DRAWINGS SHALL INCLUDE:
A. AN OVERALL PLAN SHOWING ALL UNITS TOGETHER AND DETAILS OF EACH TYPE OF UNIT.
B. A PLAN VIEW OF REINFORCEMENT FOR ANY IRREGULAR SHAPED (SKEWED, CURVED, ETC.) SECTIONS.
C. REINFORCING BAR LIST
D. BILL OF MATERIALS INCLUDING ALL ACCESSORIES
E. METHOD AND SEQUENCE OF POST-TENSIONING
- PRECAST ELEMENTS AND ACCESSORIES
PAYMENT FOR ITEM 602739 - PRECAST CONCRETE RIGID FRAME AND ITEM 602738 - PRECAST CONCRETE RETAINING WALL SHALL INCLUDE:
A. ALL PRECAST ELEMENTS FOR RIGID FRAME, HEADWALLS AND FOOTERS UNDER ITEM 602739 AND WINGWALLS UNDER ITEM 602738.
B. ALL ASSOCIATED REINFORCEMENT.
C. ALL ACCESSORIES (INCLUDING, BUT NOT LIMITED TO, CONCRETE FINISH, POST-TENSIONING TENDONS, CONNECTION PLATES, GROUT, JOINT WRAP) MENTIONED IN THE FOLLOWING NOTES UNLESS NOTED OTHERWISE.
D. DELIVERY OF ALL PRECAST ELEMENTS AND ALL ACCESSORIES.
- MISCELLANEOUS CONCRETE NOTES
A. ALL EXPOSED SURFACES SHALL BE PROTECTED WITH A WATER MISCIBLE, PENETRATING SILANE SEALER APPLIED AT THE FABRICATION PLANT.
B. ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
- RIGID FRAME POST-TENSIONING
POST TENSIONING SHALL BE COMPLETED BY THE FABRICATOR. THE PRECAST RIGID FRAME SECTIONS SHALL BE POST-TENSIONED TOGETHER WITH A MINIMUM OF FOUR POST-TENSIONING TENDONS. THE FRAME SHALL BE POST-TENSIONED SUCH THAT THE NEOPRENE GASKETS ARE COMPRESSED ALL AROUND AND THERE IS A 1/2" MAXIMUM GAP BETWEEN SECTIONS. MAXIMUM POST-TENSIONING FORCE SHALL BE 28,900 lbs. POST-TENSIONING DETAILS (PLACEMENT, SEQUENCE OF TENSIONING, etc.) SHALL BE SHOWN IN THE SUBMITTED SHOP DRAWINGS. ALL POCKETS FOR POST-TENSIONING DUCTS SHALL BE FILLED WITH NON-SHRINK GROUT.
- WINGWALL POST TENSIONING
A. THE PRECAST WINGWALL SECTIONS SHALL BE POST TENSIONED TOGETHER AND POSITIVELY CONNECTED TO THE RIGID FRAME WITH A MINIMUM OF TWO POST-TENSIONING TENDONS. POST-TENSIONING SHALL BE AS PER NOTE 4.
B. AT LOCATIONS WHERE POST TENSIONING OF THE WINGWALLS IS NOT FEASIBLE, A BOLTED CONNECTION MAY BE USED. BOLTED CONNECTION DETAILS SHALL BE SHOWN IN THE SUBMITTED SHOP DRAWINGS.
- BOLTED CONNECTIONS
THE BOLTED CONNECTION MUST CONSIST OF A MINIMUM OF TWO 3'-0" WIDE x 2'-0" TALL x 1/4" THICK PLATES PER JOINT WITH AT LEAST FOUR 3/4" BOLTS PER PLATE. ANGLED PLATES SHALL HAVE 8 BOLTS. SLOTTED HOLES IN THE PLATE SHALL NOT BE PERMITTED. HOLES FOR ANCHOR BOLTS MAY BE FIELD DRILLED.
- JOINTS BETWEEN PRECAST SECTIONS
A. NEOPRENE GASKETS SHALL BE PROVIDED AT THE JOINTS BETWEEN ALL PRECAST UNITS IN ORDER TO MAKE THE JOINTS WATERTIGHT. AFTER INSTALLATION, THE GASKETS SHALL BE COMPRESSED SUCH THAT GAPS ARE NOT VISIBLE.
B. ALL JOINTS BETWEEN PRECAST RIGID FRAME SECTIONS SHALL HAVE A SHEAR KEY IN THE TOP SLAB.
C. ALL WINGWALL TO WINGWALL AND WINGWALL TO RIGID FRAME JOINTS SHALL HAVE A SHEAR KEY.
D. THE LOCATIONS OF THE JOINTS IN THE RIGID FRAME OR WINGWALLS SHALL BE DETERMINED BY THE PRECASTER AND SUBMITTED IN THE SHOP DRAWINGS FOR APPROVAL.
E. THE REINFORCEMENT SHALL HAVE 2" COVER AT THE END OF EACH SECTION AND MEET OR EXCEED THE MINIMUM AREA OF STEEL PER FOOT DENOTED IN THE PLANS.
F. ALL JOINT EXTERIORS SHALL BE COVERED WITH A MINIMUM 9" WIDE WRAP CENTERED ON THE JOINT AS PER THE SPECIAL PROVISION FOR ITS RESPECTIVE ITEM.
- INSTALLATION OF ALL INCIDENTAL ITEMS LISTED IN PRECAST ELEMENTS NOTES 2 THROUGH 7 WITH THE EXCEPTION OF POST TENSIONING SHALL BE PAID FOR UNDER CONTRACT T201347202.

F.F. - DENOTES FILL FACE
S.F. - DENOTES STREAM FACE
E.F. - DENOTES EACH FACE



PRECAST WINGWALL SECTION

3/8" = 1'-0"

NOTE: THE 9'-0" DIMENSION AT THE FACE OF THE WINGWALLS WILL REMAIN CONSTANT FOR THE SOUTHWEST AND NORTHEAST WINGWALLS. HOWEVER, THE DIMENSION AT THE HEEL OF THE WINGWALLS WILL CHANGE IN ACCORDANCE WITH THE SKEW ANGLE.

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): NATIONWIDE PERMIT *3(a) AND (c) (NO PCN)
 DNRREC - WETLANDS & SUBAQUEOUS LANDS (WLSL): EMERGENCY WAIVER - HURRICANE SANDY
 DNRREC - 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. PROJECT CONSISTENT WITH STIPULATION II.B (4 & 12) OF DELDOT'S PROGRAMMATIC AGREEMENT WITH FHWA, DE SHPO, AND ACHP

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 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.
- 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 SEDED. 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" 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. PAYMENT FOR DELAWARE *57 STONE SHALL BE INCIDENTAL TO THE RIPRAP ITEM. ALL OTHER ITEMS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.

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**DELAWARE
DEPARTMENT OF TRANSPORTATION**

ADDENDUMS / REVISIONS

NOT TO SCALE

**BR3-463 ON S396 WEST LINE
ROAD OVER BUNTINGS BRANCH
(EMERGENCY REPLACEMENT)**

CONTRACT	BRIDGE NO.	3-463
T201347202	DESIGNED BY: NED	
COUNTY	CHECKED BY: EM	
SUSSEX		

**ENVIRONMENTAL
COMPLIANCE NOTES**

EC-1
SHEET NO.
9
TOTAL SHTS.
15

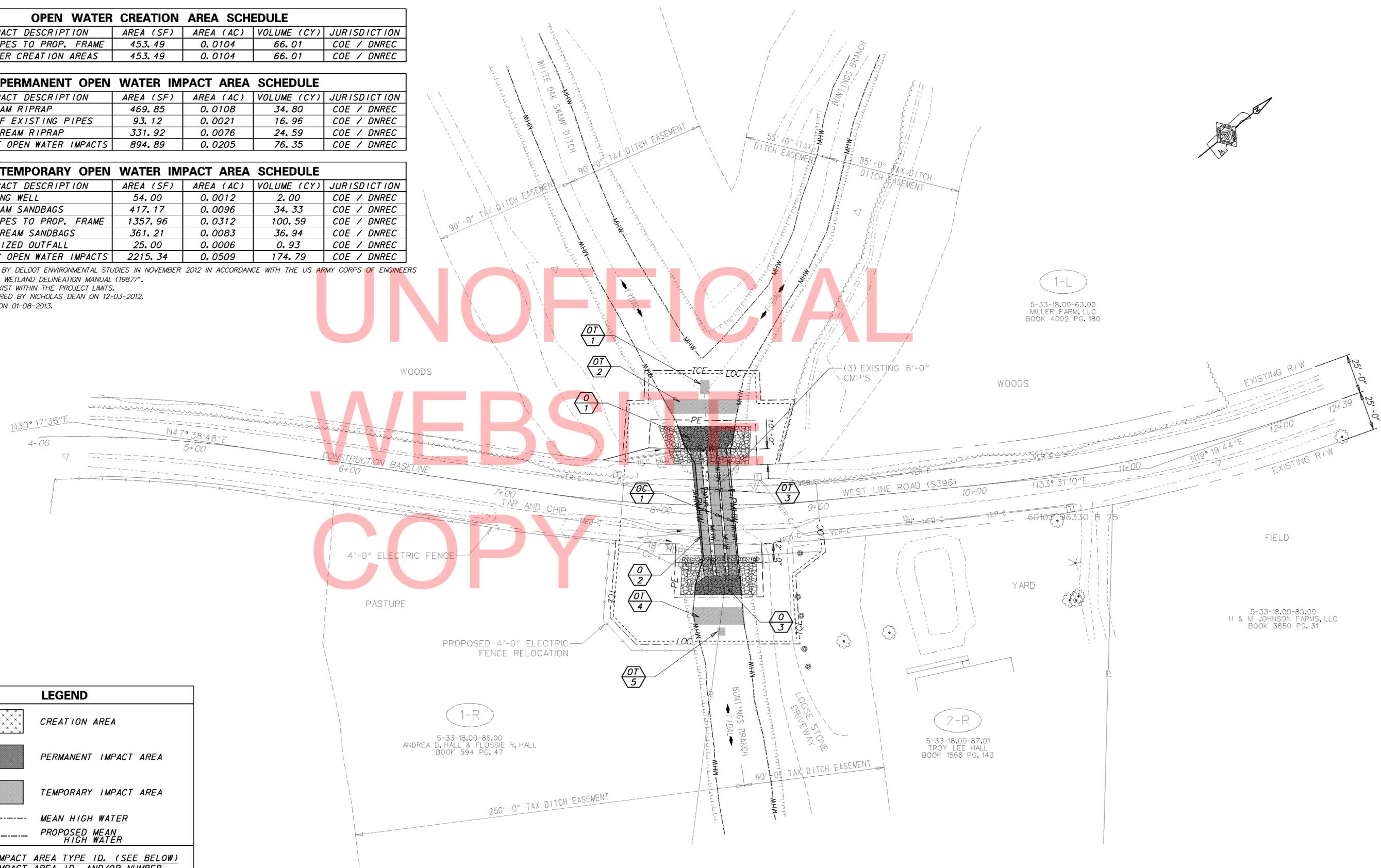
OPEN WATER CREATION AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OC-1	EX. PIPES TO PROP. FRAME	453.49	0.0104	66.01	COE / DNREC
TOTAL OPEN WATER CREATION AREAS		453.49	0.0104	66.01	COE / DNREC

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
O-1	UPSTREAM RIPRAP	469.85	0.0108	34.80	COE / DNREC
O-2	FILL OF EXISTING PIPES	93.12	0.0021	16.96	COE / DNREC
O-3	DOWNSTREAM RIPRAP	331.92	0.0076	24.59	COE / DNREC
TOTAL PERMANENT OPEN WATER IMPACTS		894.89	0.0205	76.35	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	2.00	COE / DNREC
OT-2	UPSTREAM SANDBAGS	417.17	0.0096	34.33	COE / DNREC
OT-3	EX. PIPES TO PROP. FRAME	1357.96	0.0312	100.59	COE / DNREC
OT-4	DOWNSTREAM SANDBAGS	361.21	0.0083	36.94	COE / DNREC
OT-5	STABILIZED OUTFALL	25.00	0.0006	0.93	COE / DNREC
TOTAL TEMPORARY OPEN WATER IMPACTS		2215.34	0.0509	174.79	COE / DNREC

WETLANDS DELINEATED BY DELDOT ENVIRONMENTAL STUDIES IN NOVEMBER 2012 IN ACCORDANCE WITH THE US ARMY CORPS OF ENGINEERS "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987)".
 NOTE: NO WETLANDS EXIST WITHIN THE PROJECT LIMITS.
 ORIGINAL SHEET PREPARED BY NICHOLAS DEAN ON 12-03-2012.
 SHEET LAST UPDATED ON 01-08-2013.

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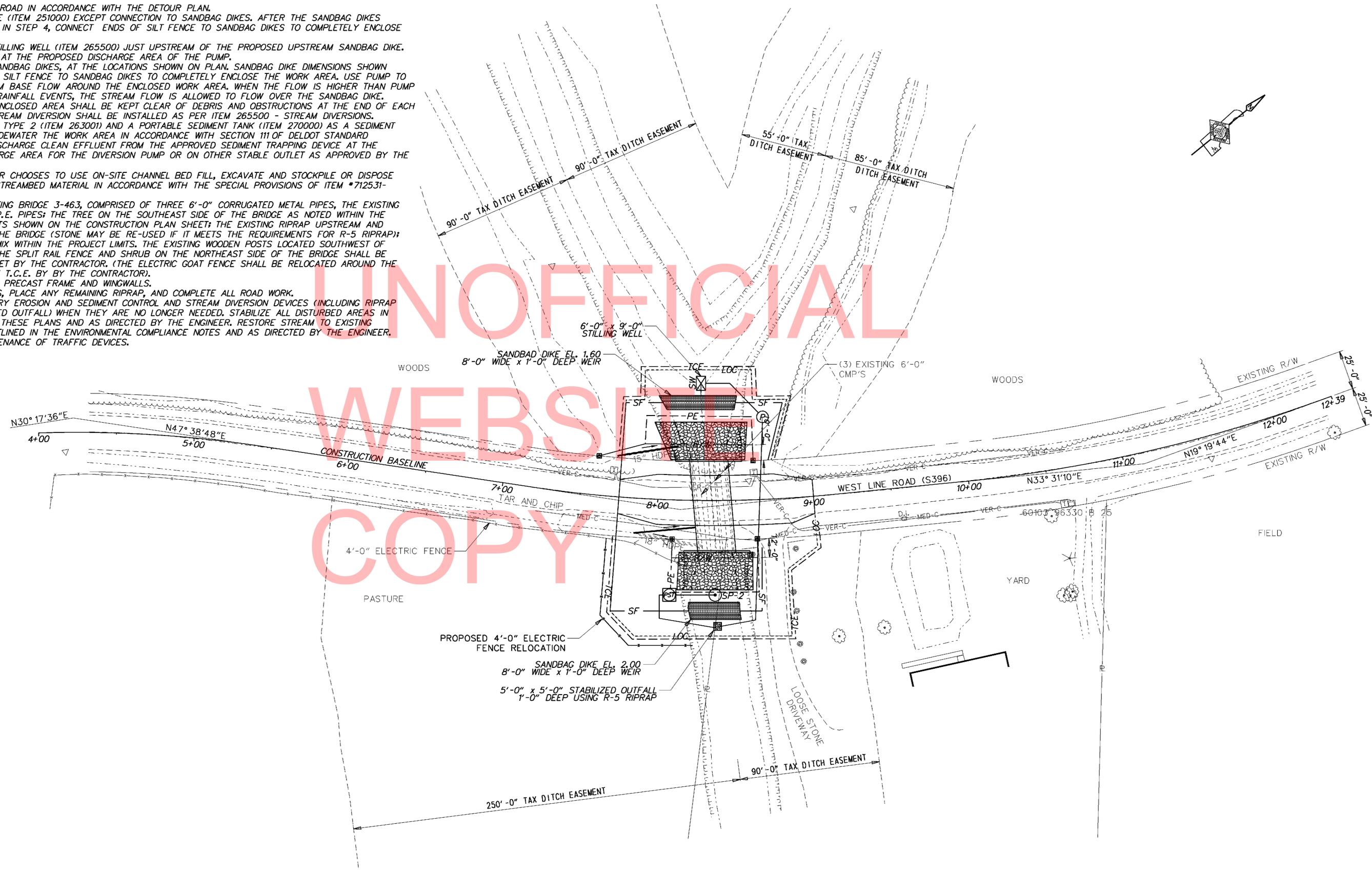


LEGEND	
	CREATION AREA
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	MHW MEAN HIGH WATER
	PMHW PROPOSED MEAN HIGH WATER
	IMPACT AREA TYPE ID. (SEE BELOW)
	IMPACT AREA ID. AND/OR NUMBER
O	OPEN WATER IMPACT
C	CREATION AREA
T	TEMPORARY IMPACT

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SEQUENCE OF CONSTRUCTION

1. CLOSE WEST LINE ROAD IN ACCORDANCE WITH THE DETOUR PLAN.
2. INSTALL SILT FENCE (ITEM 251000) EXCEPT CONNECTION TO SANDBAG DIKES. AFTER THE SANDBAG DIKES ARE CONSTRUCTED IN STEP 4, CONNECT ENDS OF SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA.
3. INSTALL A 6'x9' STILLING WELL (ITEM 265500) JUST UPSTREAM OF THE PROPOSED UPSTREAM SANDBAG DIKE. PLACE R5 RIPRAP AT THE PROPOSED DISCHARGE AREA OF THE PUMP.
4. CONSTRUCT THE SANDBAG DIKES, AT THE LOCATIONS SHOWN ON PLAN. SANDBAG DIKE DIMENSIONS SHOWN ON PLAN. CONNECT SILT FENCE TO SANDBAG DIKES TO COMPLETELY ENCLOSE THE WORK AREA. USE PUMP 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 AREA SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTIONS AT THE END OF EACH WORKDAY. THE STREAM DIVERSION SHALL BE INSTALLED AS PER ITEM 265500 - STREAM DIVERSIONS.
5. INSTALL SUMP PIT, TYPE 2 (ITEM 263001) AND A PORTABLE SEDIMENT TANK (ITEM 270000) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 111 OF DELDOT STANDARD SPECIFICATIONS. DISCHARGE CLEAN EFFLUENT FROM THE APPROVED SEDIMENT TRAPPING DEVICE AT THE RIPRAPPED DISCHARGE AREA FOR THE DIVERSION PUMP OR ON OTHER STABLE OUTLET AS APPROVED BY THE ENGINEER.
6. IF THE CONTRACTOR CHOOSES TO USE ON-SITE CHANNEL BED FILL, EXCAVATE AND STOCKPILE OR DISPOSE OF THE EXISTING STREAMBED MATERIAL IN ACCORDANCE WITH THE SPECIAL PROVISIONS OF ITEM *712531-CHANNEL BED FILL.
7. REMOVE THE EXISTING BRIDGE 3-463, COMPRISED OF THREE 6'-0" CORRUGATED METAL PIPES, THE EXISTING 18" AND 15" H.D.P.E. PIPES; THE TREE ON THE SOUTHEAST SIDE OF THE BRIDGE AS NOTED WITHIN THE CONSTRUCTION LIMITS SHOWN ON THE CONSTRUCTION PLAN SHEET; THE EXISTING RIPRAP UPSTREAM AND DOWNSTREAM OF THE BRIDGE (STONE MAY BE RE-USED IF IT MEETS THE REQUIREMENTS FOR R-5 RIPRAP); AND EXISTING HOTMIX WITHIN THE PROJECT LIMITS. THE EXISTING WOODEN POSTS LOCATED SOUTHWEST OF THE BRIDGE AND THE SPLIT RAIL FENCE AND SHRUB ON THE NORTHEAST SIDE OF THE BRIDGE SHALL BE REMOVED AND RESET BY THE CONTRACTOR. (THE ELECTRIC GOAT FENCE SHALL BE RELOCATED AROUND THE PERIMETER OF THE T.C.E. BY THE CONTRACTOR).
8. INSTALL PROPOSED PRECAST FRAME AND WINGWALLS.
9. CONSTRUCT SLOPES, PLACE ANY REMAINING RIPRAP, AND COMPLETE ALL ROAD WORK.
10. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL AND STREAM DIVERSION DEVICES (INCLUDING RIPRAP USED AS STABILIZED OUTFALL) WHEN THEY ARE NO LONGER NEEDED. STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THESE PLANS AND AS DIRECTED BY THE ENGINEER. RESTORE STREAM TO EXISTING CONDITIONS AS OUTLINED IN THE ENVIRONMENTAL COMPLIANCE NOTES AND AS DIRECTED BY THE ENGINEER. REMOVE ALL MAINTENANCE OF TRAFFIC DEVICES.



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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	BR3-463 ON S396 WEST LINE ROAD OVER BUNTINGS BRANCH (EMERGENCY REPLACEMENT)	CONTRACT T201347202	BRIDGE NO. 3-463	CONSTRUCTION SEQUENCE & EROSION CONTROL PLAN	SHEET NO. 11
				COUNTY SUSSEX	DESIGNED BY: NED		TOTAL SHTS. 15
				CHECKED BY: EM			

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

WEST
LINE RD
TO CLOSE

STARTING
XXXXXX

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

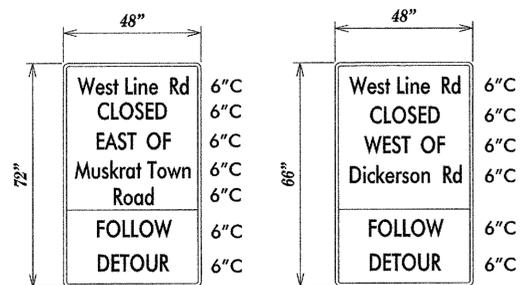
PCMS-2

WEST
LINE RD
CLOSED

FOLLOW
DETOUR

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

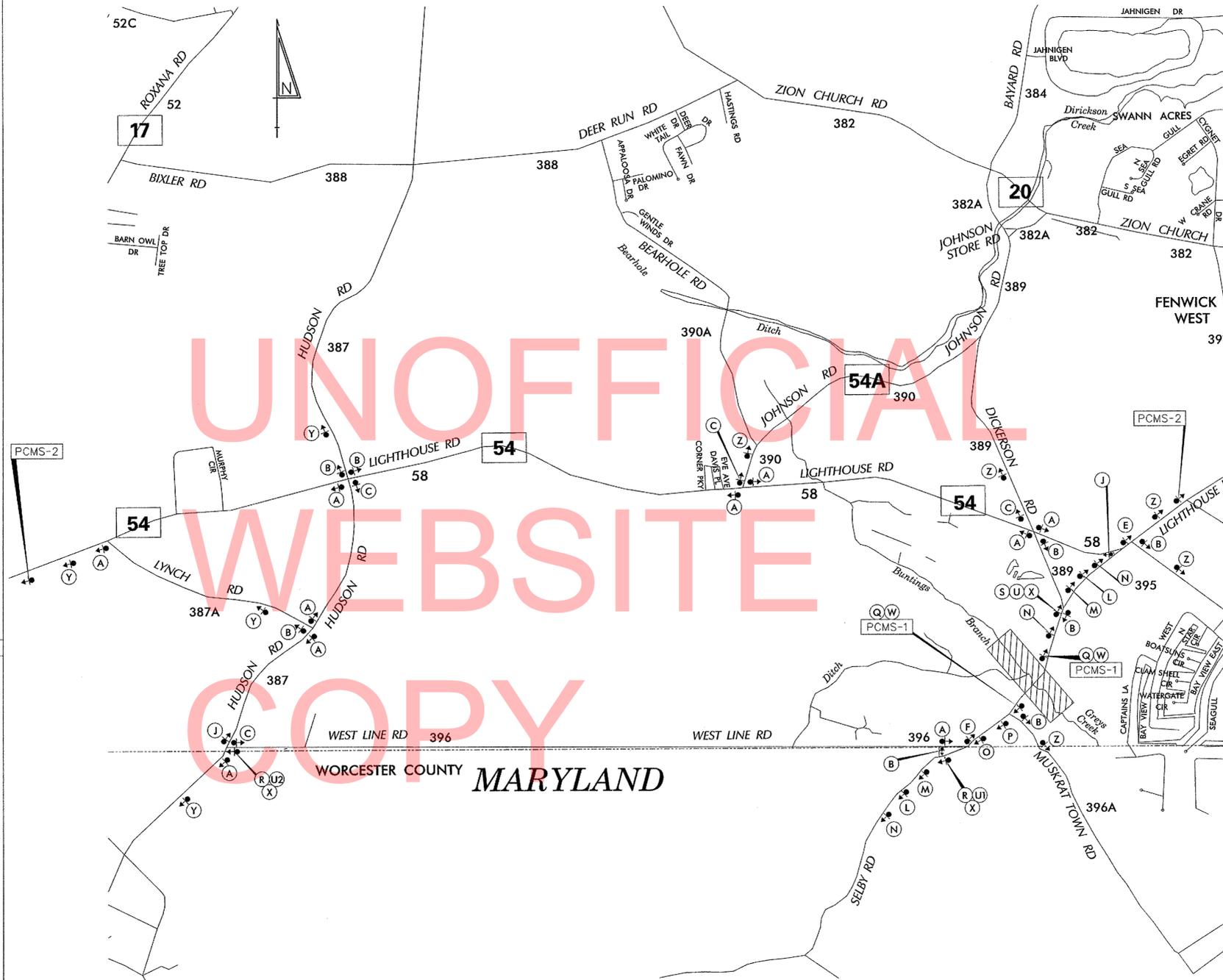
SPECIAL SIGNS



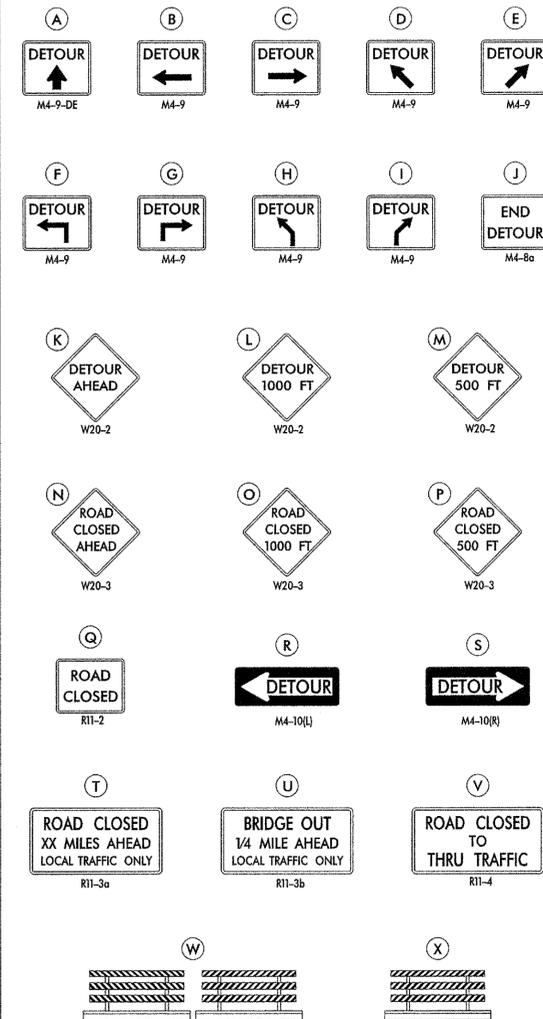
***D/G RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND**



WHITE 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 *Muss* DATE: 11-20-12

RECOMMENDED _____ DATE: _____

RECOMMENDED _____ DATE: _____

APPROVED CHIEF SAFETY OFFICER *Shirley H. Haggard* DATE: 11-29-12

APPROVED TRAFFIC ENGINEER *[Signature]* DATE: 11/29/12



ADDENDUM / REVISIONS

NOT TO SCALE

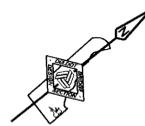
**BRIDGE REPLACEMENT
WEST LINE RD (S396)
BR 3-463 OVER BUNTINGS BRANCH**

CONTRACT	T201347202
COUNTY	SUSSEX
ROAD NO.	S396
DESIGNED BY:	MFR
CHECKED BY:	ASW

VEHICULAR DETOUR PLAN		SHEET NO.
WEST LINE RD AT		12
BR 3-463		TOTAL SHTS.
		15

C:\DOCUMENTS AND SETTINGS\MICHAEL.RIVERA\MY DOCUMENTS\MICRO STATION DGN\WEST LINE RD (S396) BR 3-463A.DGN

UNOFFICIAL
WEBSITE
COPY



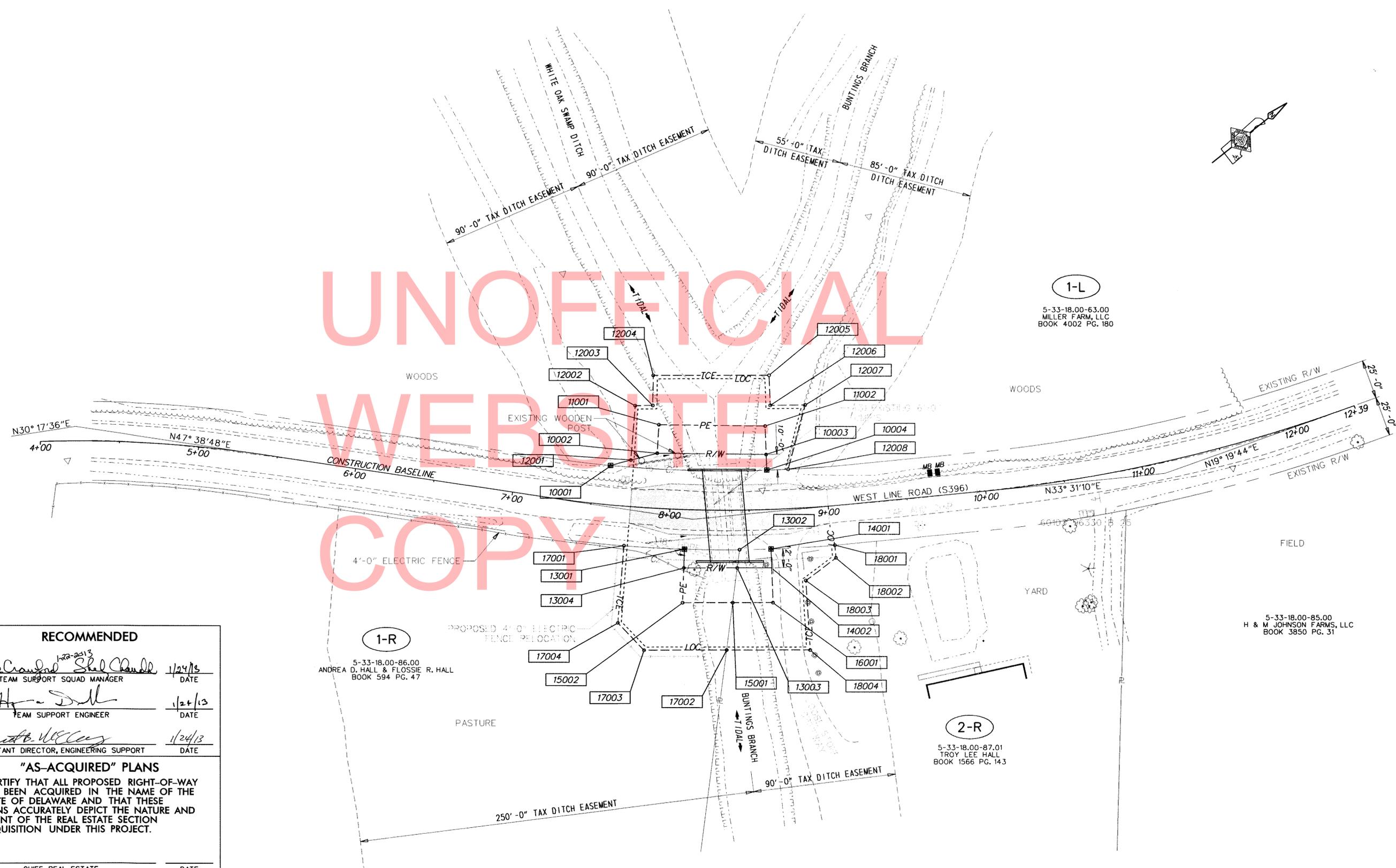
RECOMMENDED	
<i>Jude Crawford</i> TEAM SUPPORT SQUAD MANAGER	1/24/13 DATE
<i>Heather Dull</i> TEAM SUPPORT ENGINEER	1/24/13 DATE
<i>Michael McCarty</i> ASSISTANT DIRECTOR, ENGINEERING SUPPORT	1/24/13 DATE
"AS-ACQUIRED" PLANS	
I CERTIFY THAT ALL PROPOSED RIGHT-OF-WAY HAS BEEN ACQUIRED IN THE NAME OF THE STATE OF DELAWARE AND THAT THESE PLANS ACCURATELY DEPICT THE NATURE AND EXTENT OF THE REAL ESTATE SECTION ACQUISITION UNDER THIS PROJECT.	
_____ CHIEF, REAL ESTATE	_____ DATE

1-R
5-33-18.00-86.00
ANDREA D. HALL & FLOSSIE R. HALL
BOOK 594 PG. 47

2-R
5-33-18.00-87.01
TROY LEE HALL
BOOK 1566 PG. 14.3

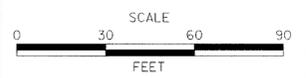
1-L
5-33-18.00-63.00
MILLER FARM, LLC
BOOK 4002 PG. 180

5-33-18.00-85.00
H & M JOHNSON FARMS, LLC
BOOK 3850 PG. 31



Y:\SUSSEX\396\BRIDGE\2013\7202\PLANS\CP01.DGN

ADDENDUMS / REVISIONS



CONTRACT T201347202	BRIDGE NO. 3-463
COUNTY SUSSEX	DESIGNED BY: NED
	CHECKED BY: EM

RIGHT-OF-WAY PLAN
SHEET NO. 13
TOTAL SHEETS. 15

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-63.00	(1-L) MILLER FARMS, LLC	FEE	BOOK 4002 PG. 180	164.059							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
10001	5000	7+60.00	-25.00	165424.5066	735964.0239	N 24°22' 40.17" E	30.5280				
10002	5000	7+90.00	-35.00	165452.3128	735976.6244	N 39°44' 56.77" E	68.7448				
10003	5000	8+62.00	-35.00	165505.1674	736020.5817	S 52°53' 43.14" E	10.0000				
10004	5000	8+62.00	-25.00	165499.1347	736028.5570			S 40°51' 03.40" W	98.6604	98.7308	755.0000
10001	5000	7+60.00	-25.00	165424.5066	735964.0239						
FIGURE 10001 AREA = 876.5297 SQ. FT. (0.0201 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-63.00	(1-L) MILLER FARMS, LLC	P/E	BOOK 4002 PG. 180	164.059							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
10002	5000	7+90.00	-35.00	165452.3128	735976.6244	N 47°36' 23.31" W	18.0000				
11001	5000	7+90.00	-53.00	165464.4488	735963.3308	N 39°44' 56.77" E	67.0839				
11002	5000	8+62.00	-53.00	165516.0263	736006.2261	S 52°53' 43.14" E	18.0000				
10003	5000	8+62.00	-35.00	165505.1674	736020.5817	S 39°44' 56.77" W	68.7448				
10002	5000	7+90.00	-35.00	165452.3128	735976.6244						
FIGURE 11001 AREA = 1221.1564 SQ. FT. (0.0280 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-63.00	(1-L) MILLER FARMS, LLC	TCE	BOOK 4002 PG. 180	164.059							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
12001	5000	7+73.00	-29.50	165436.6456	735969.5273	N 46°21' 27.80" W	34.5000				
12002	5000	7+73.00	-64.00	165460.4559	735944.5610	N 38°00' 38.97" E	11.0529				
12003	5000	7+85.00	-65.00	165469.1644	735951.3674	N 49°55' 40.63" W	19.0215				
12004	5000	7+84.00	-84.00	165481.4095	735936.8115	N 39°02' 22.95" E	73.0898				
12005	5000	8+66.00	-85.00	165538.1791	735982.8478	S 53°11' 20.91" E	19.0000				
12006	5000	8+66.00	-66.00	165526.7947	735998.0595	N 38°32' 00.82" E	22.0065				
12007	5000	8+90.00	-65.00	165544.0092	736011.7690	S 36°11' 04.15" E	42.1177				
12008	5000	8+76.00	-25.00	165510.0151	736036.6347			S 36°35' 25.76" W	13.5511	13.5513	755.0000
10004	5000	8+62.00	-25.00	165499.1347	736028.5570	N 52°53' 43.14" W	28.0000				
11002	5000	8+62.00	-53.00	165516.0263	736006.2261	S 39°44' 56.77" W	67.0839				
11001	5000	7+90.00	-53.00	165464.4488	735963.3308	S 47°36' 23.31" E	18.0000				
10002	5000	7+90.00	-35.00	165452.3128	735976.6244	S 24°22' 11.72" W	17.1998				
12001	5000	7+73.00	-29.50	165436.6456	735969.5273						
FIGURE 12001 AREA = 3560.3664 SQ. FT. (0.0817 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-86.00	(1-R) ANDREA D. HALL	FEE	BOOK 594 PG. 47	4.557							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
13001	5000	8+10.00	25.00	165427.2805	736034.6559			N 39°41' 06.71" E	34.8187	34.8214	-805.0000
13002	5000	8+43.74	25.00	165454.0757	736056.8900	S 43°33' 21.26" E	11.6618				
13003	5000	8+42.19	36.55	165445.6244	736064.9258	S 38°58' 38.55" W	33.7083				
13004	5000	8+10.00	37.00	165419.4197	736043.7228	N 49°04' 32.16" W	12.0000				
13001	5000	8+10.00	25.00	165427.2805	736034.6559						
FIGURE 13001 AREA = 399.3764 SQ. FT. (0.0092 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-86.00	(1-R) ANDREA D. HALL	P/E	BOOK 594 PG. 47	4.557							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
13004	5000	8+10.00	37.00	165419.4197	736043.7228	N 38°58' 38.55" E	33.7083				
13003	5000	8+42.19	36.55	165445.6244	736064.9258	S 43°36' 33.52" E	22.1713				
15001	5000	8+39.38	58.52	165429.5710	736080.2181	S 38°58' 30.00" W	31.5951				
15002	5000	8+10.00	59.00	165405.0084	736060.3454	N 49°04' 32.16" W	22.0000				
13004	5000	8+10.00	37.00	165419.4197	736043.7228						
FIGURE 15001 AREA = 717.8996 SQ. FT. (0.0165 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-86.00	(1-R) ANDREA D. HALL	TCE	BOOK 594 PG. 47	4.557							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
17001	5000	7+73.00	25.00	165399.0322	736008.9669	N 42°17' 00.02" E	38.1823		38.1859		-805.0000
13001	5000	8+10.00	25.00	165427.2805	736034.6559	S 49°04' 32.16" E	34.0000				
15002	5000	8+10.00	59.00	165405.0084	736060.3454	N 38°58' 30.00" E	31.5951				
15001	5000	8+39.38	58.52	165429.5710	736080.2181	S 43°37' 02.75" E	30.1569				
17002	5000	8+35.79	88.42	165407.7386	736101.0215	S 39°00' 48.02" W	52.1576				
17003	5000	7+89.00	90.00	165367.2122	736068.1883	S 85°11' 40.94" W	23.8457				
17004	5000	7+73.00	74.00	165365.2147	736044.4264	N 46°21' 27.80" W	49.0000				
17001	5000	7+73.00	25.00	165399.0322	736008.9669						
FIGURE 17001 AREA = 3326.5777 SQ. FT. (0.0764 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-87.01	(2-R) TROY LEE HALL	FEE	BOOK 1566 PG. 143	1.689							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
13002	5000	8+43.74	25.00	165454.0757	736056.8900			N 37°44' 18.99" E	19.8768	19.8773	805.0000
14001	5000	8+63.00	25.00	165469.7945	736069.0558	S 52°58' 07.58" E	12.0000				
14002	5000	8+63.00	37.00	165462.5675	736078.6355	S 38°58' 42.57" W	21.7951				
13003	5000	8+42.19	36.55	165445.6244	736064.9258	N 43°33' 21.26" W	11.6618				
13002	5000	8+43.74	25.00	165454.0757	736056.8900						
FIGURE 14001 AREA = 246.0730 SQ. FT. (0.0056 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-87.01	(2-R) TROY LEE HALL	P/E	BOOK 1566 PG. 143	1.689							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
13003	5000	8+42.19	36.55	165445.6244	736064.9258	N 38°58' 42.57" E	21.7951				
14002	5000	8+63.00	37.00	165462.5675	736078.6355	S 52°58' 07.58" E	22.0000				
16001	5000	8+63.00	59.00	165449.3180	736096.1983	S 38°58' 52.73" W	25.4029				
15001	5000	8+39.38	58.52	165429.5710	736080.2181	N 43°33' 33.52" W	22.1713				
13003	5000	8+42.19	36.55	165445.6244	736064.9258						
FIGURE 16001 AREA = 518.8649 SQ. FT. (0.0119 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)							
5-33-18.00-87.01	(2-R) TROY LEE HALL	TCE	BOOK 1566 PG. 143	1.689							
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
14001	5000	8+63.00	25.00	165469.7945	736069.0558	N 35°35' 55.80" E	40.2458		40.2500		-805.0000
18001	5000	9+02.00	25.00	165502.5189	736092.4832	S 55°50' 00.82" E	8.0000				
18002	5000	9+02.00	33.00	165498.0261	736099.1025	S 1°47' 31.65" W	23.8211				
18003	5000	8+83.00	46.00	165474.2167	736098.3575	S 54°26' 16.43" E	44.0000				
18004	5000	8+83.00	90.00	165448.6269	736134.1509	S 39°00' 56.65" W	52.6252				
17002	5000	8+35.79	88.42	165407.7386	736101.0215	N 43°37' 02.75" W	30.1569				
15001	5000	8+39.38	58.52	165429.5710	736080.2181	N 38°58' 52.73" E	25.4029				
16001	5000	8+63.00	59.00	165449.3180	736096.1983	N 52°58' 07.58" W	34.0000				
14001	5000	8+63.00	25.00	165469.7945	736069.0558						
FIGURE 18001 AREA = 2501.8073 SQ. FT. (0.0574 ACRES)											

Y:\SUSSEX\396\BRIDGE\T201347202\PLANS\R301.DGN



ADDENDUMS / REVISIONS

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BR3-463 ON S396 WEST LINE ROAD OVER BUNTINGS BRANCH (EMERGENCY REPLACEMENT)

CONTRACT	BRIDGE NO.	3-463
T201347202	DESIGNED BY:	NED
COUNTY	CHECKED BY:	EW
SUSSEX		

RIGHT-OF-WAY DATA SHEET

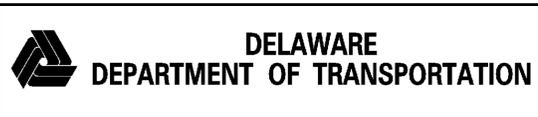
SHEET NO.	14
TOTAL SHTS.	15

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)
5-33-18.00-63.00	5	(1-L) MILLER FARMS, LLC	BOOK 4002 PG. 180	D - 164.06	FEE P/E TCE	876.5297 / 0.02		1221.1564 / 0.03	3560.3664 / 0.08	7145529.1543 / 164.04		
5-33-18.00-86.00	5	(1-R) ANDREA D. HALL	BOOK 594 PG. 47	D - 4.56	FEE P/E TCE	399.3764 / 0.01		717.8996 / 0.02	3326.5777 / 0.08	198103.5436 / 4.55		
5-33-18.00-87.01	5	(2-R) TROY LEE HALL	BOOK 1566 PG. 143	D - 1.69	FEE P/E TCE	246.073 / 0.01		518.8649 / 0.01	2501.8073 / 0.06	73326.767 / 1.68		

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WEBSITE
COPY

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



ADDENDUMS / REVISIONS

**BR3-463 ON S396 WEST LINE
ROAD OVER BUNTINGS BRANCH
(EMERGENCY REPLACEMENT)**

CONTRACT T201347202	BRIDGE NO. 3-463
COUNTY SUSSEX	DESIGNED BY: NED
	CHECKED BY: EM

**RIGHT-OF-WAY
TABULATION SHEET**

SHEET NO. 15
TOTAL SHTS. 15