

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
	DELAWARE ELECTRIC COOPERATIVE
	DELAWARE ELECTRIC COOPERATIVE
	COMCAST CABLE

CONSTRUCTION	
	CONCRETE SAFETY BARRIER - PERMANENT
	BIOFILTRATION SWALE
	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
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
	LATERAL OFFSET
	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 2" BITUMINOUS CONCRETE, SUPERPAVE TYPE C, PG 64-22, 160 GYRATIONS (CARBONATE STONE)
	2" BITUMINOUS CONCRETE, SUPERPAVE TYPE C, PG 64-22, 160 GYRATIONS (CARBONATE STONE) 3.5" BITUMINOUS CONCRETE, SUPERPAVE TYPE B, PG 64-22, 160 GYRATIONS 3" BITUMINOUS CONCRETE, BCBC, PG 64-22, 160 GYRATIONS 8" GRADED AGGREGATE BASE COURSE

UTILITY COMPANY FACILITIES	
	VERIZON
	COMCAST CABLE

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

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.

2. 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.
(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 MADE 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 0.71 ACRES.

7. THERE IS NO ADDED IMPERVIOUS AREA FOR THIS PROJECT.

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 FIVE 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 FIVE 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. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
 - REMOVAL OF THE EXISTING CORRUGATED ALUMINUM PIPES IN THEIR ENTIRETY.
 - REMOVAL OF FOUR 18 IN. CORRUGATED METAL PIPES.
 - REMOVAL OF CONCRETE SANDBAGS.

SECTION 300

3. 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

4. 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.
5. ALL MOT ITEMS, WITH THE EXCEPTION OF CHANGEABLE MESSAGE BOARDS AND FLAGGERS, WILL BE INCLUDED IN ITEM 763643-MAINTENANCE OF TRAFFIC, ALL INCLUSIVE.

SECTION 900

6. 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'S KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S STORMWATER 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.

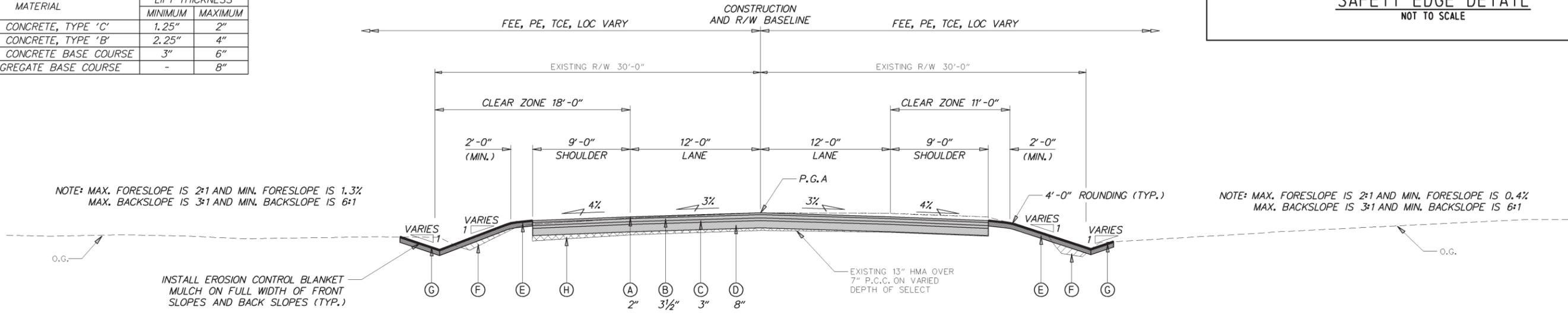
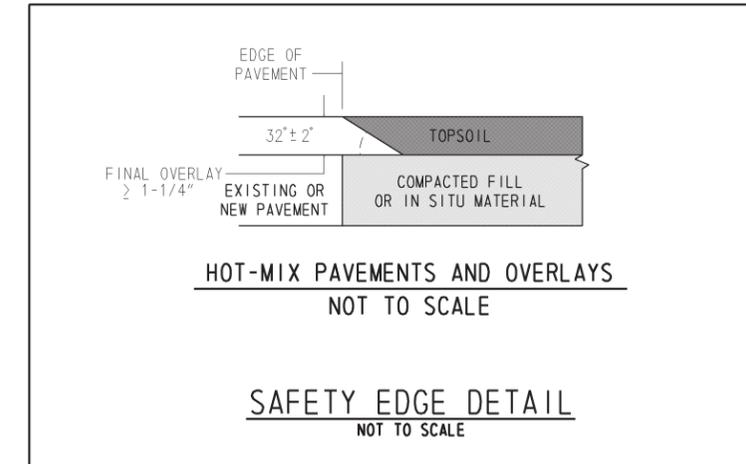
MISCELLANEOUS

7. HYDRAULIC DATA
 PROPOSED OPENING: 56.54 SF
 DRAINAGE AREA: 1.62 sq miles
 DESIGN DISCHARGE: 269.76 cfs
 DESIGN FREQUENCY: 50 YEARS
 50-YEAR FLOOD ELEVATION: 44.05 ft
 PLEASE REFER TO THE HYDROLOGY & HYDRAULIC REPORT FOR MORE INFORMATION ON HOW THE 50-YEAR STORM ELEVATION WAS OBTAINED.
8. 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', HEC-18 - 'EVALUATING SCOUR AT BRIDGES' AND HEC-23 - 'BRIDGE SCOUR AND STREAM INSTABILITY COUNTERMEASURES'. SCOUR COUNTERMEASURES HAVE BEEN DESIGNED FOR THE OVERTOPPING FLOOD EVENT.
 DESIGN EVENT: Overtopping Flood
 DESIGN VELOCITY: 10.52 fps
 DESIGN DISCHARGE: 610 cfs
 TAILWATER DEPTH OF FLOW: 8.12 ft
9. THE CONTRACTOR SHALL CONTACT WILLIAM LOTHARP, THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT 302-576-6006.
10. BEAVER DAM ROAD, SPRUCE ROAD, N. UNION CHURCH ROAD, AND WEBBS ROAD SHALL BE USED AS A LOCAL DETOUR FOR SUITABLE CAR, LIGHT TRUCK AND SMALL FARM VEHICLE TRAFFIC ONLY. PRIOR TO AND AT THE COMPLETION OF THE BRIDGE REPLACEMENT, THE AFOREMENTIONED ROADS THAT COMPRISE THIS LOCAL DETOUR SHALL BE EVALUATED FOR THEIR CONDITION BY THE ENGINEER. ANY NOTED WEAR WHICH MAY BE CAUSED BY THE DETOUR TRAFFIC, SHALL BE REPAIRED AT THE ENGINEER'S DISCRETION. PATCHING ITEMS FOR TYPE 'B' AND 'C' SUPERPAVE (ITEMS 401822 AND 401821, RESPECTIVELY) AND BITUMINOUS CONCRETE PATCHING (ITEM 406001) HAVE BEEN INCLUDED IN THIS CONTRACT FOR THAT PURPOSE.
11. ENVIRONMENTAL COMPLIANCE:
 REFER TO THE ENVIRONMENTAL COMPLIANCE PLAN FOR ANY RESTRICTIONS AND ADDITIONAL GUIDANCE THAT MAY BE ASSOCIATED TO THIS PROJECT.
12. UTILITIES:
 REFER TO THE UTILITY RELOCATION PLAN FOR ADDITIONAL INFORMATION ON TYPES AND LOCATIONS OF ALL UTILITIES. FOR ADDITIONAL GUIDANCE, REFER TO THE UTILITY STATEMENT.

LEGEND

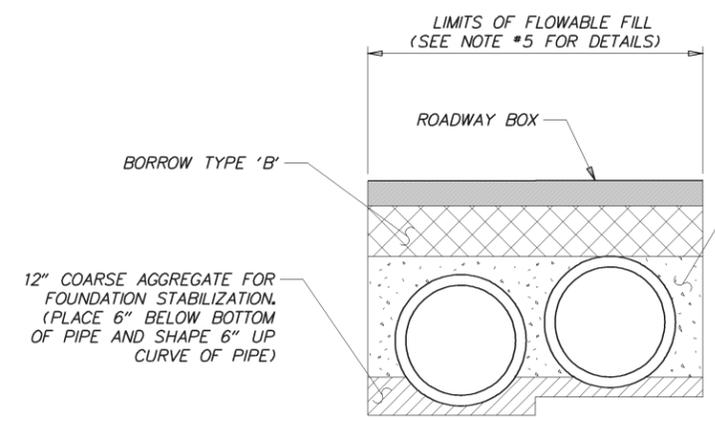
- (A) ITEM 401801 - BITUMINOUS CONCRETE, SUPERPAVE TYPE C, PG 64-22, 160 GYRATIONS (CARBONATE STONE) (TON)
- (B) ITEM 401810 - BITUMINOUS CONCRETE, SUPERPAVE TYPE B, PG 64-22, 160 GYRATIONS (TON)
- (C) ITEM 401819 - BITUMINOUS CONCRETE, BCBC, PG 64-22, 160 GYRATIONS (TON)
- (D) ITEM 302007 - GABC, TYPE B (C.Y.)
- (E) ITEM 908004 - TOPSOIL, 6" DEPTH (S.Y.)
ITEM 908019 - STREAMBANK SEED MIX, SEEDING (S.Y.)
- (F) ITEM 209006 - BORROW, TYPE F (C.Y.)
- (G) ITEM 908020 - EROSION CONTROL BLANKET MULCH (S.Y.)
- (H) ITEM 209003 - BORROW, TYPE C (C.Y.)

MATERIAL	LIFT THICKNESS	
	MINIMUM	MAXIMUM
BITUMINOUS CONCRETE, TYPE 'C'	1.25"	2"
BITUMINOUS CONCRETE, TYPE 'B'	2.25"	4"
BITUMINOUS CONCRETE BASE COURSE	3"	6"
GRADED AGGREGATE BASE COURSE	-	8"

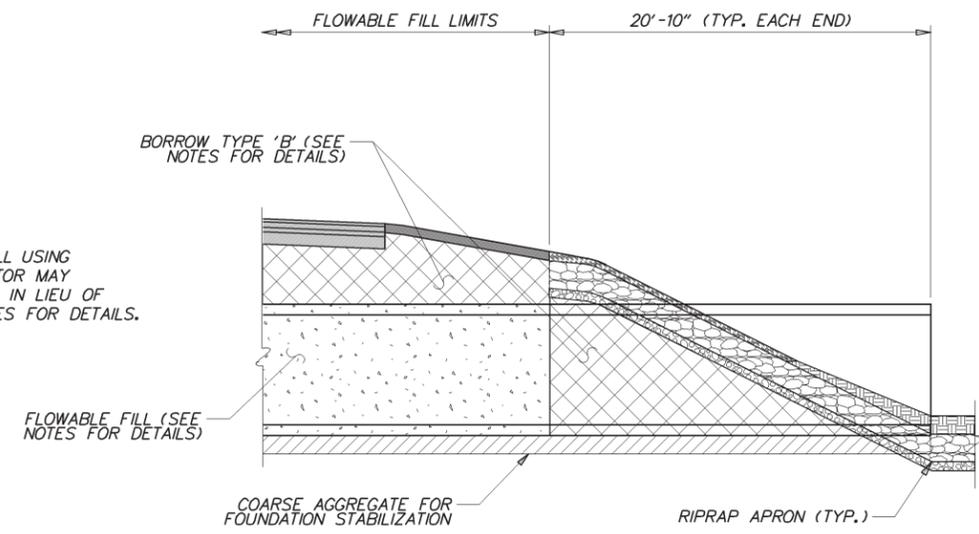


**BEACH HIGHWAY
TYPICAL ROADWAY SECTION
STA. 12+50.00 TO 14+40.00**

- STRUCTURE BACKFILL NOTES:
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILIZING THE PIPES IN ORDER TO PREVENT ANY MOVEMENT DURING THE POUR OF FLOWABLE FILL (ITEM #208001).
 - THE MAXIMUM DIFFERENCE IN SURFACE LEVELS OF THE FLOWABLE FILL ON OPPOSITE SIDES OF A PIPE SHALL NOT EXCEED 1'-0" DURING POUR.
 - THE CONTRACTOR SHALL DETERMINE THE NEED TO POUR FLOWABLE FILL IN LIFTS DUE TO BUOYANCY OF PIPES. THE CONTRACTOR SHALL SUBMIT BUOYANCY CALCULATIONS TO THE ENGINEER FOR APPROVAL. POURING OF FLOWABLE FILL WILL TERMINATE AT THE TOP EDGE OF THE HIGHER PIPE.
 - THE LIMITS OF THE FLOWABLE FILL ARE SHOWN IN THE TYPICAL BACKFILL SECTION. BACKFILL BEYOND THESE LIMITS SHALL BE BORROW TYPE 'B' UNDER THE SLOPES AT BOTH ENDS OF THE PIPES (PAYMENT UNDER ITEM #209002). THE CONTRACTOR HAS THE OPTION TO USE FLOWABLE FILL IN LIEU OF BORROW, TYPE 'B' FOR THE SLOPES, HOWEVER, PAYMENT WILL BE MADE AT THE UNIT PRICE FOR ITEM #209002 - BORROW, TYPE 'B'.
 - THE LIMITS OF THE FLOWABLE FILL AS SHOWN IN THE TYPICAL BACKFILL ELEVATION ARE CONFINED TO THE LIMITS OF ITEM #211000.
 - IF THE CONTRACTOR CHOOSES TO USE CLASS 'C' CONCRETE IN LIEU OF FLOWABLE FILL, PAYMENT WILL BE MADE AT THE UNIT PRICE FOR ITEM #208001 - FLOWABLE FILL.



TYPICAL BACKFILL ELEVATION



TYPICAL BACKFILL SECTION

ADDENDUMS / REVISIONS



CONTRACT T201507302	BRIDGE NO. 3-915
COUNTY SUSSEX	DESIGNED BY: GML & NED
	CHECKED BY: CAS

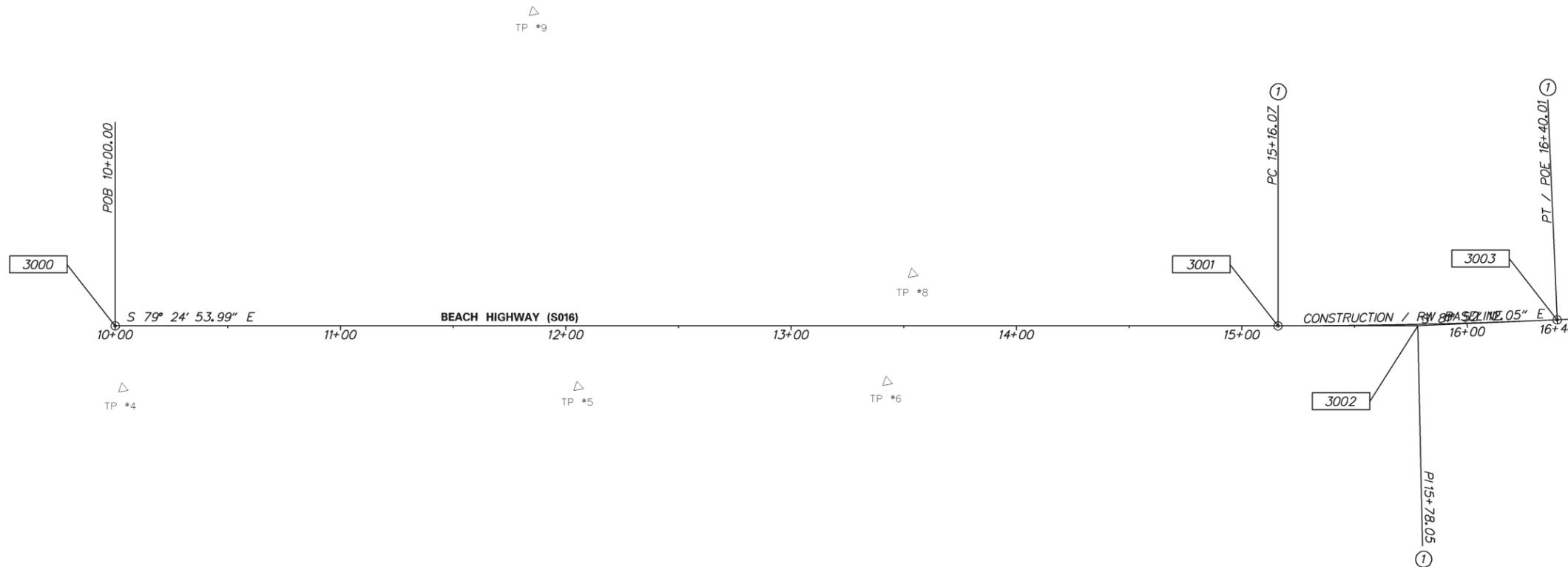
TYPICAL SECTION	SHEET NO. 4
	TOTAL SHTS. 19

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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.



① CURVE INFORMATION

	STATION	NORTHING	EASTING
<i>Element: Circular Curve #1</i>			
PC (3001)	15+16.07	293718.5851	642971.4954
PI (3002)	15+78.05	293707.2000	643032.4193
CC ()		296561.8648	643502.8304
PT (3003)	16+40.01	293698.4350	643093.7750
Radius:	2892.50		
Delta:	2° 27' 18.0630" Left		
Degree of Curvature (Arc):	1° 58' 51.0218"		
Length:	123.94		
Tangent:	61.98		
Chord:	123.93		
Middle Ordinate:	0.66		
External:	0.66		
Tangent Direction:	S 79° 24' 53.9915" E		
Radial Direction:	S 10° 35' 06.0085" W		
Chord Direction:	S 80° 38' 33.0230" E		
Radial Direction:	S 8° 07' 47.9456" W		
Tangent Direction:	S 81° 52' 12.0544" E		

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
3000	10+00.00	0.00	293813.3843	642464.2061
3003	16+40.01	0.00	293698.4350	643093.7750

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP #4	10+03.45	27.64	293785.5774	642462.5194	47.79
TP #5	12+05.48	26.99	293749.1049	642661.2298	47.33
TP #6	13+42.59	24.73	293726.1398	642796.4248	47.66
TP #8	13+53.97	-23.04	293771.0057	642816.3873	47.14
TP #9	11+85.64	-138.91	293915.8306	642672.1998	48.23

ADDENDUMS / REVISIONS



**BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH**

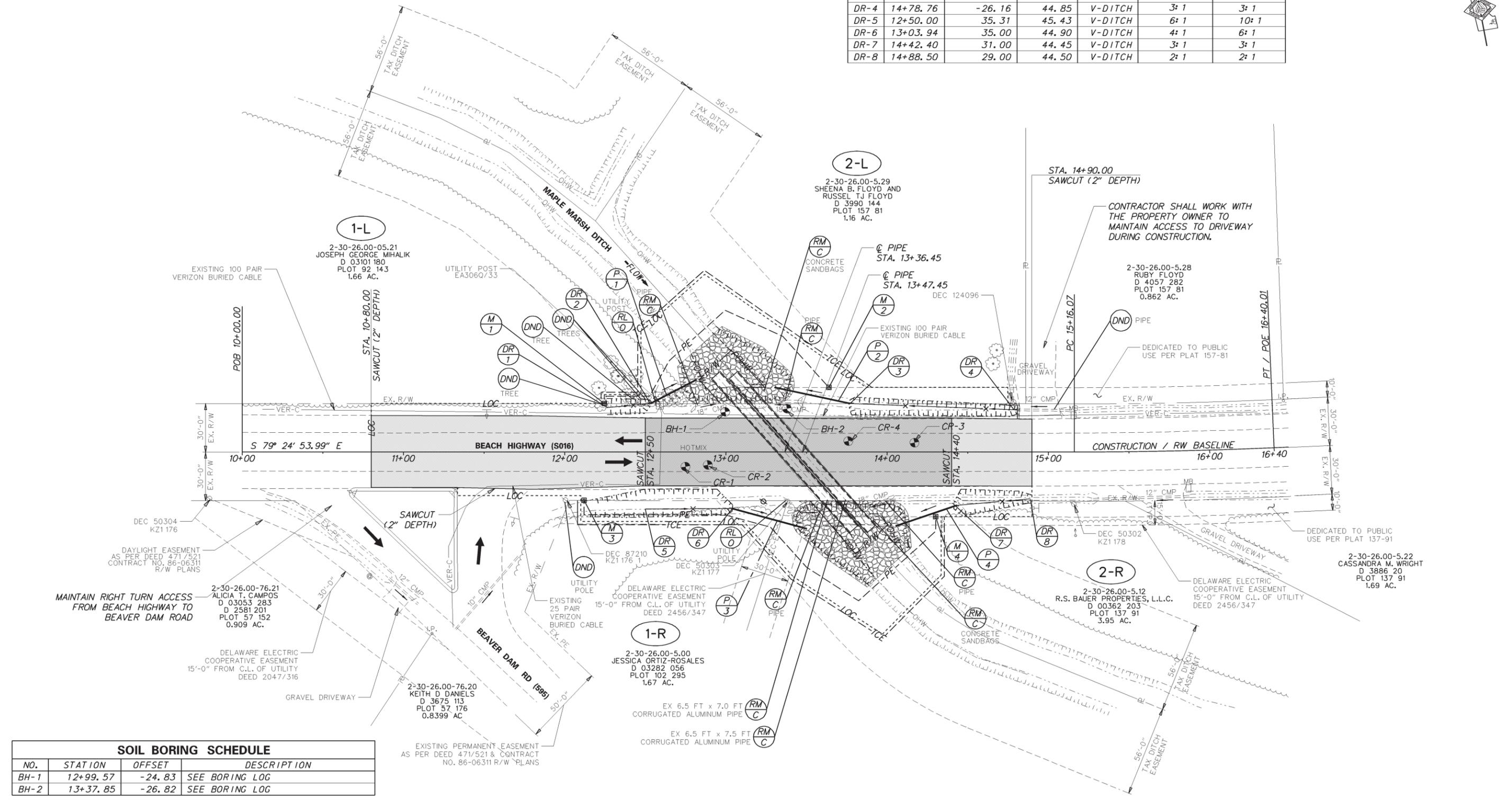
CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML & NED
COUNTY	CHECKED BY:	CAS
SUSSEX		

**HORIZONTAL AND
VERTICAL CONTROL**

SHEET NO.	5
TOTAL SHTS.	19

RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
M-1	CAPPED REBAR	12+24.55	-30.00	293801.6250	642690.4449
M-2	CAPPED REBAR	13+63.88	-40.00	293785.8575	642829.2373
M-3	CAPPED REBAR	12+12.01	29.92	293745.0314	642667.1131
M-4	CAPPED REBAR	14+30.05	40.00	293695.0673	642879.5870

DITCH RELOCATION SCHEDULE						
NO.	STATION	OFFSET	BOT. ELEV.	WIDTH	FORE SLOPE	BACK SLOPE
DR-1	12+26.55	-27.48	47.47	V-DITCH	6:1	10:1
DR-2	12+53.09	-30.00	46.52	V-DITCH	6:1	10:1
DR-3	13+77.00	-30.00	45.27	V-DITCH	3:1	3:1
DR-4	14+78.76	-26.16	44.85	V-DITCH	3:1	3:1
DR-5	12+50.00	35.31	45.43	V-DITCH	6:1	10:1
DR-6	13+03.94	35.00	44.90	V-DITCH	4:1	6:1
DR-7	14+42.40	31.00	44.45	V-DITCH	3:1	3:1
DR-8	14+88.50	29.00	44.50	V-DITCH	2:1	2:1

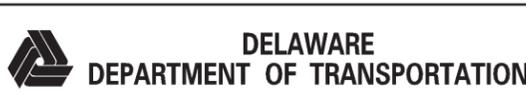


SOIL BORING SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
BH-1	12+99.57	-24.83	SEE BORING LOG
BH-2	13+37.85	-26.82	SEE BORING LOG

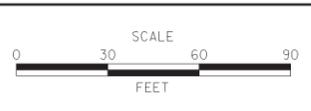
ROADWAY CORE SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
CR-1	12+74.93	9.06	EB LANE, 13" HMA, 7" PCC
CR-2	12+87.71	8.02	EB LANE, 13.5" HMA, 7" PCC
CR-3	14+16.93	-5.77	WB LANE, 13" HMA, 7" PCC
CR-4	13+75.93	-6.77	WB LANE, 13" HMA, 7" PCC

DRAINAGE PIPE SCHEDULE										
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	INT. STA.	INT. OFFSET	DIS. EL.	DIS. STA.	DIS. OFFSET
1	18" /RCP	III	32.0	6.3%	46.52	12+53.09	-30.00	44.50	12+81.48	-44.75
2	18" /RCP	III	48.0	3.2%	45.27	13+77.00	-30.00	43.75	13+30.06	-40.00
3	18" /RCP	III	48.0	2.9%	44.90	13+03.94	35.00	43.50	13+50.29	47.50
4	18" /RCP	III	40.0	1.6%	44.45	14+43.13	33.00	43.80	14+05.22	45.75

NOTE: ALL PARCELS SHOWN ON SOUTH SIDE OF SR 16 BEACH HIGHWAY ARE SUBJECT TO A 30'-0" WIDE BLANKET EASEMENT WITH DELAWARE ELECTRIC COOPERATIVE AS SHOWN ON THE PLANS (15'-0" FROM CENTERLINE OF UTILITY LINES). EASEMENT INCLUDES UNDERGROUND AND OVERHEAD UTILITIES.



ADDENDUMS / REVISIONS	

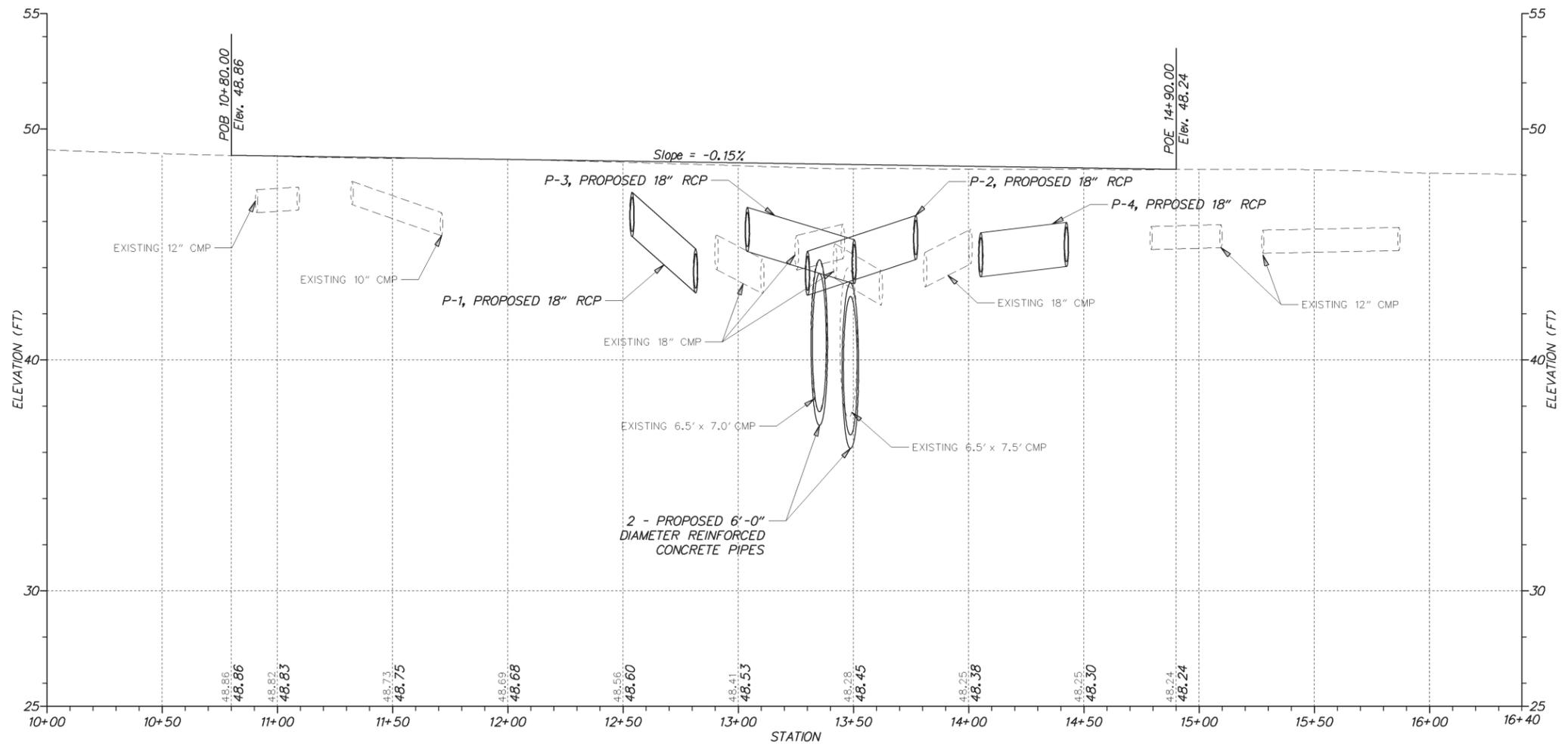


**BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH**

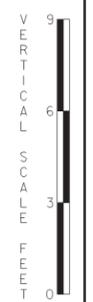
CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML & NED
SUSSEX	CHECKED BY:	CAS

CONSTRUCTION PLAN	SHEET NO.	6
	TOTAL SHTS.	19

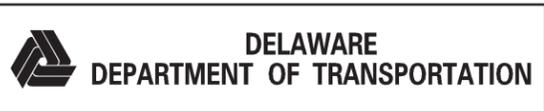
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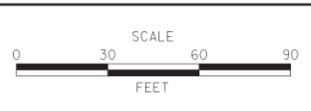
BEACH HIGHWAY, SR 16
M.R. #: S016



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ADDENDUMS / REVISIONS	



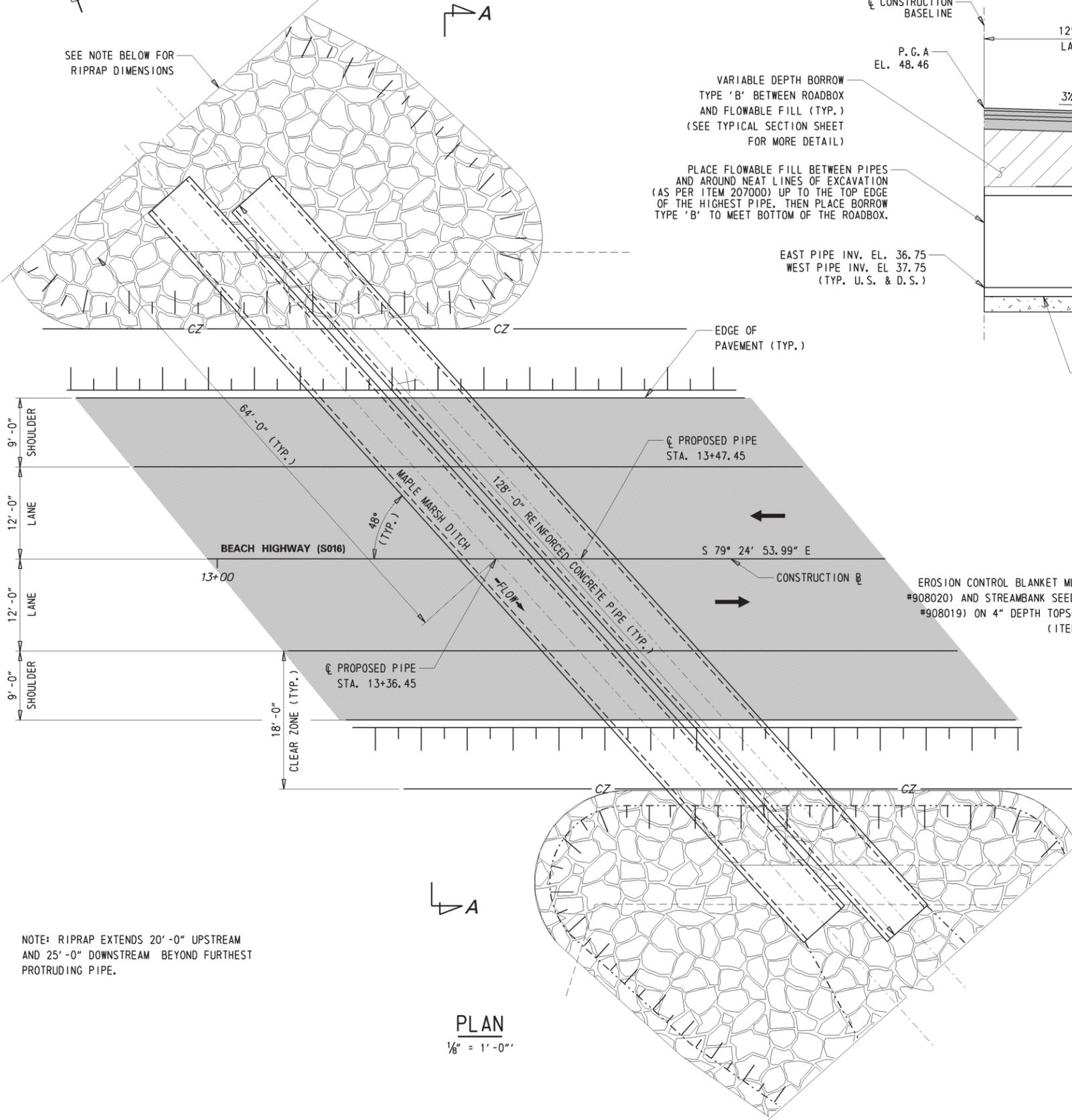
BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH

CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML & NED
COUNTY	CHECKED BY:	CAS
SUSSEX		

PROFILE	SHEET NO.	7
	TOTAL SHTS.	19



SEE NOTE BELOW FOR RIPRAP DIMENSIONS



NOTE: RIPRAP EXTENDS 20'-0" UPSTREAM AND 25'-0" DOWNSTREAM BEYOND FURTHEST PROTRUDING PIPE.

VARIABLE DEPTH BORROW TYPE 'B' BETWEEN ROADBOX AND FLOWABLE FILL (TYP.) (SEE TYPICAL SECTION SHEET FOR MORE DETAIL)

PLACE FLOWABLE FILL BETWEEN PIPES AND AROUND NEAT LINES OF EXCAVATION (AS PER ITEM 207000) UP TO THE TOP EDGE OF THE HIGHEST PIPE. THEN PLACE BORROW TYPE 'B' TO MEET BOTTOM OF THE ROADBOX.

EAST PIPE INV. EL. 36.75
WEST PIPE INV. EL. 37.75
(TYP. U.S. & D.S.)

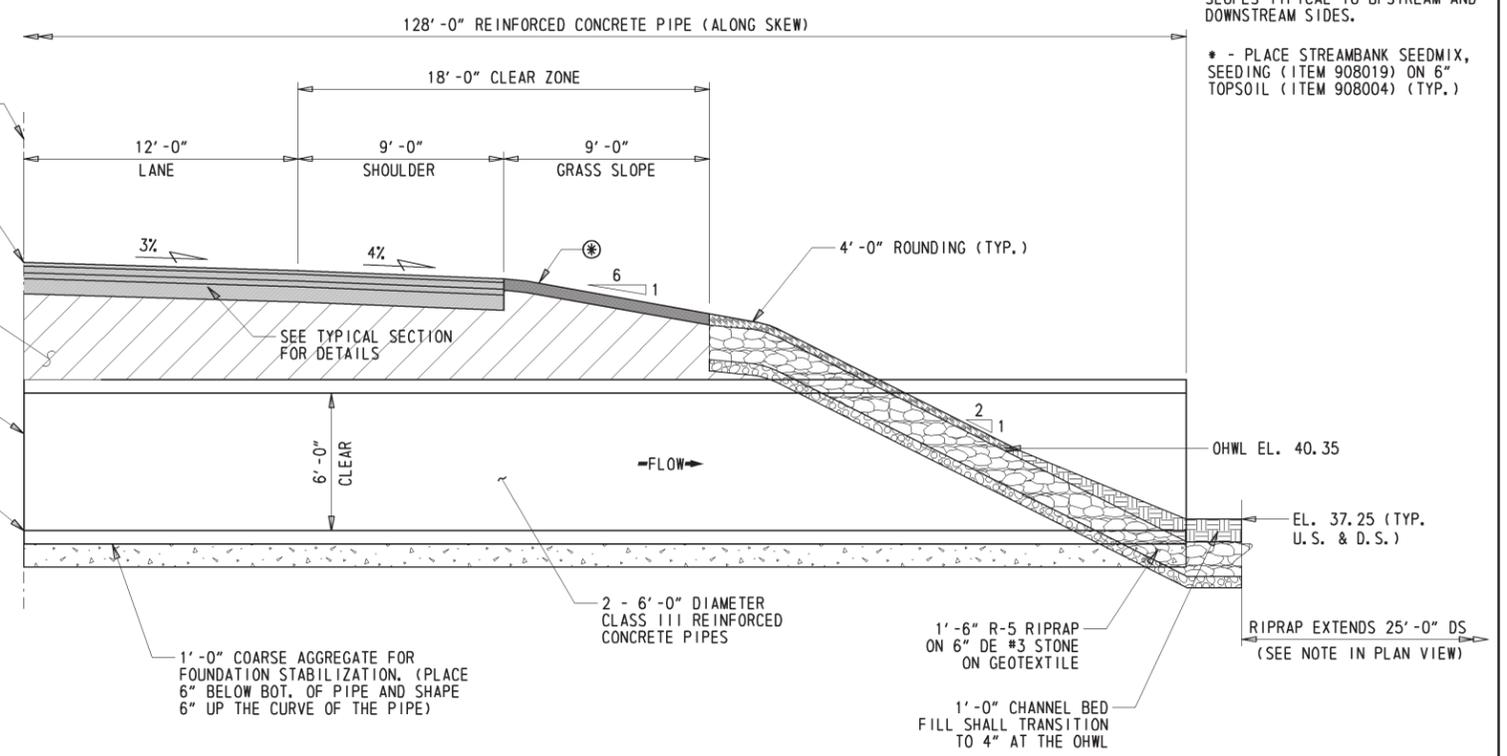
CONSTRUCTION BASELINE
P. G. A. EL. 48.46

EDGE OF PAVEMENT (TYP.)

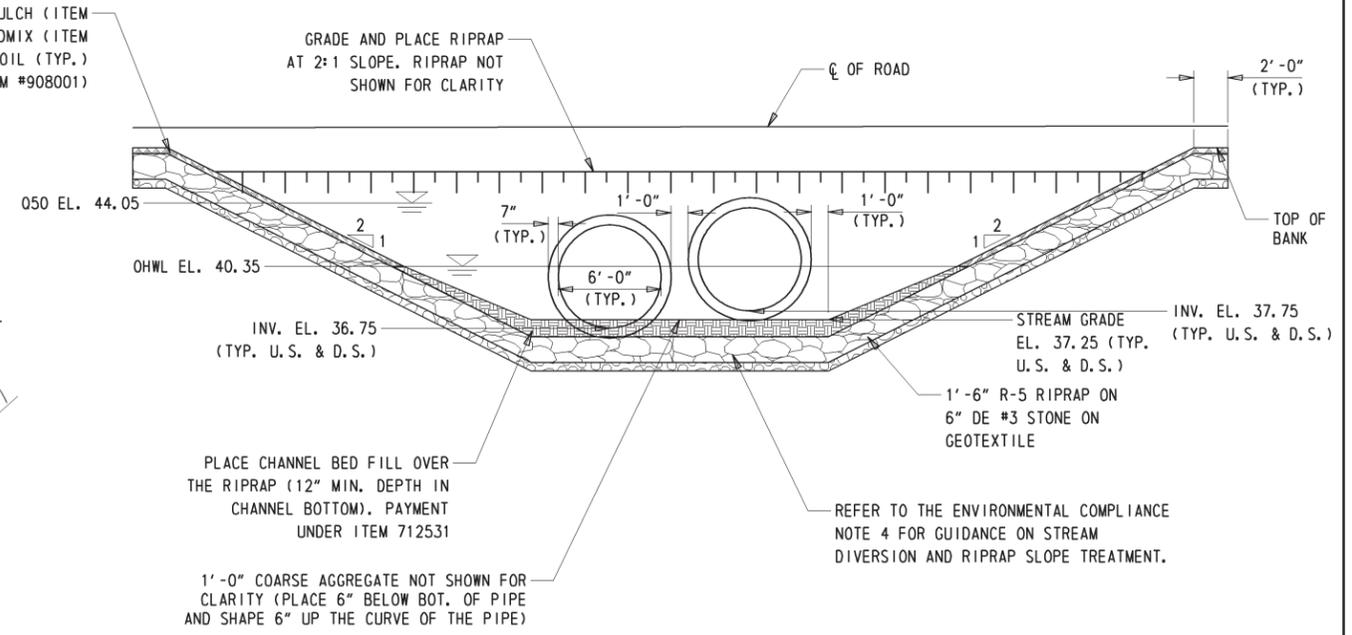
EROSION CONTROL BLANKET MULCH (ITEM #908020) AND STREAMBANK SEEDMIX (ITEM #908019) ON 4" DEPTH TOPSOIL (TYP.) (ITEM #908001)

NOTE: BRIDGE SECTION SHOWS THE EAST PIPE WITH THE LOWER INVERT. ALL ELEVATIONS, DIMENSIONS, AND SLOPES TYPICAL TO UPSTREAM AND DOWNSTREAM SIDES.

* - PLACE STREAMBANK SEEDMIX, SEEDING (ITEM 908019) ON 6" TOPSOIL (ITEM 908004) (TYP.)



SECTION A-A
1/4" = 1'-0"



UPSTREAM ELEVATION
3/8" = 1'-0"

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BORING: BH-1				DATE DRILLED: 12/18/14				BORING: BH-2				DATE DRILLED: 12/18/14							
STATION: 12+99.57		OFFSET: -24.83		ELEVATION: 47.20		NORTHING: 293782.764		EASTING: 642763.242		STATION: 13+37.85		OFFSET: -26.82		ELEVATION: 47.14		NORTHING: 293777.686		EASTING: 642801.236	
COMMENTS: N/A				COMMENTS: N/A				COMMENTS: N/A				COMMENTS: N/A							
SAMPLE INFORMATION										SAMPLE INFORMATION									
NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS	NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS	NO.	DEPTH	BLOWS /6"	DESCRIPTION	CLASS /G.I.	REMARKS		
1	0.0	4	MOIST LOOSE BROWN SILTY FINE SAND W/SOME COARSE SAND, TRACE OF FINE GRAVEL.	A-2-4(0)		1	0.0		MOIST BROWN FINE TO COARSE SAND W/TRACE FINE GRAVEL AND SILT.	A-1-B	HAND AUGER								
	0.0	3					0.0												
	0.0	4					0.0												
2	0.0	3	WET LOOSE BROWN FINE SANDY SILT W/SOME COARSE SAND AND ORGANIC MATTER, TRACE OF FINE GRAVEL.	A-2-4(0)		2	0.0		MOIST BROWN FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)	HAND AUGER								
	2.0	2					2.0												
	2.0	3					2.0												
3	2.0	4	WET LOOSE BROWN SILTY FINE SAND W/SOME COARSE SAND, TRACE OF FINE GRAVEL.	A-2-4(0)		3	2.0	WH	WET VERY LOOSE BROWN FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)									
	4.0	4					4.0	1											
4	4.0	7	WET LOOSE BROWN SILTY FINE SAND W/TRACE COARSE SAND AND FINE GRAVEL.	A-2-4(0)		4	4.0	WH	WET VERY LOOSE BROWN FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)									
	6.0	5					6.0	1											
5	6.0	5	WET LOOSE BROWN FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)		5	6.0	4	WET MEDIUM DENSE GRAY FINE TO COARSE SAND W/TRACE SILT AND FINE GRAVEL.	A-3									
	8.0	5					8.0	5											
	8.0	6			WATER TABLE		8.0	6											
6	8.0	4	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)		6	8.0	11	WET MEDIUM DENSE GRAY FINE TO COARSE SAND W/TRACE SILT AND FINE GRAVEL.	A-3									
	10.0	5					10.0	9											
	10.0	8					10.0	10											
7	10.0	4	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME FINE GRAVEL, TRACE OF SILT.	A-1-B	BOT. COURSE AGGREGATE (WEST PIPE) BOT. COURSE AGGREGATE (EAST PIPE)	7	10.0	8	WET MEDIUM DENSE GRAY FINE SAND W/SOME COARSE SAND, FINE GRAVEL AND SILT.	A-2-4(0)	BOT. COURSE AGGREGATE (WEST PIPE) BOT. COURSE AGGREGATE (EAST PIPE)								
	12.0	9					12.0	4											
8	12.0	3	WET LOOSE BROWN COARSE TO FINE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-1-B		8	12.0	4	WET LOOSE GRAY FINE SAND W/SOME COARSE SAND AND SILT, TRACE OF FINE GRAVEL.	A-2-4(0)									
	14.0	5					14.0	3											
	14.0	7					14.0	6											
9	14.0	4	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/TRACE FINE GRAVEL AND SILT.	A-1-B		9	14.0	5	WET MEDIUM DENSE GRAY FINE TO COARSE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-2-4(0)									
	16.0	6					16.0	9											
	16.0	13					16.0	13											
10	16.0	5	WET MEDIUM DENSE BROWN FINE SAND W/SOME COARSE SAND AND SILT, TRACE OF FINE GRAVEL.	A-2-4(0)		10	16.0	15	WET MEDIUM DENSE GRAY COARSE TO FINE SAND W/TRACE FINE GRAVEL AND SILT.	A-1-B									
	18.0	5					18.0	10											
	18.0	6					18.0	11											
11	18.0	9	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/TRACE FINE GRAVEL AND SILT.	A-1-B		11	18.0	8	WET MEDIUM DENSE GRAY COARSE TO FINE SAND W/TRACE SILT AND FINE GRAVEL.	A-1-B									
	23.0	10					23.0	9											
	23.0	14					23.0	11											
	25.0	20					25.0	16											
	25.0		END BORING				25.0		END BORING										

NOTES:

- BORING LOGS WERE CREATED BY THE DELAWARE DEPARTMENT OF TRANSPORTATION. SUBSURFACE EXPLORATION HAS BEEN COMPLETED BY THE WALTON CORPORATION.
- REFER TO THE CONSTRUCTION PLAN SHEET FOR APPROXIMATE BORING LOCATIONS.
- SOIL SAMPLING: 2 INCHES OUTSIDE DIAMETER SPLIT BARREL SAMPLER, DRIVEN WITH 140-LB HAMMER, FREE FALLING 30 IN. TO COLLECT SOIL SAMPLES OF 24 INCHES IN DEPTH.
- ALL DEPTHS ARE GIVEN IN FEET.

ADDENDUMS / REVISIONS

NOT TO SCALE

BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH

CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML
COUNTY	CHECKED BY:	CAS
SUSSEX		

BORING LOG

SHEET NO.	9
TOTAL SHTS.	19



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, SECTION 7217, SPECIAL EXCEPTION (b).
 - DNREC - WATER QUALITY (WQC) & COASTAL ZONE CONSISTENCY (CZM): ISSUED

* 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 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 OR REJECT THE REQUEST, WHICH MAY TAKE UP TO 3 MONTHS. 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 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 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. PROTECTION OF RESOURCES:

- A. CLEARING IN WETLAND AREAS SHALL BE KEPT TO A MINIMUM ABSOLUTELY NECESSARY FOR CONSTRUCTION ACCESS. ALL EQUIPMENT TRAVERSING WETLANDS AND SUBAQUEOUS LAND SHALL BE SUPPORTED ON MATS. PAYMENT FOR MATS SHALL BE MADE UNDER 601520 - TIMBER MAT. IN WETLAND AREAS THAT ARE CLEARED, THERE SHALL BE NO GRUBBING EXCEPT WHERE NECESSARY TO CONSTRUCT PROJECT COMPONENTS SUCH AS FOUNDATIONS AND RIPRAP PROTECTION. VEGETATION SHALL BE CUT FLUSH WITH THE GROUND (I.E. NO DISTURBANCE OF THE ROOT MAT. TEMPORARILY DISTURBED WETLAND AREAS SHALL BE RESTORED TO GRADE AND SEEDED WITH TEMPORARY GRASS SEEDING - DRY GROUND, (PAYMENT UNDER ITEM 908017).
- B. SILT FENCE OR CONSTRUCTION SAFETY FENCE SHALL BE USED ALONG THE LIMITS OF CONSTRUCTION IN ALL AREAS WHERE WATER/WETLANDS ARE BEING IMPACTED AS SHOWN ON EC SHEETS), AND ALSO IN ANY AREA WHERE WATER/WETLANDS EXIST WITHIN 20 FEET OF THE LOC (AS SHOWN ON CONSTRUCTION PLANS). CONTRACTOR ACCESS BEYOND THE LOC IS STRICTLY PROHIBITED.
- C. SILT FENCE INSTALLATION ADJACENT TO WOODED UPLANDS/ WETLANDS: SANDBAGS SHALL BE USED TO SECURE SILT FENCE IN LIEU OF TRENCHING UNLESS PROPER EROSION & SEDIMENT CONTROL CANNOT BE MAINTAINED. SANDBAGS USED TO SECURE SILT FENCE SHALL BE INCIDENTAL TO ITEM NUMBER 905001 - SILT FENCE. THE ENVIRONMENTAL STUDIES SECTION (CAROL SULLIVAN, 302-760-2129) CAN PROVIDE FURTHER GUIDANCE REGARDING THIS METHOD OF INSTALLATION.
- D. IF IT IS NECESSARY TO REMOVE ANY OF THE TREES MARKED DO NOT DISTURB (DND), THE CONTRACTOR MUST COORDINATE AND OBTAIN APPROVAL WITH THE ENVIRONMENTAL STUDIES SECTION PRIOR TO REMOVAL.

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
0-1	UPSTREAM RIPRAP	328.76	0.0075	18.26	DNREC/COE
0-2	UPSTREAM PIPES	282.52	0.0065	32.44	DNREC/COE
0-3	DOWNSTREAM RIPRAP	606.88	0.0139	33.72	DNREC/COE
0-4	DOWNSTREAM PIPES	205.31	0.0047	23.57	DNREC/COE
0-5	PIPE OVERLAP	227.17	0.0052	12.62	DNREC/COE
TOTAL PERMANENT OPEN WATER IMPACTS		1650.64	0.0378	120.61	DNREC/COE

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
W-1	UPSTREAM RIPRAP	28.14	0.0006	N/A	COE
W-2	UPSTREAM RIPRAP	170.90	0.0039	N/A	COE
W-3	DOWNSTREAM RIPRAP	196.00	0.0045	N/A	COE
W-4	DOWNSTREAM RIPRAP	175.20	0.0040	N/A	COE
TOTAL PERMANENT WETLAND IMPACT AREAS		570.24	0.013	N/A	COE

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OT-1	STILLING WELL	40.00	0.0009	2.22	DNREC/COE
OT-2	UPSTREAM SANDBAG DIKE	195.58	0.0045	9.48	DNREC/COE
OT-3	REINFORCED CONCRETE PIPES	1037.97	0.0238	121.40	DNREC/COE
OT-4	SUMP PIT (UPSTREAM)	50.27	0.0012	8.84	DNREC/COE
OT-5	SUMP PIT (DOWNSTREAM)	50.27	0.0012	8.84	DNREC/COE
OT-6	DOWNSTREAM SANDBAG DIKE	252.76	0.0058	11.85	DNREC/COE
OT-7	5' x 5' STABILIZED OUTFALL	25.00	0.0006	1.38	DNREC/COE
TOTAL TEMPORARY OPEN WATER IMPACTS		1651.85	0.038	164.01	DNREC/COE

TEMPORARY WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
WT-1	UPSTREAM SANDBAG DIKE	67.86	0.0016	N/A	COE
WT-2	SUMP PIT (DOWNSTREAM)	43.37	0.001	N/A	COE
WT-3	DOWNSTREAM SANDBAG DIKE	169.54	0.0039	N/A	COE
TOTAL TEMPORARY WETLAND IMPACT AREAS		280.77	0.0065	N/A	COE

ADDENDUMS / REVISIONS

NOT TO SCALE

BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH

CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML
COUNTY	CHECKED BY:	CAS
SUSSEX		

ENVIRONMENTAL
COMPLIANCE NOTES

SHEET NO.	10
TOTAL SHTS.	19



WETLANDS DELINEATED BY CHRISTIE BONNIEWELL, DELDOT, ON 06-05-2015 IN ACCORDANCE WITH THE US ARMY CORPS OF ENGINEERS CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE ATLANTIC AND GULF COAST REGIONAL SUPPLEMENT (2010).

ORIGINAL SHEET PREPARED BY GREG LAVENBURG ON 6-29-2015. SHEET LAST UPDATED ON 07-22-2015.

SEE THE ENVIRONMENTAL COMPLIANCE NOTES AND IMPACTS ON THE PREVIOUS SHEET.



LEGEND

PERMANENT IMPACT AREA

TEMPORARY IMPACT AREA

POHW PROPOSED ORDINARY HIGH WATER

OHW ORDINARY HIGH WATER

WL WETLAND BOUNDARY

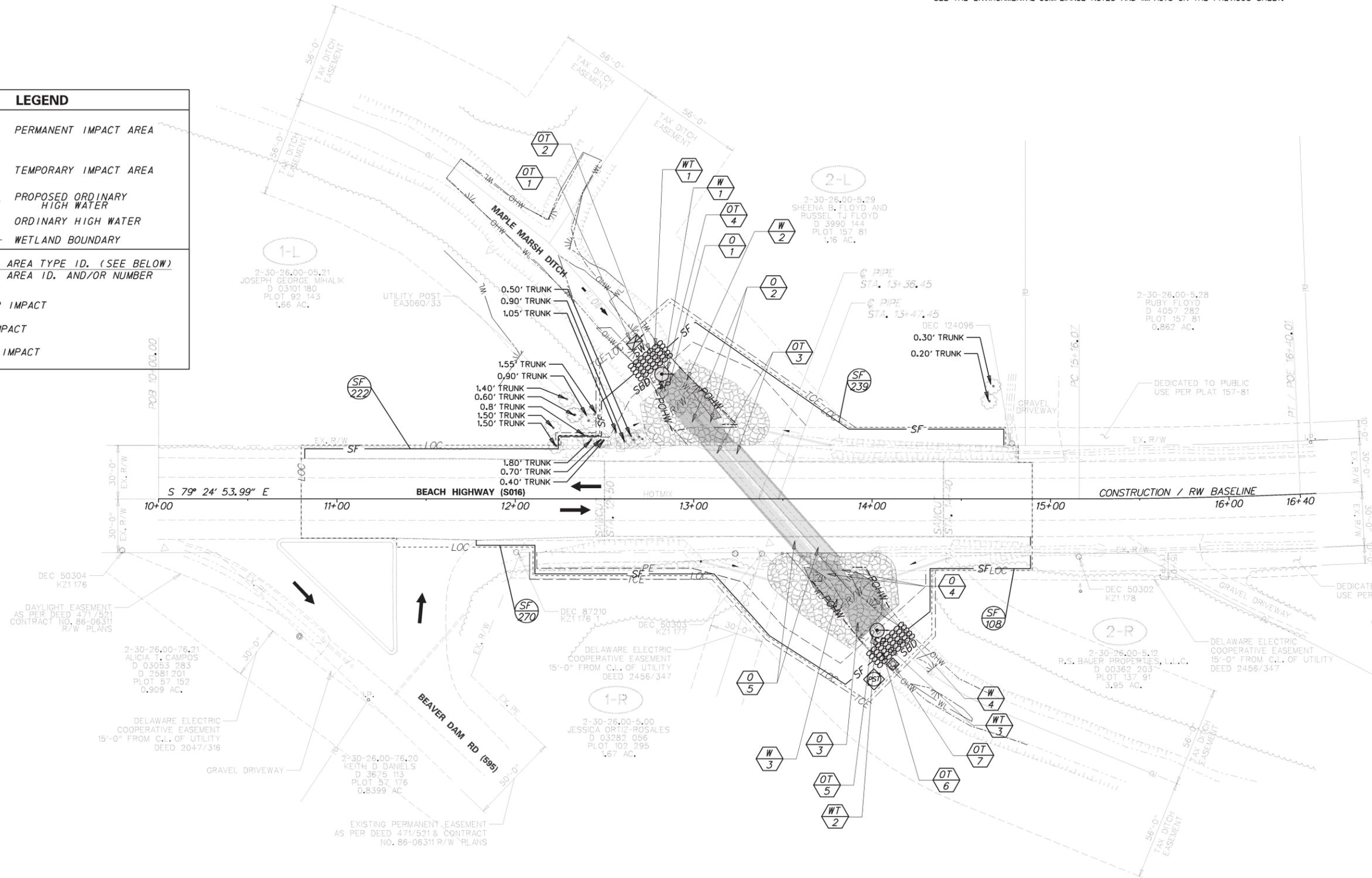
IMPACT AREA TYPE ID. (SEE BELOW)

IMPACT AREA ID. AND/OR NUMBER

O = OPEN WATER IMPACT

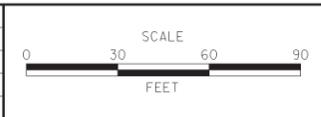
W = WETLAND IMPACT

T = TEMPORARY IMPACT

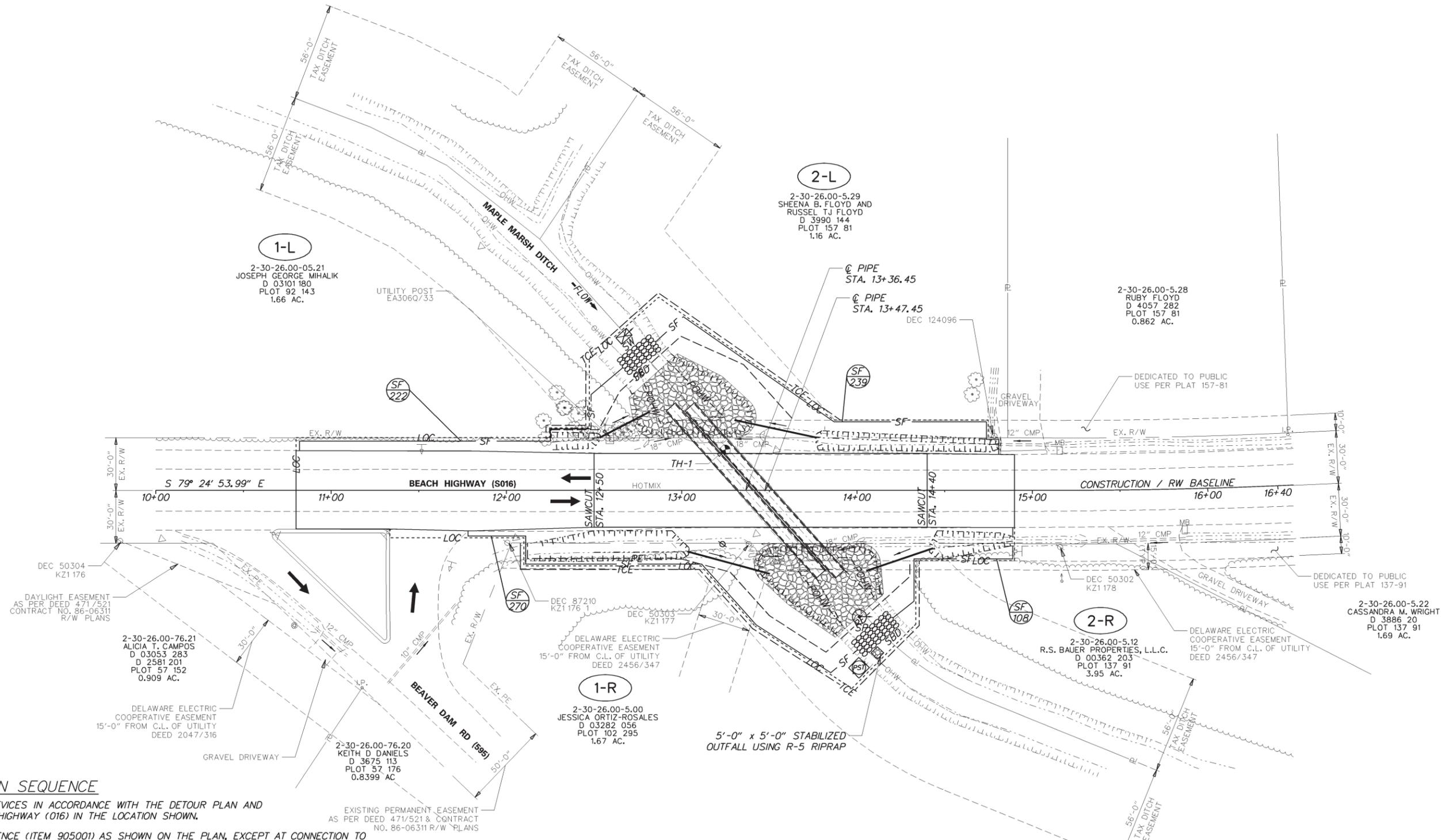


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ADDENDUMS / REVISIONS	



CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML & NED
COUNTY	CHECKED BY:	CAS
SUSSEX		



CONSTRUCTION SEQUENCE

1. INSTALL MOT DEVICES IN ACCORDANCE WITH THE DETOUR PLAN AND CLOSE BEACH HIGHWAY (016) IN THE LOCATION SHOWN.
2. INSTALL SILT FENCE (ITEM 905001) AS SHOWN ON THE PLAN, EXCEPT AT CONNECTION TO SANDBAG DIKES (ITEM 909005). INSTALL STILLING WELL (ITEM 905005) JUST UPSTREAM OF THE PROPOSED UPSTREAM SANDBAG DIKE. PLACE R-5 RIPRAP (ITEM 909005) 5 FEET IN DIRECTION OF FLOW BY 5 FEET WIDE AT THE PROPOSED DISCHARGE AREA. CONSTRUCT THE SANDBAG DIKES, AT THE LOCATIONS SHOWN, WITH TOP EL. OF 42.00 ON THE UPSTREAM SIDE. THE ELEVATION OF THE DOWNSTREAM SANDBAG DIKE SHALL NOT BE HIGHER THAN THE LOWEST ELEVATION ON THE UPSTREAM SANDBAG DIKE. WEIR OPENINGS SHOULD BE 2' WIDE x 1' DEEP BOTH UPSTREAM AND DOWNSTREAM. CONNECT SILT FENCE TO THE SANDBAG DIKES TO COMPLETELY 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 SHALL BE KEPT CLEAR OF DEBRIS AND OBSTRUCTIONS AT THE END OF EACH WORKDAY. THE BASE FLOW THROUGH THE PUMP SHALL BE 9.68 CFS.
3. INSTALL SUMP PIT DOWNSTREAM (ITEM 906003) AND PORTABLE SEDIMENT TANK (ITEM 906001) AS A SEDIMENT TRAPPING DEVICE. DEWATER THE WORK AREA IN ACCORDANCE WITH SECTION 902 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL BE AWARE OF THE POSSIBLE NEED TO USE A WELL-POINT SYSTEM (ITEM 906005). 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.
4. REMOVE THE EXISTING PIPES AND DRAINAGE PIPE RUNS IN THEIR ENTIRETY. INSTALL PROPOSED PIPES, DRAINAGE PIPE RUNS, RIPRAP, AND CHANNEL BED FILL IN ACCORDANCE WITH THE PLANS.
5. CONSTRUCT SLOPES, PLACE ANY REMAINING RIPRAP, AND COMPLETE ALL ROAD WORK IN ACCORDANCE WITH THE PLANS.
6. 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. REMOVE ALL MOT DEVICES AND REOPEN THE ROADWAY. REMOVAL OF MOT DEVICES MAY OCCUR PRIOR TO REMOVAL OF TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

SR 16
TO
CLOSE

STARTING
XX/XX/XX

DURING DETOUR

(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

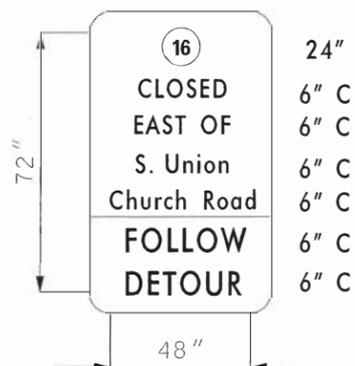
PCMS-2

SR 16
CLOSED

FOLLOW
DETOUR

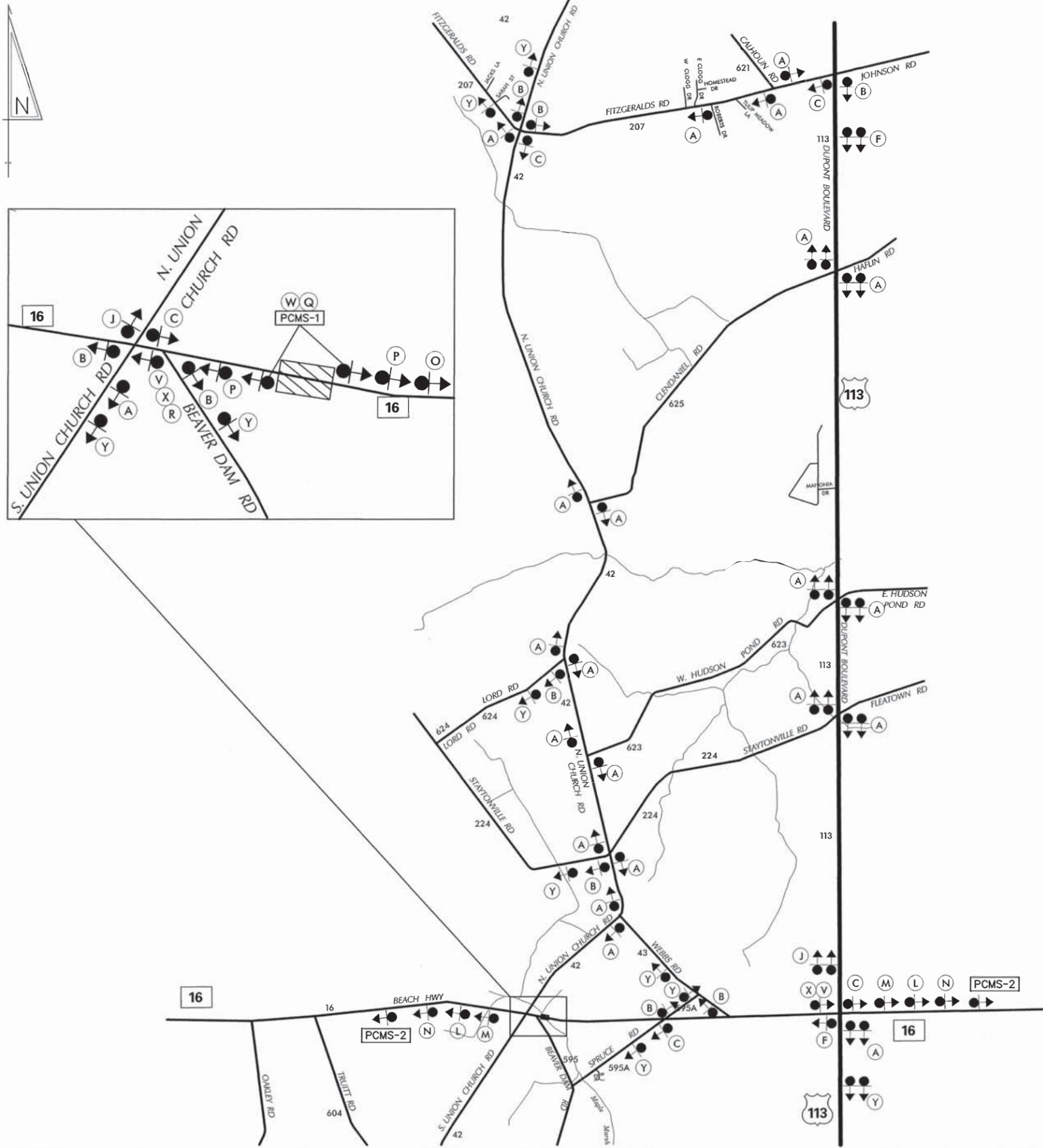
SPECIAL SIGNS

Y

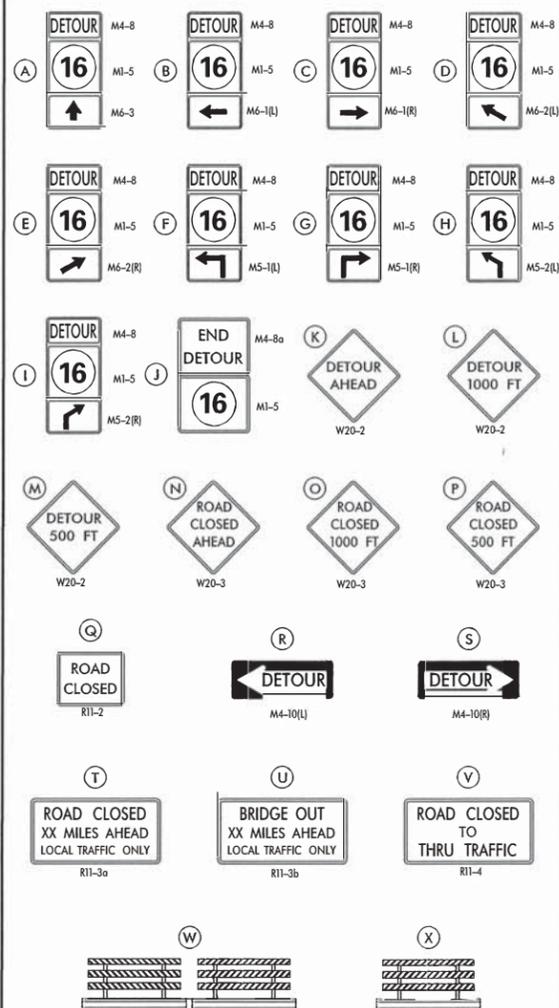


D/G RETROREFLECTIVE
FLUORESCENT ORANGE

24" 24" 16 WHITE BACKGROUND; BLACK LEGEND



LEGEND



GENERAL NOTES

- ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
- DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
- SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
- THE COLORS, DIMENSIONS, AND CHARACTERISTICS OF ALL INTERSTATE, U.S. ROUTE, AND STATE ROUTE SHIELD SIGNS SHALL BE IN ACCORDANCE WITH SECTION 20.11 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 _____ DATE: _____ APPROVED CHIEF SAFETY OFFICER _____ DATE: 9-21-15 APPROVED TRAFFIC ENGINEER _____ DATE: 9/21/15

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

NOT TO SCALE

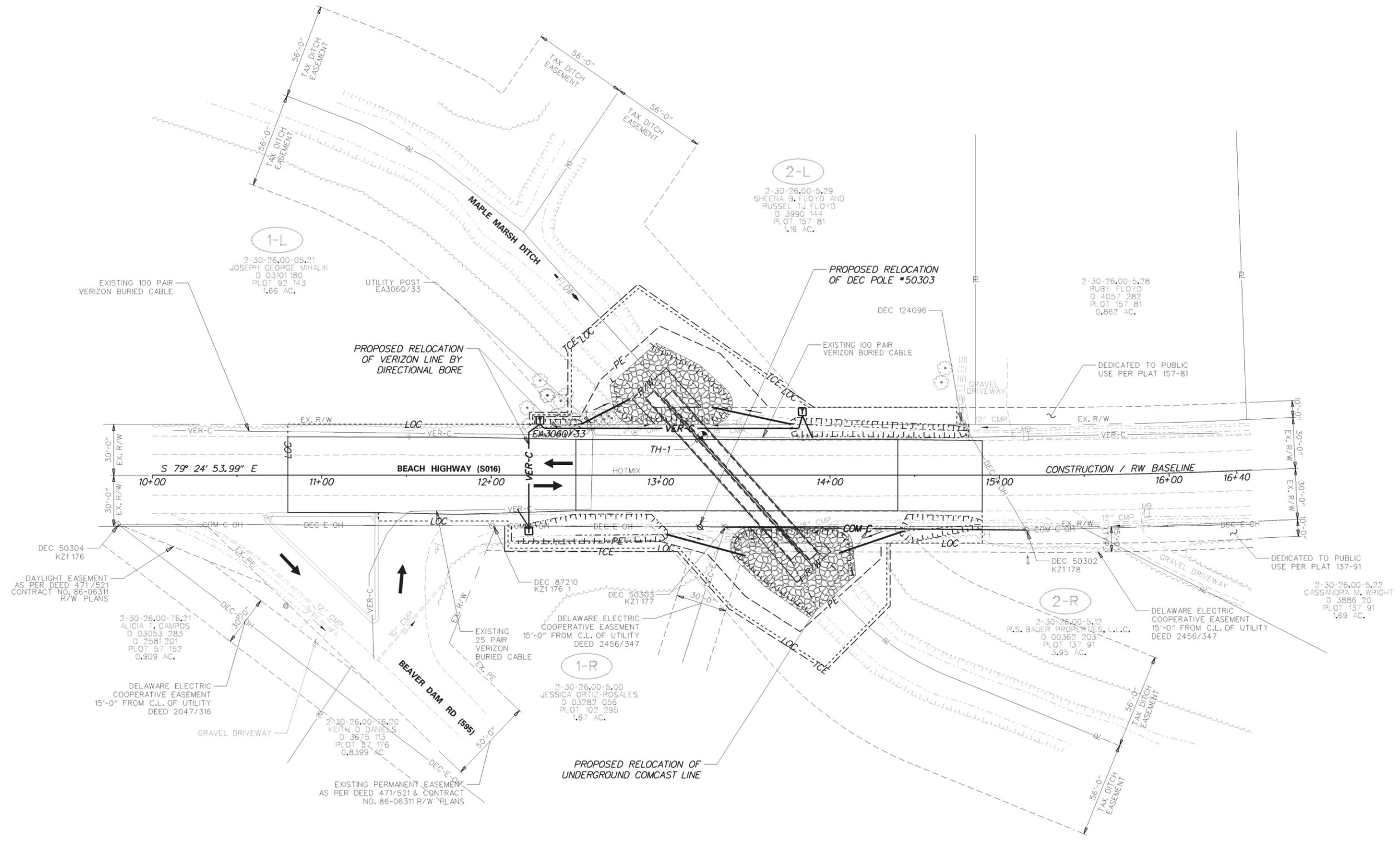
BR 3-914 on SR 16 Beach Highway over Maple-Marsh & Ditch

CONTRACT T201507302 COUNTY Sussex PERMIT NO. DESIGNED BY: Joe McMahon CHECKED BY: PH

VEHICULAR DETOUR PLAN
SR 16 Beach Highway)

SHEET NO. 13 TOTAL SHTS. 19

W:\MSV8\CELLS\PROJ\DEV\SBCEL



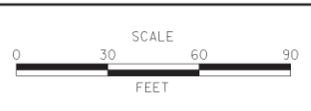
UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
TH-1	VER-C	13+24.90	-23.12	47.44	1.62	1" CABLE

NOTE: ALL PARCELS SHOWN ON SOUTH SIDE OF SR 16 BEACH HIGHWAY ARE SUBJECT TO A 30'-0" WIDE BLANKET EASEMENT WITH DELAWARE ELECTRIC COOPERATIVE AS SHOWN ON THE PLANS (15'-0" FROM CENTERLINE OF UTILITY LINES). EASEMENT INCLUDES UNDERGROUND AND OVERHEAD UTILITIES.

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ADDENDUMS / REVISIONS	

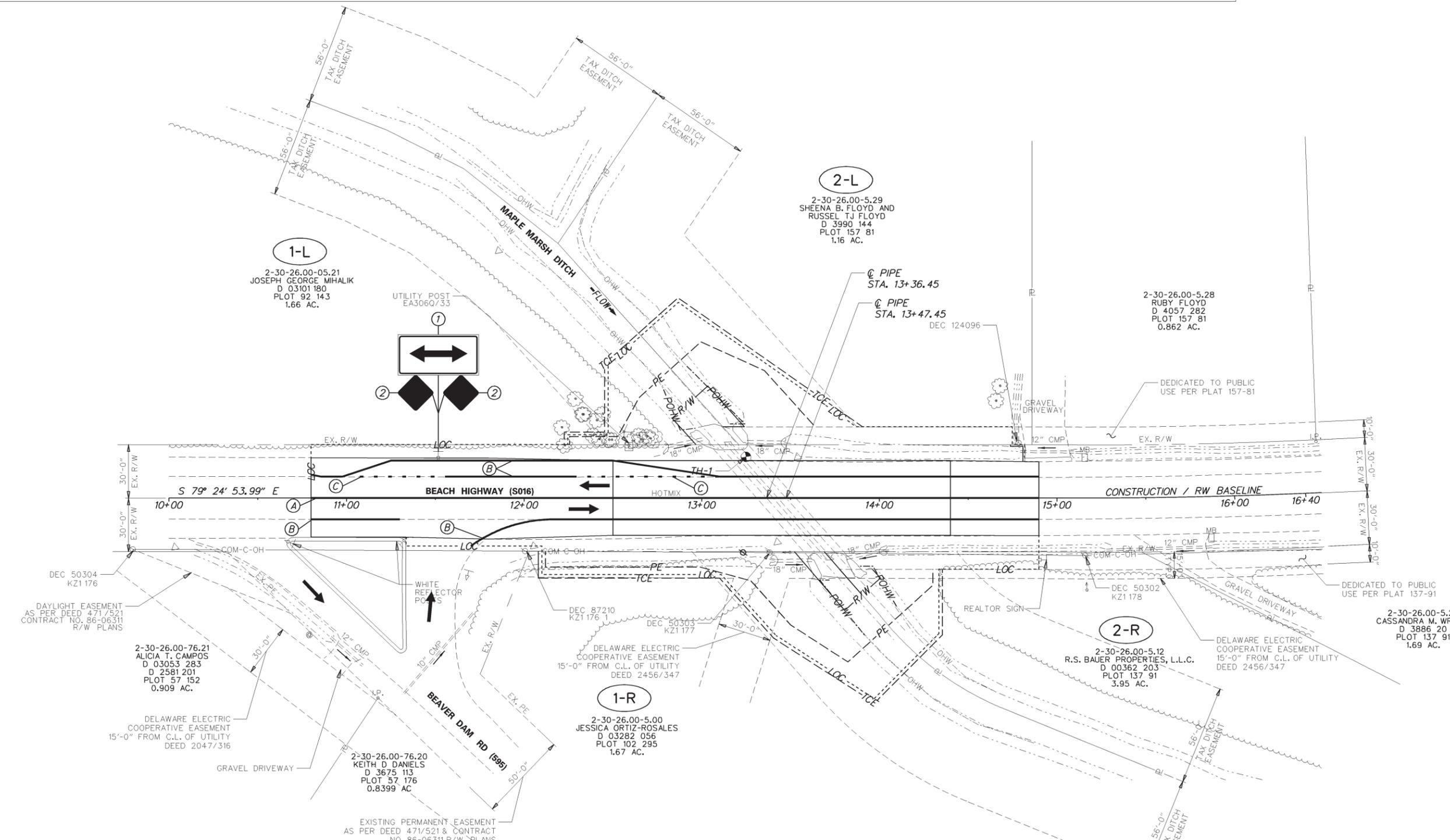


**BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH**

CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML & NED
COUNTY	CHECKED BY:	CAS
SUSSEX		

UTILITY RELOCATION PLAN	SHEET NO.	14
	TOTAL SHTS.	19

#	SHEET NO.	PLAN INDICATOR	CODE	QTY.	DESCRIPTION	ASSEMBLY NO.	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	ITEM 749687 SINGLE POST			ITEM 749690 MULTI POST			POST INSTALLATION TYPE	Code X11 12' Post (W/ Basepost)	ITEM 749688 4" HOLE, 0-6" (EACH)	ITEM 749689 4" HOLE, >6" (EACH)
										SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL				
778	15	1	W1-7(48)	1	TWO DIRECTIONAL LARGE ARROW - 48x24	1	48"	24"	8	REMAIN	0	0	REMAIN	0	0	0	0	0	
1964	15	2	OM4-3	2	END OF ROAD OBJECT MARKER	1	18"	18"	2.25	REMAIN	0	0	REMAIN	0	0	0	0		



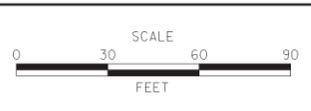
PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	860 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	900 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	140 LF

NOTE: STRIPING ASSOCIATED WITH SYMBOL 'A' AND 'B' HAVE AN ADDITIONAL 10 FT OF STRIPING AT EACH END OF EACH LINE AT THE LOCATION OF THE PROJECT LIMITS. THIS ADDITIONAL QUANTITY IS USED TO ACCOUNT FOR ANY DAMAGE TO THE EXISTING STRIPING AT THE ROADWAY TIE-IN POINTS, AND HAS BEEN REFLECTED IN THE STRIPING QUANTITIES SHOWN.

NOTE: ALL PARCELS SHOWN ON SOUTH SIDE OF SR 16 BEACH HIGHWAY ARE SUBJECT TO A 30'-0" WIDE BLANKET EASEMENT WITH DELAWARE ELECTRIC COOPERATIVE AS SHOWN ON THE PLANS (15'-0" FROM CENTERLINE OF UTILITY LINES). EASEMENT INCLUDES UNDERGROUND AND OVERHEAD UTILITIES.



ADDENDUMS / REVISIONS	



**BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH**

CONTRACT T201507302	BRIDGE NO. 3-915
COUNTY SUSSEX	DESIGNED BY: GML & NED
	CHECKED BY: CAS

SIGNING, STRIPING AND CONDUIT PLAN	SHEET NO. 15
	TOTAL SHTS. 19

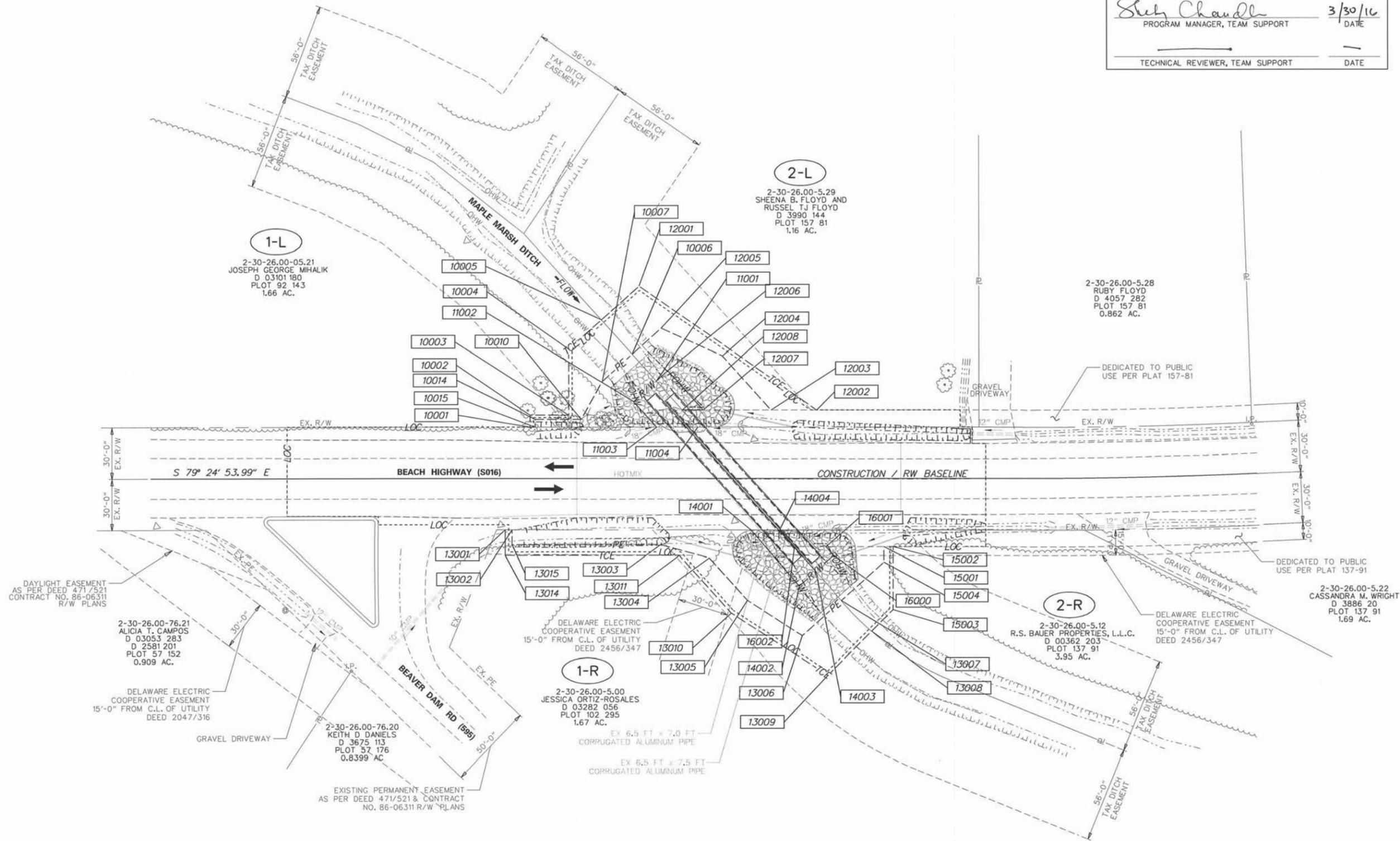
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RECOMMENDED AS TO ENGINEERING NEED

Mona C. Hite 3/30/16
 MANAGER, TEAM SUPPORT DATE

Shelby Chaudhry 3/30/16
 PROGRAM MANAGER, TEAM SUPPORT DATE

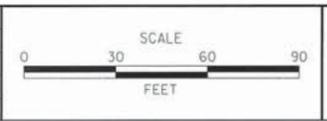
TECHNICAL REVIEWER, TEAM SUPPORT DATE



NOTE: ALL PARCELS SHOWN ON SOUTH SIDE OF SR 16 BEACH HIGHWAY ARE SUBJECT TO A 30'-0" WIDE BLANKET EASEMENT WITH DELAWARE ELECTRIC COOPERATIVE AS SHOWN ON THE PLANS (15'-0" FROM CENTERLINE OF UTILITY LINES). EASEMENT INCLUDES UNDERGROUND AND OVERHEAD UTILITIES.

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ADDENDUMS / REVISIONS



**BR 3-915 ON SR 16
 BEACH HIGHWAY OVER
 MAPLE MARSH DITCH**

CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML
COUNTY	CHECKED BY:	CAS
SUSSEX		

**RIGHT-OF-WAY PLAN
 SHEET 1 OF 4**

SHEET NO.	16
TOTAL SHTS.	19

ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-05.21	(1-L) JOSEPH GEORGE MIHALIK					FEE	D 03101 180	1.660			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
11003	5000	12+96.75	-30.00	293788.3616	642761.4191	N 31°31'40.64" W	20.07				
11002	5000	12+83.30	-44.88	293805.4656	642750.9263	N 58°35'06.00" E	17.97				
11001	5000	12+96.65	-56.91	293814.8315	642766.2611	S 31°25'24.57" E	36.21				
11004	5000	13+20.89	-30.00	293783.9284	642785.1418	N 79°24'53.57" W	24.13				
11003	5000	12+96.75	-30.00	293788.3616	642761.4191						
FIGURE 11100 AREA = 504.9824 SQ. FT. (0.0116 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-05.21	(1-L) JOSEPH GEORGE MIHALIK					P/E	D 03101 180	1.660			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
10010	5000	12+52.59	-34.50	293800.8975	642718.8350	N 39°37'07.49" E	25.44				
10007	5000	12+64.94	-56.75	293820.4965	642735.0594	N 58°35'59.41" E	23.67				
10006	5000	12+82.53	-72.58	293832.8299	642755.2647	S 31°25'24.57" E	21.09				
11001	5000	12+96.65	-56.91	293814.8315	642766.2611	S 58°35'06.00" W	17.97				
11002	5000	12+83.30	-44.88	293805.4656	642750.9263	S 31°31'40.64" E	20.07				
11003	5000	12+96.75	-30.00	293788.3616	642761.4191	N 79°24'53.57" W	71.20				
10015	5000	12+25.55	-30.00	293801.4613	642691.4279	N 10°35'06.01" E	4.50				
10014	5000	12+25.55	-34.50	293805.8647	642692.2545	S 79°24'53.99" E	27.04				
10010	5000	12+52.59	-34.50	293800.8975	642718.8350						
FIGURE 11000 AREA = 1236.0750 SQ. FT. (0.0284 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-05.21	(1-L) JOSEPH GEORGE MIHALIK					TCE	D 03101 180	1.660			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
10001	5000	12+22.55	-30.00	293801.9892	642688.4783	N 10°35'06.01" E	7.00				
10002	5000	12+22.55	-37.00	293808.8694	642689.7640	S 79°24'53.99" E	22.69				
10003	5000	12+45.24	-37.00	293804.7013	642712.0685	N 10°35'06.01" E	38.50				
10004	5000	12+45.24	-75.50	293842.5460	642719.1407	N 58°42'58.48" E	25.76				
10005	5000	12+64.42	-92.69	293855.9228	642741.1557	S 31°25'24.55" E	27.06				
10006	5000	12+82.53	-72.58	293832.8299	642755.2647	S 58°35'59.41" W	23.67				
10007	5000	12+64.94	-56.75	293820.4965	642735.0594	S 39°37'07.49" W	25.44				
10010	5000	12+52.59	-34.50	293800.8975	642718.8350	N 79°24'53.99" W	27.04				
10014	5000	12+25.55	-34.50	293805.8647	642692.2545	S 10°35'06.01" W	4.50				
10015	5000	12+25.55	-30.00	293801.4613	642691.4279	N 79°28'40.70" W	3.00				
10001	5000	12+22.55	-30.00	293801.9892	642688.4783						
FIGURE 10000 AREA = 1225.1550 SQ. FT. (0.0281 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-5.00	(1-R) JESSICA ORTIZ-ROSALES					FEE	D 03282 056	1.670			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
14001	5000	13+52.17	30.05	293719.1553	642804.8594	S 79°21'36.16" E	16.77				
14004	5000	13+68.94	30.07	293716.0584	642821.3440	S 30°40'54.21" E	32.20				
14003	5000	13+90.18	54.27	293688.3655	642837.7749	S 58°35'06.01" W	13.10				
14002	5000	13+80.44	63.03	293681.5374	642826.5952	N 30°01'10.43" W	43.45				
14001	5000	13+52.17	30.05	293719.1553	642804.8594						
FIGURE 15100 AREA = 487.2956 SQ. FT. (0.0112 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-5.00	(1-R) JESSICA ORTIZ-ROSALES					P/E	D 03282 056	1.670			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
13002	5000	12+12.01	29.92	293745.0314	642667.1131	S 79°21'38.89" E	140.16				
14001	5000	13+52.17	30.05	293719.1553	642804.8594	S 30°01'10.43" E	43.45				
14002	5000	13+80.44	63.03	293681.5374	642826.5952	N 58°35'06.01" E	13.10				
14003	5000	13+90.18	54.27	293688.3655	642837.7749	S 30°07'20.40" E	22.75				
13007	5000	14+05.01	71.51	293668.6887	642849.1914	S 58°37'27.32" W	30.65				
13006	5000	13+82.23	92.00	293652.7329	642823.0266	N 46°35'36.22" W	38.30				
13005	5000	13+50.04	71.25	293679.0508	642795.2027	N 31°30'21.34" W	33.35				
13004	5000	13+27.68	46.50	293707.4862	642777.7734	N 64°20'26.26" W	29.77				
13003	5000	12+98.94	38.75	293720.3759	642750.9421	N 79°24'53.99" W	86.94				
13015	5000	12+12.00	38.75	293736.3462	642665.4816	N 10°38'20.32" E	8.84				
13002	5000	12+12.01	29.92	293745.0314	642667.1131						
FIGURE 15000 AREA = 3378.0757 SQ. FT. (0.0775 ACRES)											

ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-5.00	(1-R) JESSICA ORTIZ-ROSALES					TCE	D 03282 056	1.670			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
13001	5000	12+08.01	29.91	293745.7691	642663.1857	S 79°21'39.68" E	4.00				
13002	5000	12+12.00	29.92	293745.0314	642667.1131	S 10°38'20.32" W	8.84				
13015	5000	12+12.00	38.75	293736.3462	642665.4816	S 79°24'53.99" E	86.94				
13003	5000	12+98.94	38.75	293720.3759	642750.9421	S 64°20'26.26" E	29.77				
13004	5000	13+27.68	46.50	293707.4862	642777.7734	S 31°30'21.34" E	33.35				
13005	5000	13+50.04	71.25	293679.0508	642795.2027	S 46°35'36.22" E	38.30				
13006	5000	13+82.23	92.00	293652.7329	642823.0266	N 58°37'27.32" E	30.65				
13007	5000	14+05.01	71.51	293668.6887	642849.1914	S 34°20'21.26" E	25.26		25.29		-171.06
13008	5000	14+22.85	89.40	293647.8287	642863.4420	S 55°32'50.80" W	36.19				
13009	5000	13+97.28	115.00	293627.3579	642833.6039	N 46°50'04.63" W	67.32				
13010	5000	13+40.55	78.75	293673.4151	642784.4986	N 31°27'47.14" W	45.45				
13011	5000	13+10.11	45.00	293712.1842	642760.7751	N 79°24'53.99" W	102.11				
13014	5000	12+08.00	45.00	293730.9417	642660.4004	N 10°38'20.32" E	15.09				
13001	5000	12+08.01	29.91	293745.7691	642663.1857						
FIGURE 14000 AREA = 2624.0683 SQ. FT. (0.0602 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-5.29	(2-L) SHEENA B. FLOYD AND RUSSEL TJ FLOYD					FEE	D 0390 144	1.160			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
12008	5000	13+11.88	-40.00	293795.4136	642778.1248	N 31°25'24.57" W	22.76				
11001	5000	12+96.65	-56.91	293814.8315	642766.2611	N 58°35'06.03" E	9.08				
12006	5000	13+03.39	-62.98	293819.5618	642774.0060	S 31°24'24.64" E	30.92				
12007	5000	13+24.08	-40.00	293793.1722	642790.1185	N 79°24'53.90" W	12.20				
12008	5000	13+11.88	-40.00	293795.4136	642778.1248						
FIGURE 13100 AREA = 243.4520 SQ. FT. (0.0056 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-5.29	(2-L) SHEENA B. FLOYD AND RUSSEL TJ FLOYD					P/E	D 0390 144	1.160			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
11001	5000	12+96.65	-56.91	293814.8315	642766.2611	N 31°25'24.57" W	21.09				
10006	5000	12+82.53	-72.58	293832.8299	642755.2647	N 58°35'59.45" E	22.68				
12005	5000	12+99.39	-87.75	293844.6453	642774.6214	S 55°08'19.20" E	39.52				
12004	5000	13+35.42	-71.50	293822.0546	642807.0511	S 31°30'19.08" E	42.46				
12003	5000	13+63.88	-40.00	293785.8575	642829.2373	N 79°24'31.30" W	39.80				
12007	5000	13+24.08	-40.00	293793.1722	642790.1185	N 31°24'24.64" W	30.92				
12006	5000	13+03.39	-62.98	293819.5618	642774.0060	S 58°35'06.03" W	9.08				
11001	5000	12+96.65	-56.91	293814.8315	642766.2611						
FIGURE 13000 AREA = 1831.4708 SQ. FT. (0.0420 ACRES)											
ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
2-30-26.00-5.29	(2-L) SHEENA B. FLOYD AND RUSSEL TJ FLOYD					TCE	D 0390 144	1.160			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
10005	5000	12+64.42	-92								

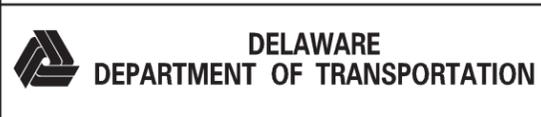
ASSESSMENT NUMBER	OWNERSHIP OF RECORD				TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)				
2-30-26.00-5.12	(2-R) R. S. BAUER PROPERTIES, L.L.C.				P/E	D 00362 203	3.950				
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
16001	5000	13+96.08	39.97	293701.3378	642846.2075	S 79°21'38.49" E	33.96				
15001	5000	14+30.05	40.00	293695.0673	642879.5870	S 10°35'06.01" W	9.00				
15004	5000	14+30.05	49.00	293686.2212	642877.9339	S 58°37'03.25" W	33.67				
13007	5000	14+05.01	71.51	293668.6887	642849.1914	N 30°07'20.40" W	22.75				
14003	5000	13+90.18	54.27	293688.3655	642837.7749	N 58°35'06.01" E	13.96				
16000	5000	14+00.58	44.93	293695.6409	642849.6869	N 31°24'53.99" W	6.68				
16001	5000	13+96.08	39.97	293701.3378	642846.2075						

FIGURE 17000 AREA = 758.6136 SQ. FT. (0.0174 ACRES)

ASSESSMENT NUMBER	OWNERSHIP OF RECORD				TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)				
2-30-26.00-5.12	(2-R) R. S. BAUER PROPERTIES, L.L.C.				TCE	D 00362 203	3.950				
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION / RW BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
15001	5000	14+30.05	40.00	293695.0673	642879.5870	S 79°24'52.68" E	5.45				
15002	5000	14+35.50	40.00	293694.0659	642884.9453	S 10°35'06.01" W	36.75				
15003	5000	14+35.50	76.75	293657.9417	642878.1947	S 55°34'09.24" W	17.89				
13008	5000	14+22.85	89.40	293647.8287	642863.4420			N 34°20'21.26" W	25.26	25.29	171.06
13007	5000	14+05.01	71.51	293668.6887	642849.1914	N 58°37'03.25" E	33.67				
15004	5000	14+30.05	49.00	293686.2212	642877.9339	N 10°35'06.01" E	9.00				
15001	5000	14+30.05	40.00	293695.0673	642879.5870						

FIGURE 16000 AREA = 767.1835 SQ. FT. (0.0176 ACRES)

LEGEND	
FEE	AREA OF ACQUISITION
RW	AREA OCCUPIED BY EXISTING RW
PE	PERMANENT EASEMENT
TCE	TEMPORARY CONSTRUCTION EASEMENT
*	"-" OFFSET IS LEFT OF BASELINE
**	"-" CURVE TURNS TO THE LEFT



ADDENDUMS / REVISIONS

NOT TO SCALE

**BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH**

CONTRACT	BRIDGE NO.	3-915
T201507302	DESIGNED BY:	GML & NED
COUNTY	CHECKED BY:	CAS
SUSSEX		

RIGHT-OF-WAY DATA SHEET 3 OF 4	
SHEET NO.	18
TOTAL SHTS.	19

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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)			
2-30-26.00-05.21	16	(1-L) JOSEPH GEORGE MIHALIK	D 03101 180	D - 1.66	FEE	504,9824 / 0.01				71804,6176 / 1.65		0.01 AC (504.98 SF) IN EX. TAX DITCH EASEMENT 0.03 AC (1155.33 SF) IN EX. TAX DITCH EASEMENT 0.03 AC (1167.18 SF) IN EX. TAX DITCH EASEMENT
					P/E			1236,075 / 0.03				
					TCE				1225,155 / 0.03			
2-30-26.00-5.29	16	(2-L) SHEENA B. FLOYD AND RUSSEL TJ FLOYD	D 3990 144	D - 1.16	FEE	243,452 / 0.01				50286,148 / 1.15		0.01 AC (243.45 SF) IN EX. TAX DITCH EASEMENT 0.04 AC (1831.47 SF) IN EX. TAX DITCH EASEMENT 0.04 AC (1821.49 SF) IN EX. TAX DITCH EASEMENT
					P/E			1831,4708 / 0.04				
					TCE				1831,9809 / 0.04			
2-30-26.00-5.00	16	(1-R) JESSICA ORTIZ-ROSALES	D 03282 056	D - 1.67	FEE	487,2956 / 0.01						0.01 AC (487.29 SF) IN EX. TAX DITCH EASEMENT 0.006 AC (253.87 SF) IN EX. DEC EASEMENT 0.06 AC (2618.00 SF) IN EX. TAX DITCH EASEMENT 0.04 AC (1808.78 SF) IN EX. DEC EASEMENT 0.05 AC (1990.19 SF) IN EX. TAX DITCH EASEMENT 0.02 AC (1061.17 SF) IN EX. DEC EASEMENT
					P/E			3378,0757 / 0.08				
					TCE				2624,0683 / 0.06	72257,9044 / 1.66		
2-30-26.00-5.12	16	(2-R) R. S. BAUER PROPERTIES, L.L.C.	D 00362 203	D - 3.95	FEE	178,7069 / 0.00						0.00 AC (178.71 SF) IN EX. TAX DITCH EASEMENT 0.002 AC (94.59 SF) IN EX. DEC EASEMENT 0.02 AC (758.61 SF) IN EX. TAX DITCH EASEMENT 0.004 AC (162.44 SF) IN EX. DEC EASEMENT 0.02 AC (767.18 SF) IN EX. TAX DITCH EASEMENT 0.0006 AC (27.93 SF) IN EX. DEC EASEMENT
					P/E			758,6136 / 0.02				
					TCE				767,1835 / 0.02	171883,2931 / 3.95		

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

ADDENDUMS / REVISIONS

NOT TO SCALE

**BR 3-915 ON SR 16
BEACH HIGHWAY OVER
MAPLE MARSH DITCH**

CONTRACT T201507302	BRIDGE NO. 3-915
COUNTY SUSSEX	DESIGNED BY: GML
	CHECKED BY: CAS

**RIGHT-OF-WAY
TABULATION SHEET 4 OF 4**

SHEET NO. 19
TOTAL SHTS. 19



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