

**BEGIN  
CONTRACT T200811301  
STATION 62+75**

PLAN SHEET INDEX CROSS REFERENCE

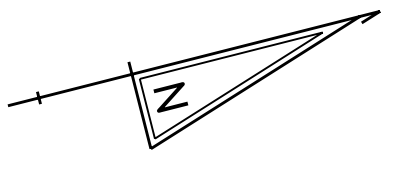
ENVIRONMENTAL COMPLIANCE PLANS	441	442	443	444	445	446	447	448
CONSTRUCTION PLANS	58, 59	59, 60	61, 62	62, 63	63, 64, 83	64, 84	65	64, 85

**LIMIT OF CONSTRUCTION  
CONTRACT T200811301  
STATION 1001+00**

**LIMIT OF CONSTRUCTION  
CONTRACT T200811301  
STATION 1020+60**

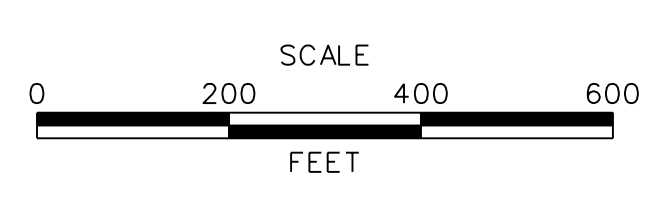
**LIMIT OF CONSTRUCTION  
CONTRACT T200811301  
STATION 511+58**

**DRAFT  
NOT FOR BIDDING  
AUGUST 2015**



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ADDENDUMS / REVISIONS	



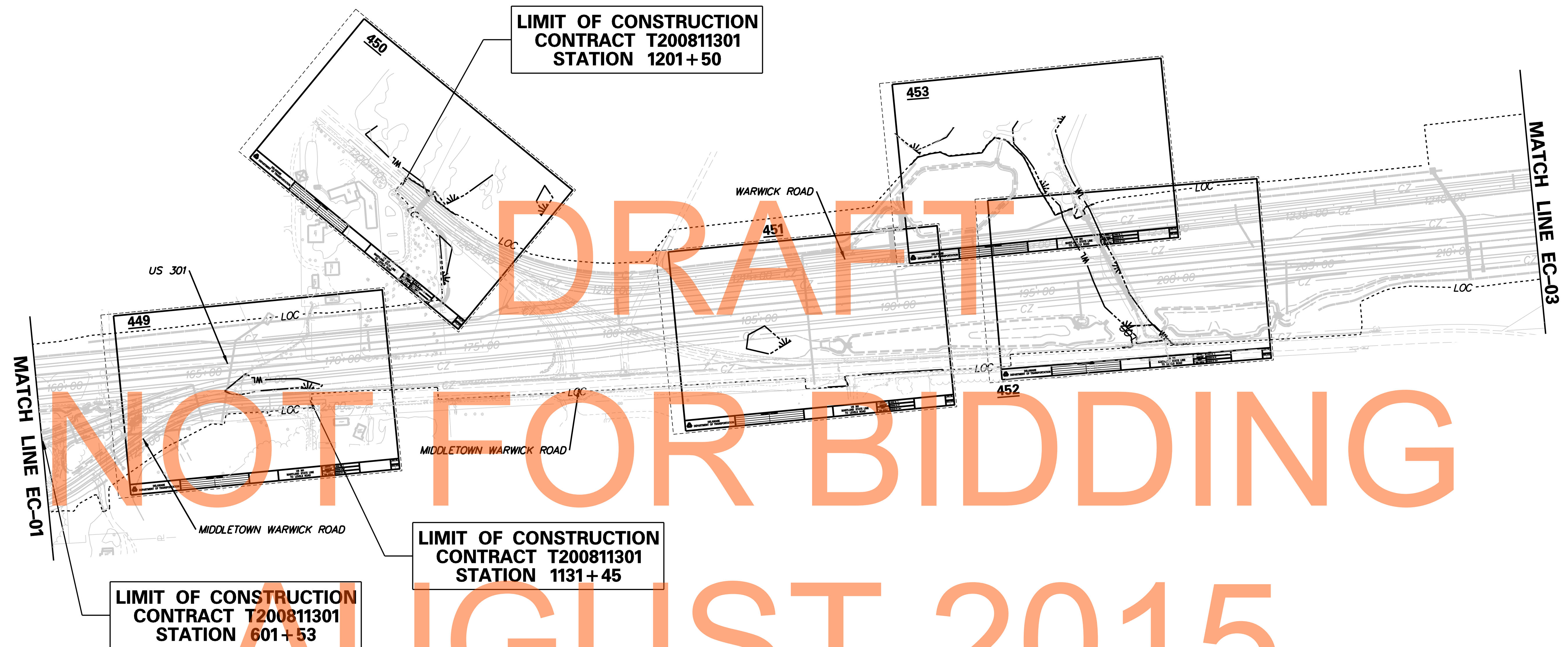
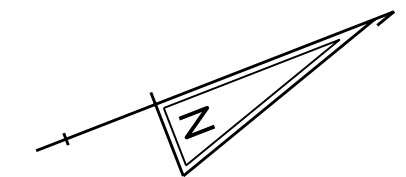
CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: RF
	CHECKED BY: SKH

<b>EC-01</b>
SHEET NO. 446
TOTAL SHTS. 850

MATCH LINE EC-02

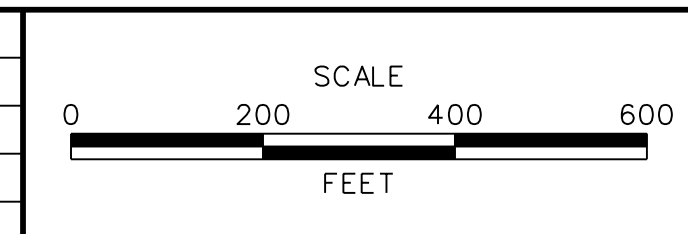
PLAN SHEET INDEX CROSS REFERENCE

ENVIRONMENTAL COMPLIANCE PLANS	449	450	451	452	453
CONSTRUCTION PLANS	66, 67	87	69	70, 71	90, 91



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ADDENDUMS / REVISIONS	



CONTRACT	BRIDGE NO.
T200811301	
COUNTY	DESIGNED BY: RF
NEW CASTLE	CHECKED BY: SKH

EC-02
SHEET NO. 447
TOTAL SHTS. 850

MATCH LINE BELOW LEFT THIS SHEET

LIMIT OF CONSTRUCTION  
CONTRACT T200811301  
STATION 32+00

MATCH LINE EC-02

END  
CONTRACT T200811301  
STATION 258+00

DRAFT  
NOT FOR BIDDING  
AUGUST 2015

LIMIT OF CONSTRUCTION  
CONTRACT T200811301  
STATION 732+00

LIMIT OF CONSTRUCTION  
CONTRACT T200811301  
STATION 667+00

LIMIT OF CONSTRUCTION  
CONTRACT T200811301  
STATION 748+00

PLAN SHEET INDEX CROSS REFERENCE

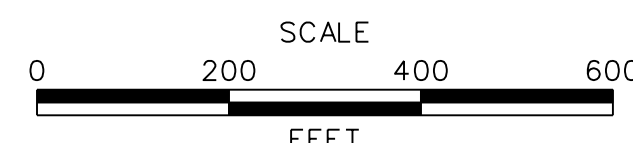
ENVIRONMENTAL COMPLIANCE PLANS	454
BORROW SITE GRADING PLANS	432

MATCH LINE ABOVE RIGHT THIS SHEET

EC-03



ADDENDUMS / REVISIONS



US 301  
MARYLAND STATE LINE  
TO LEVELS ROAD

CONTRACT	BRIDGE NO.
T200811301	
COUNTY	DESIGNED BY: RF
NEW CASTLE	CHECKED BY: SKH

ENVIRONMENTAL  
COMPLIANCE  
INDEX SHEET

SHEET NO.
448
TOTAL SHTS.
850

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**ENVIRONMENTAL COMPLIANCE NOTES**

**1. GENERAL NOTES:**

- A. THE PURPOSE OF THESE ENVIRONMENTAL COMPLIANCE SHEETS IS TO IDENTIFY THOSE ITEMS ASSOCIATED WITH ENVIRONMENTAL COMPLIANCE. IMPACT CALCULATIONS ARE FOR AGENCY REPORTING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING PURPOSES.
- B. AN ENVIRONMENTAL MONITOR WILL BE RESPONSIBLE FOR REVIEWING ENVIRONMENTAL COMPLIANCE. CONTACT INFORMATION FOR THE PROJECT'S ENVIRONMENTAL MONITOR WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETINGS AND MAY ALSO BE OBTAINED BY CALLING THE DELDOT ENVIRONMENTAL STUDIES SECTION AT (302) 760-2264. THE PRESENCE OF THE DEPARTMENT'S ENVIRONMENTAL MONITOR DOES NOT ALLEVIATE OR NULLIFY ANY OF THE CONTRACTOR'S OBLIGATIONS TO FULLY COMPLY WITH ALL ENVIRONMENTAL PERMITS AND/OR REGULATIONS.
- C. IF A DEPARTURE FROM THE APPROVED PLANS IS NECESSARY, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND ENVIRONMENTAL MONITOR IMMEDIATELY. THE ENVIRONMENTAL MONITOR SHALL COORDINATE WITH THE APPROPRIATE RESOURCE AGENCIES INCLUDING BUT NOT LIMITED TO THE ARMY CORPS OF ENGINEERS (USACE), DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL (DNREC), STATE HISTORIC PRESERVATION OFFICE (SHPO), AND MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE). WORK SHALL NOT PROCEED UNTIL ALL THE NECESSARY APPROVALS, PERMITS OR MODIFICATIONS ARE OBTAINED. THIS RESOURCE AGENCY APPROVAL IS IN ADDITION TO ANY APPROVAL THAT NEEDS TO BE DERIVED FROM THE ENGINEER. THE ENVIRONMENTAL MONITOR CANNOT APPROVE ANY CHANGE INDEPENDENT FROM THE ENGINEER. APPROVAL MAY TAKE A SIGNIFICANT AMOUNT OF TIME TO COMPLETE AND ALL CHANGES MAY NOT BE APPROVED. THE CONTRACTOR SHALL HAVE NO CLAIM AGAINST THE DEPARTMENT FOR COSTS OR DELAYS ASSOCIATED WITH RESOURCE AGENCY APPROVAL OR REJECTION OF CHANGES OR DEVIATIONS FROM THESE PLANS.
- D. USE OF THESE SHEETS DOES NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL CONDITIONS SET FORTH IN THE ENVIRONMENTAL STATEMENT AND PERMITS.
- E. THE IDENTIFIED PERMANENT AND TEMPORARY IMPACTS TO JURISDICTIONAL RESOURCES SHOWN ON THE ENVIRONMENTAL COMPLIANCE SHEETS ARE THE ONLY AUTHORIZED IMPACTS.

**2. NATURAL AND CULTURAL RESOURCE ISSUES:**

- A. PERMIT REQUIREMENTS/APPROVALS:
  - USACE - INDIVIDUAL PERMIT CENAP-OP-R-2006-6071-1 APPROVAL JANUARY 7, 2013; EXPIRES DECEMBER 31, 2023\*\*
  - DNREC SUBAQUEOUS LAND PERMIT APPROVAL JANUARY 30, 2012; EXPIRES JANUARY 30, 2017\*\*
  - DNREC WATER QUALITY CERTIFICATION APPROVAL JANUARY 30, 2012; EXPIRES JANUARY 30, 2017\*\*
  - DELAWARE COASTAL ZONE MANAGEMENT FEDERAL CONSISTENCY CERTIFICATION SEPTEMBER 14, 2007; MODIFIED APRIL 4, 2011; NO EXPIRATION\*\*
  - NEW CASTLE COUNTY FLOODPLAIN APPROVAL JANUARY 31, 2012; NO EXPIRATION\*\*
  - MDE NON-TIDAL WETLAND PERMIT APPROVAL DECEMBER 13, 2011; EXPIRES DECEMBER 13, 2014\*\*
  - MDE WATER QUALITY CERTIFICATION APPROVAL DECEMBER 13, 2011; EXPIRES DECEMBER 13, 2014\*\*

\* THE PERMITS/APPROVALS LISTED ARE THOSE REQUIRED FOR THIS PROJECT. THE ENVIRONMENTAL STUDIES SECTION IS RESPONSIBLE FOR COORDINATING/OBTAINING THESE PERMITS/APPROVALS.

\*\* THE CONTRACTOR MUST ENSURE THAT THESE PERMITS/APPROVALS ARE IN THEIR POSSESSION PRIOR TO BEGINNING OF CONSTRUCTION AND ENSURE THESE PERMITS/APPROVALS ARE DISPLAYED ON-SITE DURING THE ENTIRE CONSTRUCTION PERIOD.

- B. CONSTRUCTION RESTRICTIONS: NONE
- ENDANGERED SPECIES: NONE
- FISHERIES: NONE
- MIGRATORY BIRDS: NONE

**C. PROTECTION OF RESOURCES**

- I. ITEM 727552 - RESOURCE PROTECTION FENCE (WITH ASSOCIATED SIGNAGE) SHALL BE USED ALONG THE LIMIT OF CONSTRUCTION (LOC) AND OTHER AREAS SHOWN ON THE PLANS WHERE WETLANDS, WATERS OR CULTURAL RESOURCES EXIST. RESOURCE PROTECTION FENCE SHALL BE INSTALLED IMMEDIATELY AFTER STAKEOUT OF LOC AND PRIOR TO INSTALLATION OF EROSION AND SEDIMENT CONTROLS. THE CONTRACTOR SHALL STAKEOUT THE LOCATION OF THE RESOURCE PROTECTION FENCE AND THE ENVIRONMENTAL MONITOR WILL BE RESPONSIBLE FOR CONFIRMING OR ADJUSTING THE FENCING LOCATIONS PRIOR TO CONSTRUCTION. IMPROPERLY PLACED FENCE SHALL BE RE-INSTALLED AT CONTRACTOR EXPENSE. ANY ADDITIONAL RESOURCE PROTECTION FENCE AS REQUESTED BY THE ENVIRONMENTAL MONITOR AND CONFIRMED BY THE ENGINEER SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE. RESOURCE PROTECTION FENCE SIGNAGE SHALL BE PROVIDED BY DELDOT AND INSTALLED BY THE CONTRACTOR ALONG THE FENCE NO GREATER THAN 100 FEET APART AND WITH A MINIMUM OF 2 SIGNS PER CONTINUOUS FENCE RUN AS INDICATED IN THE SPECIAL PROVISIONS. RESOURCE PROTECTION FENCE SHALL BE PAID FOR UNDER ITEM 727552 - RESOURCE PROTECTION FENCE.
- II. THE PURPOSE OF ITEM 727552 - RESOURCE PROTECTION FENCE IS TO PREVENT IMPACTS TO SENSITIVE RESOURCES DURING CONSTRUCTION. ACCESS INTO THESE AREAS IS STRICTLY PROHIBITED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL EMPLOYEES UNDERSTAND AND COMPLY WITH THE PURPOSE OF THE RESOURCE PROTECTION FENCE.
- III. THE INSTALLATION OF THE RIGHT-OF-WAY FENCE AND RESOURCE PROTECTION FENCE ARE THE ONLY CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED TO OCCUR OUTSIDE OF THE LOC.
- IV. RESOURCE PROTECTION FENCE SHALL BE INSTALLED BY HAND AS PER THE DETAILS AND SPECIFICATIONS OF ITEM 727552 - RESOURCE PROTECTION FENCE. THERE SHALL BE NO GRUBBING FOR THE INSTALLATION OF RESOURCE PROTECTION FENCE. RIGHT-OF-WAY FENCE SHALL BE INSTALLED BY HAND IN SENSITIVE AREAS, INCLUDING WETLANDS, FORESTS, AND CULTURAL RESOURCE AREAS PROTECTED BY RESOURCE PROTECTION FENCE. THERE SHALL BE NO GRUBBING FOR THE INSTALLATION OF RIGHT-OF-WAY FENCE IN SENSITIVE AREAS WHERE CLEARING IS NECESSARY FOR FENCE INSTALLATION, VEGETATION SHALL BE CUT FLUSH WITH THE GROUND (I.E., NO DISTURBANCE OF THE ROOT MAT). ENVIRONMENTAL IMPACTS SHALL BE MINIMIZED DURING THE INSTALLATION OF THE RESOURCE PROTECTION FENCE AND RIGHT-OF-WAY FENCE AND THE REMOVAL OF THE RESOURCE PROTECTION FENCE. ACCESS AND INSTALLATION/REMOVAL OF RESOURCE PROTECTION FENCE AND INSTALLATION OF RIGHT-OF-WAY FENCE SHALL BE COORDINATED WITH THE ENVIRONMENTAL MONITOR.

**D. STREAM RESTORATION AND SLOPE RIPRAP TREATMENT:**

- I. 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 A SEPARATE SPECIAL PROVISION OR MATERIAL GRADATION HAS BEEN DETAILED ON THE PLANS FOR A SPECIFIC CHANNEL LOCATION, THAT SPECIFICATION OR GRADATION SHALL BE UTILIZED FOR CHANNEL BED FILL AT THE INDICATED LOCATION(S). PIPES WITH DIAMETERS ≥ 48" SHALL BE RECESSED A MINIMUM OF 12" BELOW THE STREAMBED ELEVATION. BOX CULVERTS SHALL BE RECESSED 12" BELOW THE STREAMBED ELEVATION. ALL RIPRAP SHALL BE PLACED SUCH THAT THE TOP OF THE RIPRAP IS PLACED TO MATCH THE INVERT ELEVATION OF THE PIPE OR CULVERT 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 CHANNEL BED FILL TO MATCH EXISTING UPSTREAM/DOWNSTREAM CHANNEL BED ELEVATIONS. PAYMENT UNDER ITEM 712531 - CHANNEL BED FILL.

PIPES AND RIPRAP SHALL BE RECESSED IN STREAMS LOCATED AT THE FOLLOWING CROSSINGS:  
UNNAMED TRIBUTARY TO SASSAFRAS RIVER - US 301 STA 126+00

PIPES AND RIPRAP SHALL NOT BE RECESSED AND RIPRAP SHALL BE CHOKED WITH ITEM 712531 - CHANNEL BED FILL TO CREATE A SMOOTH STREAM BOTTOM IN STREAMS LOCATED AT THE FOLLOWING CROSSINGS:  
UNNAMED TRIBUTARY TO SASSAFRAS RIVER - STRAWBERRY LANE STA 1019+00  
UNNAMED TRIBUTARY TO SANDY BRANCH - US 301 STA 198+00

- II. 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 PREDISTURBANCE CONDITIONS. ANY CAVITIES OR SCOUR HOLES RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE FILLED WITH CHANNEL BED FILL. PAYMENT UNDER ITEM 712531 - CHANNEL BED FILL.

- III. 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.

- IV. ALL RIPRAP ON THE STREAM BANK, ABOVE THE ORDINARY HIGH WATER MARK, SHALL BE PLACED AS DESCRIBED BELOW:

CHOKE THE RIPRAP WITH ENOUGH ITEM 302012 - DELAWARE #57 STONE TO PREVENT THE LOSS OF TOPSOIL THROUGH THE RIPRAP AS APPROVED BY THE ENGINEER. FILL THE REMAINING VOIDS WITH TOPSOIL SO THAT THE RIPRAP IS BARELY VISIBLE. REGARDLESS OF DEPTH, THIS SHALL BE PAID FOR UNDER ITEM 733001 - TOPSOILING, 4" DEPTH. APPLY AN ADDITIONAL 4 INCH LAYER OF TOPSOIL (ITEM 733001 - TOPSOILING, 4" DEPTH). SEED WITH ITEM 734531 - STREAMBANK SEED MIX FROM ABOVE THE ORDINARY HIGH WATER MARK TO THE TOP OF THE SLOPE. IMMEDIATELY FOLLOWING THE SEEDING, INSTALL ITEM 735533 - SOIL RETENTION BLANKET MULCH, TYPE 5. ALL WORK, STARTING WITH TOPSOIL PLACEMENT THROUGH SEEDING AND MULCHING, SHALL BE COMPLETED PRIOR TO ANY RAIN EVENT. RIPRAP AND ALL OTHER ITEMS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.

STREAMBANK RIPRAP SHALL BE TREATED AS DESCRIBED ABOVE IN STREAMS LOCATED AT THE FOLLOWING CROSSINGS:  
UNNAMED TRIBUTARY TO SASSAFRAS RIVER - US 301 STA 126+00  
UNNAMED TRIBUTARY TO SASSAFRAS RIVER - STRAWBERRY LANE STA 1019+00  
UNNAMED TRIBUTARY TO SANDY BRANCH - US 301 STA 198+00

- V. THE CHANNEL AND STREAM BANK SEGMENTS ENTERING AND EXITING THE BRIDGES, PIPES AND CULVERTS SHALL NOT BE WIDENED BEYOND THE DIMENSIONS SHOWN ON THE PLANS. THE CHANNEL WIDTH, CHANNELS BANKS AND SIDE-SLOPES SHALL NOT BE WIDENED OR RE-CONTOURED TO ACCOMMODATE EASIER CONSTRUCTION OR ACCESS.

**E. STAGING, STOCKPILING AND DISPOSAL:**

- I. NO STOCKPILING OR STORAGE OF EQUIPMENT, MATERIALS OR STRUCTURAL STEEL; NO STAGING AREA; AND NO INSTALLATION OF ANCILLARY FACILITIES SUCH AS CONCRETE OR ASPHALT PLANTS OR CONSTRUCTION TRAILERS SHALL BE PERMITTED ON ANY CULTURAL RESOURCE SITE OR WITHIN WETLANDS OR STREAMS OUTSIDE OF IDENTIFIED STORAGE AREAS APPROVED BY THE SHPO OR THE USACE. NO CONSTRUCTION MATERIALS, AGGREGATES, OR EARTH SHALL BE STOCKPILED OR STORED IN A MANNER THAT WOULD AFFECT WETLANDS OR STREAMS. STOCKPILES SHALL HAVE EROSION AND SEDIMENT CONTROLS APPROVED BY DELDOT.
- II. ALL EXCESS EXCAVATED MATERIALS NOT USED IN HIGHWAY OR COMPENSATORY MITIGATION SITE CONSTRUCTION SHALL BE DISPOSED OF IN UPLAND, NON-WETLAND, NON-CULTURAL RESOURCE SITE(S). THE EXCAVATED MATERIAL SHALL BE PROPERLY CONTAINED AND STABILIZED TO PREVENT ITS ENTRY INTO ANY ADJACENT WETLANDS OR WATERWAYS. OUTSIDE OF ANY LOCATION DESIGNATED ON PLANS FOR DISPOSAL, NO DISPOSAL/WASTING OPERATION SHALL COMMENCE UNTIL WRITTEN APPROVAL OF THE DISPOSAL SITE(S) IS OBTAINED BY THE ENGINEER FROM THE USACE AND THE SHPO. THE CONTRACTOR SHALL SUBMIT THE PROPOSED DISPOSAL SITE LOCATION(S) TO THE ENGINEER. THE ENGINEER WILL SUBMIT THE PROPOSED DISPOSAL SITE INFORMATION TO THE SHPO AND USACE FOR APPROVAL. THE DEPARTMENT WILL NOT CONSIDER ANY DELAYS OR MONETARY CLAIMS OF ANY NATURE RESULTING FROM DELAYS IN APPROVAL OR REJECTION OF DISPOSAL SITES OR FROM THE CONTRACTOR'S FAILURE OR DIFFICULTY IN FINDING ACCEPTABLE DISPOSAL SITES TO MEET THE TIME FRAMES AND CAPACITIES REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PLANS, EROSION AND SEDIMENTATION CONTROL MEASURES, ETC. REQUIRED BY THE APPROPRIATE REGULATORY AGENCY FOR UTILIZING OFF-SITE SPOIL AREAS.

**F. MINIMIZATION AND RESTORATION OF TEMPORARY IMPACTS:**

- I. ALL TEMPORARY IMPACTS SHOWN ON THESE SHEETS SHALL BE RESTORED AS SPECIFIED IN THE MISCELLANEOUS PROJECT NOTES TO PREDISTURBANCE GRADE AND CONDITION AND STABILIZED. THE AREA SHALL BE PLANTED AS SHOWN IN THE MOT SHEETS AND NOTED ON THESE EC SHEETS. STREAMS SHALL BE RESTORED TO PREDISTURBANCE PATTERN AND PROFILE.
- II. NO GRUBBING SHALL OCCUR IN AREAS OF WETLANDS THAT WILL BE TEMPORARILY IMPACTED AT THE LEVELS ROAD BORROW SITE (SEE SHEET EC-19). ALL TEMPORARY WETLAND IMPACT AREAS WILL BE RESTORED BY OTHERS UNDER CONTRACT T200911303.

**G. CULTURAL RESOURCES:**

IF ANY UNANTICIPATED DISCOVERIES OF ARCHAEOLOGICAL OR HUMAN REMAINS OCCUR DURING CONSTRUCTION, ALL WORK SHALL BE IMMEDIATELY SUSPENDED IN THE AREA OF THE DISCOVERY AND THE ENVIRONMENTAL MONITOR SHALL BE CONTACTED. THE ENVIRONMENTAL MONITOR WILL CONTACT DELDOT CULTURAL RESOURCES, SHPO AND USACE TO COMMENCE THE NECESSARY FEDERAL AND STATE COORDINATION. WORK SHALL NOT RESUME UNTIL APPROPRIATE RESOURCE AGENCY COORDINATION, INVESTIGATION AND/OR RECOVERY IS COMPLETE.

WETLANDS DELINEATED BY RUMMEL, KLEPPER, & KAHL, LLP. IN JUNE 2005 THROUGH MAY 2011 IN ACCORDANCE WITH THE 1987 USACE WETLAND DELINEATION MANUAL AND APPLICABLE REGIONAL SUPPLEMENTS.

PRELIMINARY JURISDICTIONAL DETERMINATION AUGUST 18, 2009 (EXPIRES AUGUST 18, 2014). WETLAND IDENTIFIERS (ALPHANUMERIC LABELS) CORRESPOND TO THE US 301 WETLAND DELINEATION REPORT AND ARE CONSISTENT WITH THE JURISDICTIONAL DETERMINATION.

SHEETS PREPARED BY: JACOBS  
DATE: MARCH 28, 2011

SHEETS LAST UPDATED: JANUARY 10, 2013

ALL IDENTIFIED WATERS/WETLANDS ON THESE ENVIRONMENTAL COMPLIANCE SHEETS ARE USACE JURISDICTIONAL AND/OR DNREC JURISDICTIONAL.



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	ADDENDUMS / REVISIONS		NOT TO SCALE	US 301 MARYLAND STATE LINE TO LEVELS ROAD	CONTRACT	BRIDGE NO.	ENVIRONMENTAL COMPLIANCE PLAN	SHEET NO.
					T200811301	449		
					COUNTY	DESIGNED BY: RF		TOTAL SHTS.
					NEW CASTLE	CHECKED BY: SKH		850

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
8-01	FILL	39.94	0.0009	1.23	USACE/DNREC
8-02	RIPRAP	162.46	0.0037	10.53	USACE/DNREC
8-03	FILL	199.49	0.0046	11.11	USACE/DNREC
8-04	FILL	1,636.39	0.0376	99.94	USACE/DNREC
8-05	RIPRAP	240.08	0.0055	15.56	USACE/DNREC
8-06	FILL	3,829.64	0.0879	58.06	USACE/DNREC
9-01	FILL	657.44	0.0151	36.22	USACE
9-02	EXCAVATION	92.65	0.0021	1.14	USACE
11-01	FILL	69.53	0.0016	1.75	USACE
11-02	FILL	36.06	0.0008	1.32	USACE
11-03	FILL	184.36	0.0042	5.98	USACE
11-04	RIPRAP	113.13	0.0026	5.67	USACE
13-01	FILL	227.43	0.0052	13.22	USACE
15-01	FILL	663.46	0.0152	10.95	USACE
15-02	FILL	79.65	0.0018	5.71	USACE
17-01	FILL	3,960.96	0.0909	58.03	USACE/DNREC
17-02	RIPRAP	126.44	0.0029	16.39	USACE/DNREC
TOTAL PERMANENT USACE WATER IMPACTS		12,319.11	0.2828	352.81	USACE
TOTAL PERMANENT DNREC WATER IMPACTS		10,195.40	0.2341	270.85	DNREC

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
8-OT1	E&S AREA	85.46	0.0020	3.85	USACE/DNREC
8-OT2	TEMPORARY ACCESS	425.68	0.0098	N/A	USACE/DNREC
8-OT3	E&S AREA	239.17	0.0055	12.96	USACE/DNREC
8-OT4	TEMPORARY ACCESS	10.87	0.0002	N/A	USACE/DNREC
11-OT1	TEMPORARY ACCESS	61.48	0.0014	N/A	USACE
11-OT2	TEMPORARY ACCESS	35.53	0.0008	N/A	USACE
17-OT1	E&S AREA	81.26	0.0019	3.70	USACE/DNREC
17-OT2	TEMPORARY ACCESS	597.79	0.0137	N/A	USACE/DNREC
17-OT3	E&S AREA	157.14	0.0036	4.48	USACE/DNREC
TOTAL TEMPORARY USACE WATER IMPACTS		1,694.38	0.0389	24.99	USACE
TOTAL PERMANENT DNREC WATER IMPACTS		1,597.37	0.0367	24.99	DNREC

TEMPORARY WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
19-WT1	TEMPORARY ACCESS	3,410.14	0.0783	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACT AREAS		3,410.14	0.0783	N/A	USACE

PERMANENT WETLAND BUFFER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
6-WB1	EXCAVATION	2,642.28	0.0607	N/A	MDE
8-WB1	EXCAVATION	1,948.83	0.0448	N/A	MDE
8-WB2	FILL	1,316.92	0.0302	N/A	MDE
8-WB3	FILL	5,641.34	0.1295	N/A	MDE
8-WB4	EXCAVATION	261.49	0.0060	N/A	MDE
TOTAL PERMANENT WETLAND BUFFER IMPACTS		11,810.86	0.2712	N/A	MDE

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
8-W1	FILL	44.48	0.0010	N/A	USACE
8-W2	EXCAVATION	198.00	0.0045	N/A	USACE
8-W3	RIPRAP	36.34	0.0008	N/A	USACE
8-W4	FILL	865.17	0.0199	N/A	USACE
8-W5	EXCAVATION	656.41	0.0151	N/A	USACE
8-W6	RIPRAP	145.81	0.0033	N/A	USACE
8-W7	FILL	16,383.73	0.3761	N/A	USACE
8-W8	EXCAVATION	260.00	0.0060	N/A	USACE
8-W9	EXCAVATION	2,092.52	0.0480	N/A	USACE/MDE
8-W10	FILL	7,139.90	0.1639	N/A	USACE/MDE
8-W11	RIPRAP	67.17	0.0015	N/A	USACE
8-W12	FILL	2,344.08	0.0538	N/A	USACE
8-W13	EXCAVATION	431.63	0.0099	N/A	USACE
9-W1	FILL	785.76	0.0180	N/A	USACE
9-W2	EXCAVATION	275.86	0.0063	N/A	USACE
9-W3	NON-VIABLE REMNANT	294.80	0.0068	N/A	USACE
9-W4	EXCAVATION	581.33	0.0133	N/A	USACE
9-W5	EXCAVATION	779.65	0.0179	N/A	USACE
9-W6	FILL	942.69	0.0216	N/A	USACE
10-W1	FILL	3,410.73	0.0783	N/A	USACE
10-W2	FILL	10,344.36	0.2375	N/A	USACE
10-W3	NON-VIABLE REMNANT	1,441.51	0.0331	N/A	USACE
10-W4	EXCAVATION	468.20	0.0107	N/A	USACE
10-W5	FILL	4,204.43	0.0965	N/A	USACE
11-W1	FILL	789.45	0.0181	N/A	USACE
11-W2	EXCAVATION	795.47	0.0183	N/A	USACE
11-W3	EXCAVATION	112.31	0.0026	N/A	USACE
12-W1	FILL	11,340.69	0.2603	N/A	USACE
12-W2	EXCAVATION	477.33	0.0110	N/A	USACE
13-W1	FILL	4,141.13	0.0951	N/A	USACE
13-W2	EXCAVATION	5,647.08	0.1296	N/A	USACE
13-W3	FILL	11,483.13	0.2636	N/A	USACE
13-W4	EXCAVATION	1,785.74	0.0410	N/A	USACE
13-W5	FILL	1,189.80	0.0273	N/A	USACE
13-W6	EXCAVATION	668.93	0.0154	N/A	USACE
13-W7	FILL	2,644.50	0.0607	N/A	USACE
13-W8	EXCAVATION	1,323.50	0.0304	N/A	USACE
13-W9	RIPRAP	11.95	0.0003	N/A	USACE
14-W1	FILL	12,688.71	0.2913	N/A	USACE
15-W1	EXCAVATION	3,816.74	0.0876	N/A	USACE
15-W2	EXCAVATION	223.65	0.0051	N/A	USACE
15-W3	RIPRAP	102.55	0.0024	N/A	USACE
16-W1	FILL	4,077.42	0.0936	N/A	USACE
16-W2	EXCAVATION	4,511.21	0.1036	N/A	USACE
17-W1	RIPRAP	204.00	0.0047	N/A	USACE
17-W2	EXCAVATION	2176.82	0.0500	N/A	USACE
17-W3	RIPRAP	52.68	0.0012	N/A	USACE
17-W4	FILL	25,478.67	0.5849	N/A	USACE
17-W5	EXCAVATION	651.03	0.0149	N/A	USACE
17-W6	RIPRAP	200.01	0.0046	N/A	USACE
17-W7	FILL	5,778.51	0.1327	N/A	USACE
17-W8	EXCAVATION	4,209.52	0.0966	N/A	USACE
17-W9	EXCAVATION	1,508.20	0.0346	N/A	USACE
TOTAL PERMANENT WETLAND IMPACTS		162,285.29	3.7255	N/A	USACE

NOT FOR CONSTRUCTION

AUGUST 2015

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 <b>DELAWARE DEPARTMENT OF TRANSPORTATION</b>	ADDENDUMS / REVISIONS	<b>NOT TO SCALE</b>	<b>US 301 MARYLAND STATE LINE TO LEVELS ROAD</b>	CONTRACT	BRIDGE NO.	<b>ENVIRONMENTAL COMPLIANCE PLAN</b>	SHEET NO.
	T200811301				DESIGNED BY: RF		450
	NEW CASTLE				CHECKED BY: SKH		TOTAL SHTS. 850

**LEGEND**

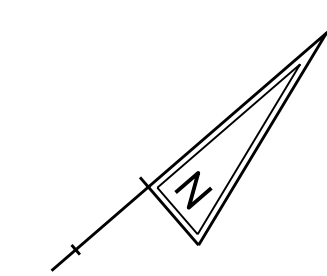
- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- OHW --- ORDINARY HIGH WATER
- OHW/WL --- ORD. HIGH WATER / WETLAND
- WL --- WETLAND BOUNDARY
- B --- 25-FOOT WETLAND BUFFER
- LOC --- LIMIT OF CONSTRUCTION
- RPF --- RESOURCE PROTECTION FENCE

**XX** IMPACT AREA TYPE ID. (SEE BELOW)  
**XX** IMPACT AREA ID. AND/OR NUMBER

- WB = WETLAND BUFFER IMPACT
- O = OPEN WATER IMPACT
- T = TEMPORARY IMPACT
- W = WETLAND IMPACT

NOTE: NO DNREC/USACE IMPACTS THIS SHEET.

PERMANENT WETLAND BUFFER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
6-WB1	EXCAVATION	2,642.28	0.0607	N/A	MDE



DRAFT

NOT FOR BIDDING

AUGUST 2015

92  
 LARRY J. ZANNINO, JR.  
 TAX MAP 64 / PARCEL 1  
 LIBER NDS 440 / LIBER 702  
 PROJECT PARCEL 92

95  
 JESSE C. DIANGELO, ET UX  
 TAX MAP 64 / PARCEL 10  
 LIBER 1187 / FOLIO 178  
 PROJECT PARCEL 95

FORMERLY:  
 PHILLIP L. CONNER  
 27542

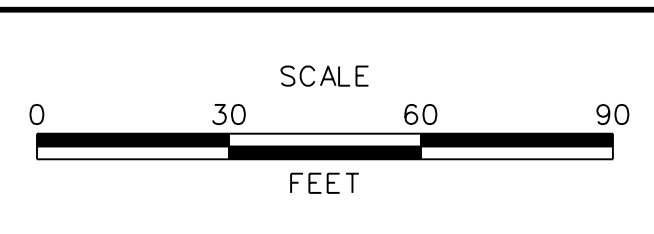
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MATCH LINE EC-07

EC-06



ADDENDUMS / REVISIONS	



**US 301**  
**MARYLAND STATE LINE**  
**TO LEVELS ROAD**

CONTRACT T200811301	BRIDGE NO.
COUNTY CECIL	DESIGNED BY: MJB
	CHECKED BY: SKH

**ENVIRONMENTAL**  
**COMPLIANCE PLAN**

SHEET NO. 451
TOTAL SHTS. 850

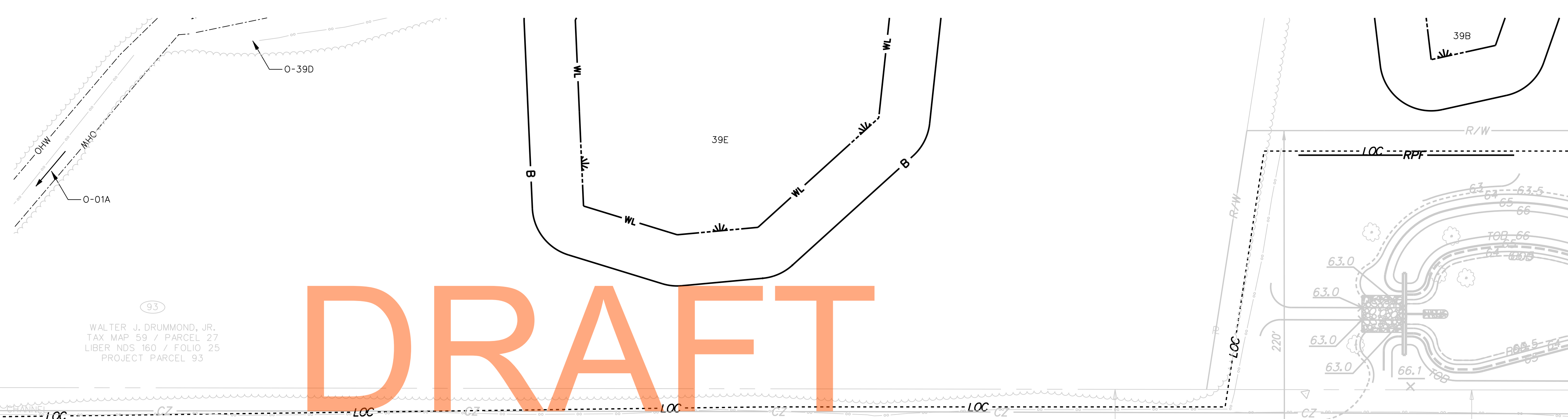
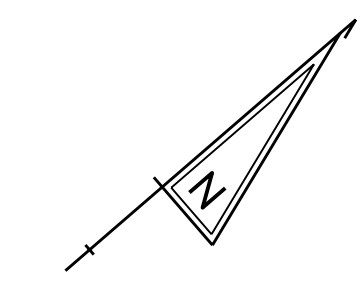
**LEGEND**

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- OHW --- ORDINARY HIGH WATER
- OHW/WL --- ORD. HIGH WATER / WETLAND
- WL --- WETLAND BOUNDARY
- B --- 25-FOOT WETLAND BUFFER
- LOC --- LIMIT OF CONSTRUCTION
- RPF --- RESOURCE PROTECTION FENCE

**XX** IMPACT AREA TYPE ID. (SEE BELOW)  
**XX** IMPACT AREA ID. AND/OR NUMBER

- WB = WETLAND BUFFER IMPACT
- O = OPEN WATER IMPACT
- T = TEMPORARY IMPACT
- W = WETLAND IMPACT

NOTE: NO IMPACT ON THIS SHEET.

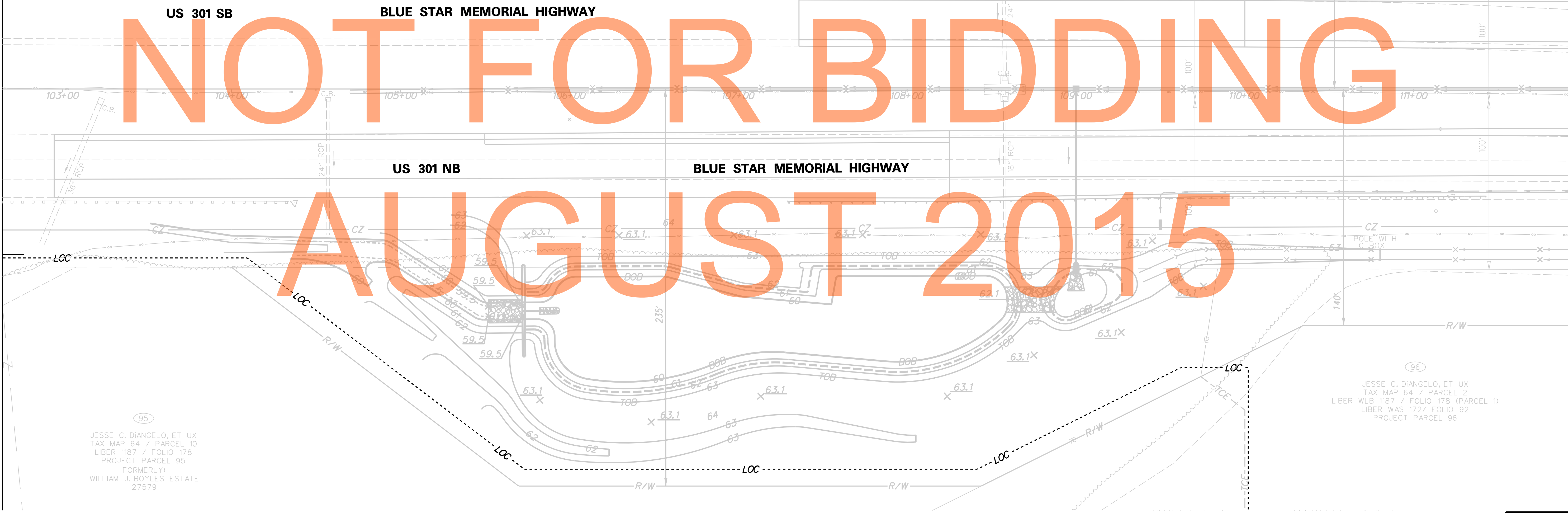


DRAFT

MATCH LINE EC-06

NOT FOR BIDDING

AUGUST 2015



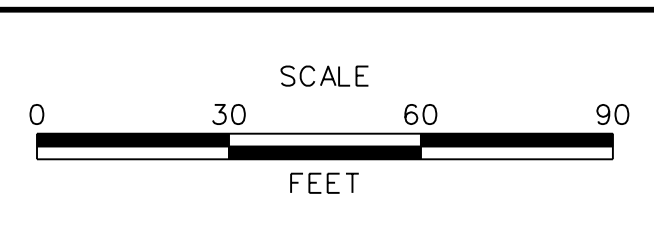
95  
 JESSE C. DIANGELO, ET UX  
 TAX MAP 64 / PARCEL 10  
 LIBER 1187 / FOLIO 178  
 PROJECT PARCEL 95  
 FORMERLY:  
 WILLIAM J. BOYLES ESTATE  
 27579

96  
 JESSE C. DIANGELO, ET UX  
 TAX MAP 64 / PARCEL 2  
 LIBER 1187 / FOLIO 178 (PARCEL 1)  
 LIBER WAS 172 / FOLIO 92  
 PROJECT PARCEL 96

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ADDENDUMS / REVISIONS	



**US 301  
 MARYLAND STATE LINE  
 TO LEVELS ROAD**



CONTRACT T200811301	BRIDGE NO.
COUNTY CECIL	DESIGNED BY: MJB
	CHECKED BY: SKH

**ENVIRONMENTAL  
 COMPLIANCE PLAN**

**EC-07**

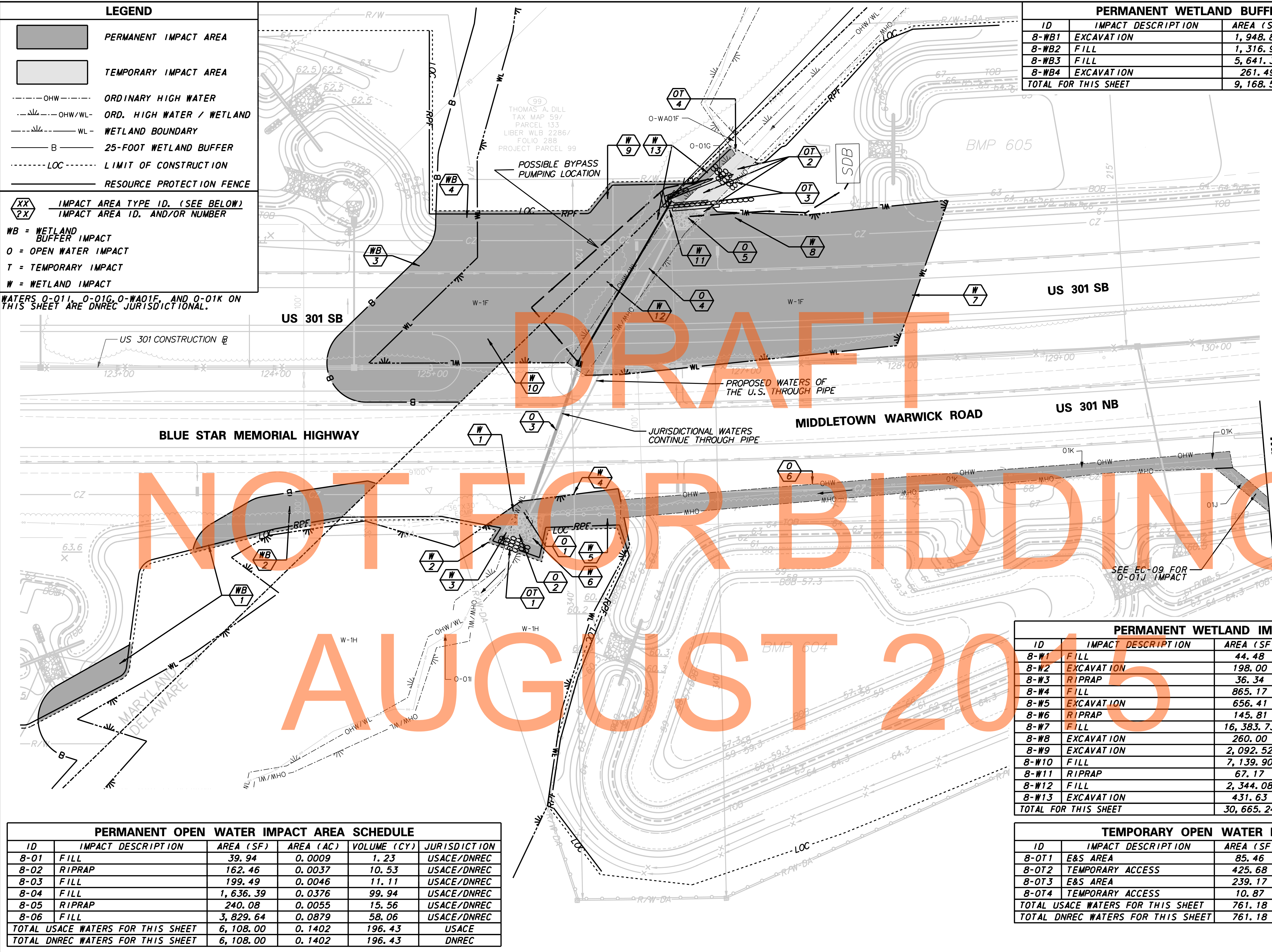
SHEET NO. 452
TOTAL SHTS. 850

**LEGEND**

-  PERMANENT IMPACT AREA
  -  TEMPORARY IMPACT AREA
  - OHW --- ORDINARY HIGH WATER
  - OHW/WL --- ORD. HIGH WATER / WETLAND
  - WL --- WETLAND BOUNDARY
  - B --- 25-FOOT WETLAND BUFFER
  - LOC --- LIMIT OF CONSTRUCTION
  - RPF --- RESOURCE PROTECTION FENCE
- XX** IMPACT AREA TYPE ID. (SEE BELOW)  
**2X** IMPACT AREA ID. AND/OR NUMBER
- WB = WETLAND BUFFER IMPACT  
 O = OPEN WATER IMPACT  
 T = TEMPORARY IMPACT  
 W = WETLAND IMPACT

WATERS O-011, O-01G, O-WA01F, AND O-01K ON THIS SHEET ARE DNREC JURISDICTIONAL.

PERMANENT WETLAND BUFFER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
8-WB1	EXCAVATION	1,948.83	0.0448	N/A	MDE
8-WB2	FILL	1,316.92	0.0302	N/A	MDE
8-WB3	FILL	5,641.34	0.1295	N/A	MDE
8-WB4	EXCAVATION	261.49	0.0060	N/A	MDE
<b>TOTAL FOR THIS SHEET</b>		<b>9,168.58</b>	<b>0.2105</b>	<b>N/A</b>	<b>MDE</b>



DRAFT

NOT FOR BIDDING

AUGUST 2016

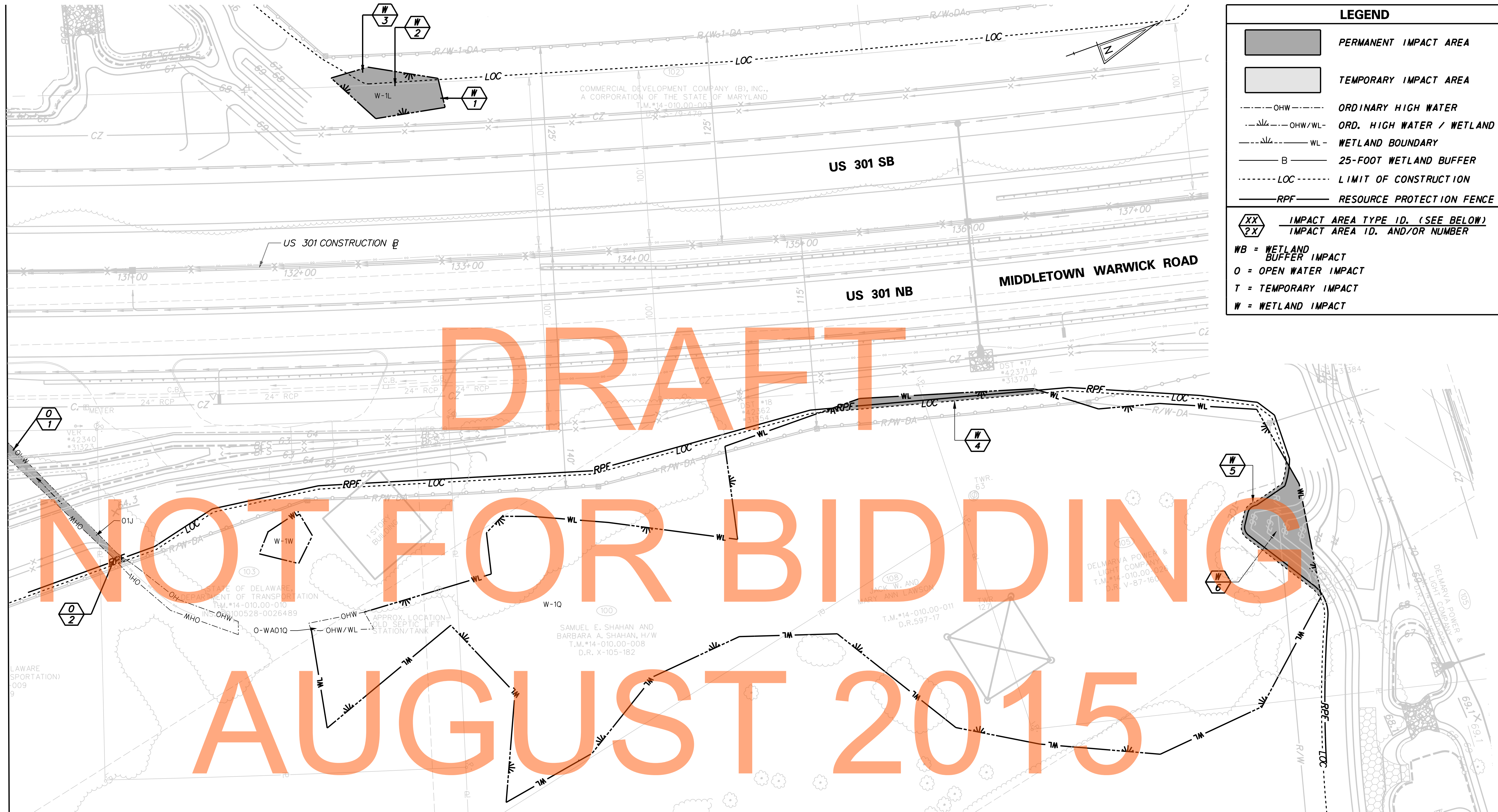
PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
8-01	FILL	39.94	0.0009	1.23	USACE/DNREC
8-02	RIPRAP	162.46	0.0037	10.53	USACE/DNREC
8-03	FILL	199.49	0.0046	11.11	USACE/DNREC
8-04	FILL	1,636.39	0.0376	99.94	USACE/DNREC
8-05	RIPRAP	240.08	0.0055	15.56	USACE/DNREC
8-06	FILL	3,829.64	0.0879	58.06	USACE/DNREC
<b>TOTAL USACE WATERS FOR THIS SHEET</b>		<b>6,108.00</b>	<b>0.1402</b>	<b>196.43</b>	<b>USACE</b>
<b>TOTAL DNREC WATERS FOR THIS SHEET</b>		<b>6,108.00</b>	<b>0.1402</b>	<b>196.43</b>	<b>DNREC</b>

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
8-W1	FILL	44.48	0.0010	N/A	USACE
8-W2	EXCAVATION	198.00	0.0045	N/A	USACE
8-W3	RIPRAP	36.34	0.0008	N/A	USACE
8-W4	FILL	865.17	0.0199	N/A	USACE
8-W5	EXCAVATION	656.41	0.0151	N/A	USACE
8-W6	RIPRAP	145.81	0.0033	N/A	USACE
8-W7	FILL	16,383.73	0.3761	N/A	USACE
8-W8	EXCAVATION	260.00	0.0060	N/A	USACE
8-W9	EXCAVATION	2,092.52	0.0480	N/A	USACE/MDE
8-W10	FILL	7,139.90	0.1639	N/A	USACE/MDE
8-W11	RIPRAP	67.17	0.0015	N/A	USACE
8-W12	FILL	2,344.08	0.0538	N/A	USACE
8-W13	EXCAVATION	431.63	0.0099	N/A	USACE
<b>TOTAL FOR THIS SHEET</b>		<b>30,665.24</b>	<b>0.7040</b>	<b>N/A</b>	<b>N/A</b>

TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
8-OT1	E&S AREA	85.46	0.0020	3.85	USACE/DNREC
8-OT2	TEMPORARY ACCESS	425.68	0.0098	N/A	USACE/DNREC
8-OT3	E&S AREA	239.17	0.0055	12.96	USACE/DNREC
8-OT4	TEMPORARY ACCESS	10.87	0.0002	N/A	USACE/DNREC
<b>TOTAL USACE WATERS FOR THIS SHEET</b>		<b>761.18</b>	<b>0.0175</b>	<b>16.81</b>	<b>USACE</b>
<b>TOTAL DNREC WATERS FOR THIS SHEET</b>		<b>761.18</b>	<b>0.0175</b>	<b>16.81</b>	<b>DNREC</b>

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LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	25-FOOT WETLAND BUFFER
	LIMIT OF CONSTRUCTION
	RESOURCE PROTECTION FENCE
	IMPACT AREA TYPE ID. (SEE BELOW)
	IMPACT AREA ID. AND/OR NUMBER
WB = WETLAND BUFFER IMPACT	
O = OPEN WATER IMPACT	
T = TEMPORARY IMPACT	
W = WETLAND IMPACT	

DRAFT  
NOT FOR BIDDING  
AUGUST 2015

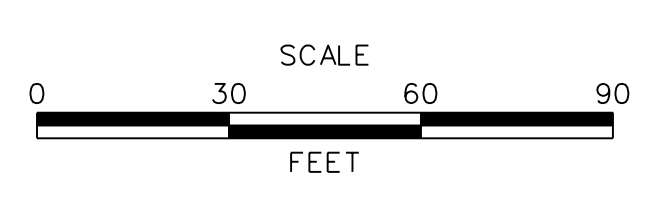
PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
9-01	FILL	657.44	0.0151	36.22	USACE
9-02	EXCAVATION	92.65	0.0021	1.14	USACE
TOTAL USACE WATERS FOR THIS SHEET		750.09	0.0172	37.36	USACE
TOTAL DNREC WATERS FOR THIS SHEET		N/A	N/A	N/A	DNREC

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
9-W1	FILL	785.76	0.0180	N/A	USACE
9-W2	EXCAVATION	275.86	0.0063	N/A	USACE
9-W3	NON-VIABLE REMNANT	294.80	0.0068	N/A	USACE
9-W4	EXCAVATION	581.33	0.0133	N/A	USACE
9-W5	EXCAVATION	779.65	0.0179	N/A	USACE
9-W6	FILL	942.69	0.0216	N/A	USACE
TOTAL FOR THIS SHEET		3,660.09	0.0840	N/A	USACE

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ADDENDUMS / REVISIONS	






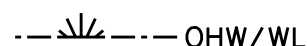




**US 301  
MARYLAND STATE LINE  
TO LEVELS ROAD**



CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MJB
	CHECKED BY: SKH

<b>ENVIRONMENTAL COMPLIANCE PLAN</b>	SHEET NO. 454
	TOTAL SHTS. 850

**EC-09**

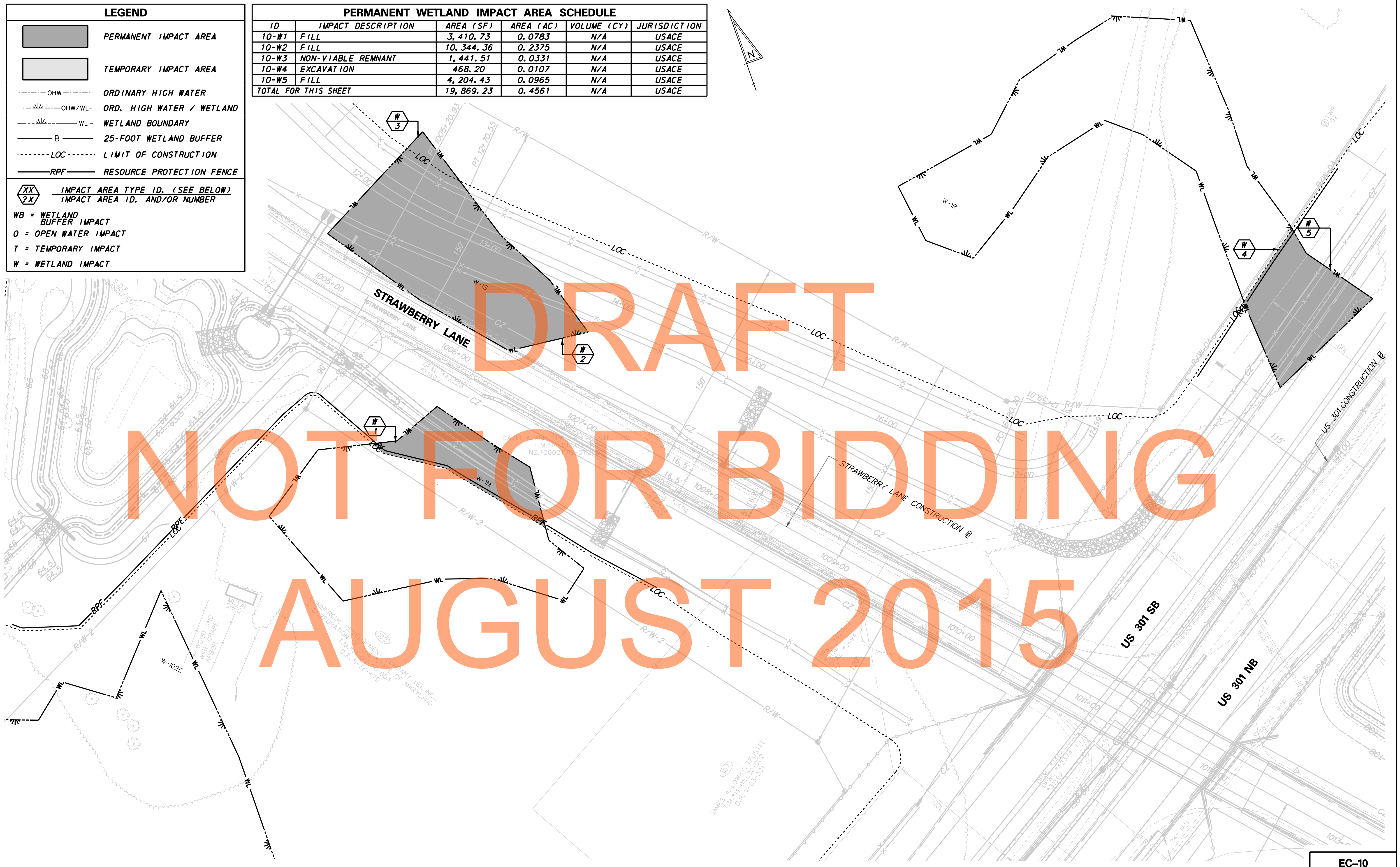
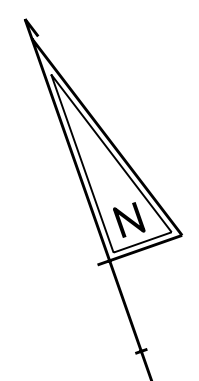
**LEGEND**

-  PERMANENT IMPACT AREA
-  TEMPORARY IMPACT AREA
-  OHW ORDINARY HIGH WATER
-  OHW/WL ORD. HIGH WATER / WETLAND
-  WL WETLAND BOUNDARY
-  B 25-FOOT WETLAND BUFFER
-  LOC LIMIT OF CONSTRUCTION
-  RPF RESOURCE PROTECTION FENCE

 IMPACT AREA TYPE ID. (SEE BELOW)  
 IMPACT AREA ID. AND/OR NUMBER

- WB = WETLAND BUFFER IMPACT
- O = OPEN WATER IMPACT
- T = TEMPORARY IMPACT
- W = WETLAND IMPACT

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
10-W1	FILL	3,410.73	0.0783	N/A	USACE
10-W2	FILL	10,344.36	0.2375	N/A	USACE
10-W3	NON-VIABLE REMNANT	1,441.51	0.0331	N/A	USACE
10-W4	EXCAVATION	468.20	0.0107	N/A	USACE
10-W5	FILL	4,204.43	0.0965	N/A </td <td>USACE</td>	USACE
TOTAL FOR THIS SHEET		19,869.23	0.4561	N/A	USACE

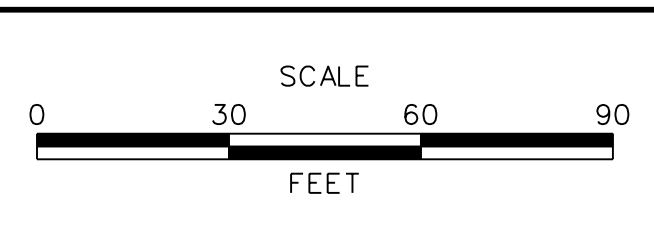


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**DELAWARE**  
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	



**US 301**  
**MARYLAND STATE LINE**  
**TO LEVELS ROAD**

CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MJB
	CHECKED BY: SKH

**ENVIRONMENTAL**  
**COMPLIANCE PLAN**

SHEET NO. 455
TOTAL SHTS. 850

EC-10

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
11-W1	FILL	789.45	0.0181	N/A	USACE
11-W2	EXCAVATION	795.47	0.0183	N/A	USACE
11-W3	EXCAVATION	112.31	0.0026	N/A	USACE
TOTAL FOR THIS SHEET		1,697.23	0.0390	N/A	USACE

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
11-O1	FILL	69.53	0.0016	1.75	USACE
11-O2	FILL	36.06	0.0008	1.32	USACE
11-O3	FILL	184.36	0.0042	5.98	USACE
11-O4	RIPRAP	113.13	0.0026	5.67	USACE
TOTAL USACE WATERS FOR THIS SHEET		403.08	0.0093	14.72	USACE
TOTAL DNREC WATERS FOR THIS SHEET		N/A	N/A	N/A	DNREC

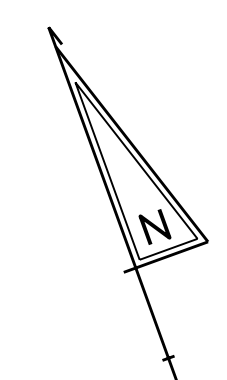
TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
11-OT1	TEMPORARY ACCESS	61.48	0.0014	N/A	USACE
11-OT2	TEMPORARY ACCESS	35.53	0.0008	N/A	USACE
TOTAL USACE WATERS FOR THIS SHEET		97.01	0.0022	N/A	USACE
TOTAL DNREC WATERS FOR THIS SHEET		N/A	N/A	N/A	DNREC

**LEGEND**

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- OHW --- ORDINARY HIGH WATER
- OHW/WL --- ORD. HIGH WATER / WETLAND
- WL --- WETLAND BOUNDARY
- B --- 25-FOOT WETLAND BUFFER
- LOC --- LIMIT OF CONSTRUCTION
- RPF --- RESOURCE PROTECTION FENCE

**XX**  
**?**  
**X** IMPACT AREA TYPE ID. (SEE BELOW)  
IMPACT AREA ID. AND/OR NUMBER

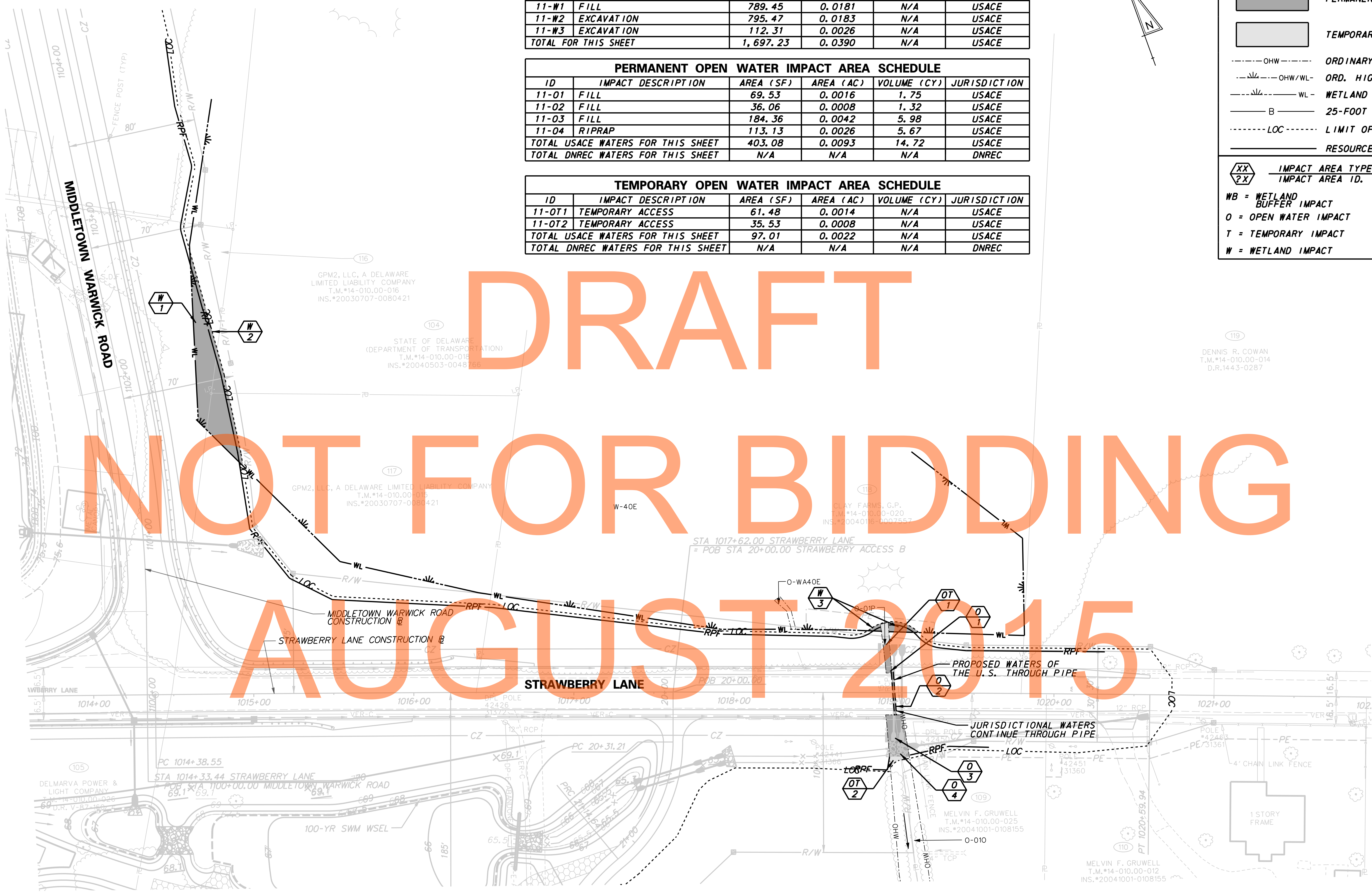
WB = WETLAND BUFFER IMPACT  
O = OPEN WATER IMPACT  
T = TEMPORARY IMPACT  
W = WETLAND IMPACT



# DRAFT

# NOT FOR BIDDING

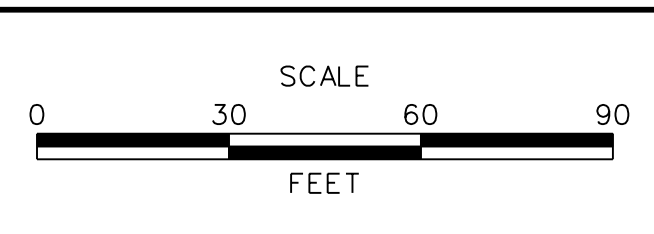
# AUGUST 2015



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**DELAWARE**  
**DEPARTMENT OF TRANSPORTATION**

ADDENDUMS / REVISIONS	



**US 301**  
**MARYLAND STATE LINE**  
**TO LEVELS ROAD**

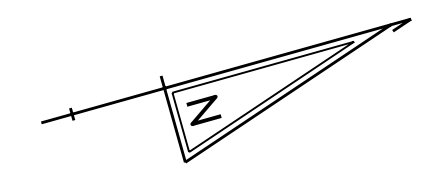
CONTRACT	BRIDGE NO.
T200811301	
COUNTY	DESIGNED BY: MJB
NEW CASTLE	CHECKED BY: SKH

**ENVIRONMENTAL**  
**COMPLIANCE PLAN**

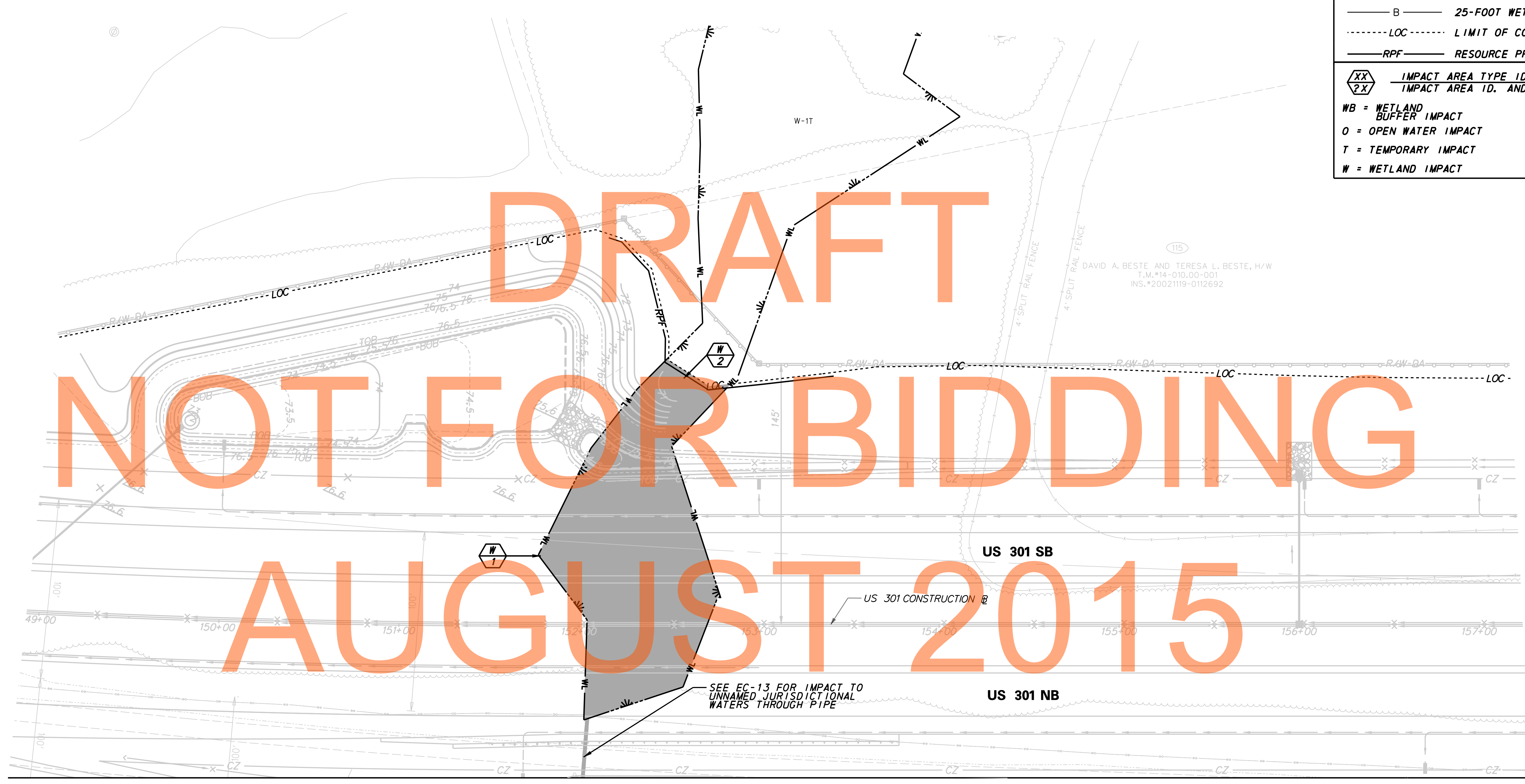
SHEET NO.
456
TOTAL SHTS.
850

**EC-11**

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
12-W1	FILL	11,340.69	0.2603	N/A	USACE
12-W2	EXCAVATION	477.33	0.0110	N/A	USACE
TOTAL FOR THIS SHEET		11,818.02	0.2713	N/A	USACE



LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	25-FOOT WETLAND BUFFER
	LIMIT OF CONSTRUCTION
	RESOURCE PROTECTION FENCE
	IMPACT AREA TYPE ID. (SEE BELOW)
	IMPACT AREA ID. AND/OR NUMBER
WB = WETLAND BUFFER IMPACT	
O = OPEN WATER IMPACT	
T = TEMPORARY IMPACT	
W = WETLAND IMPACT	

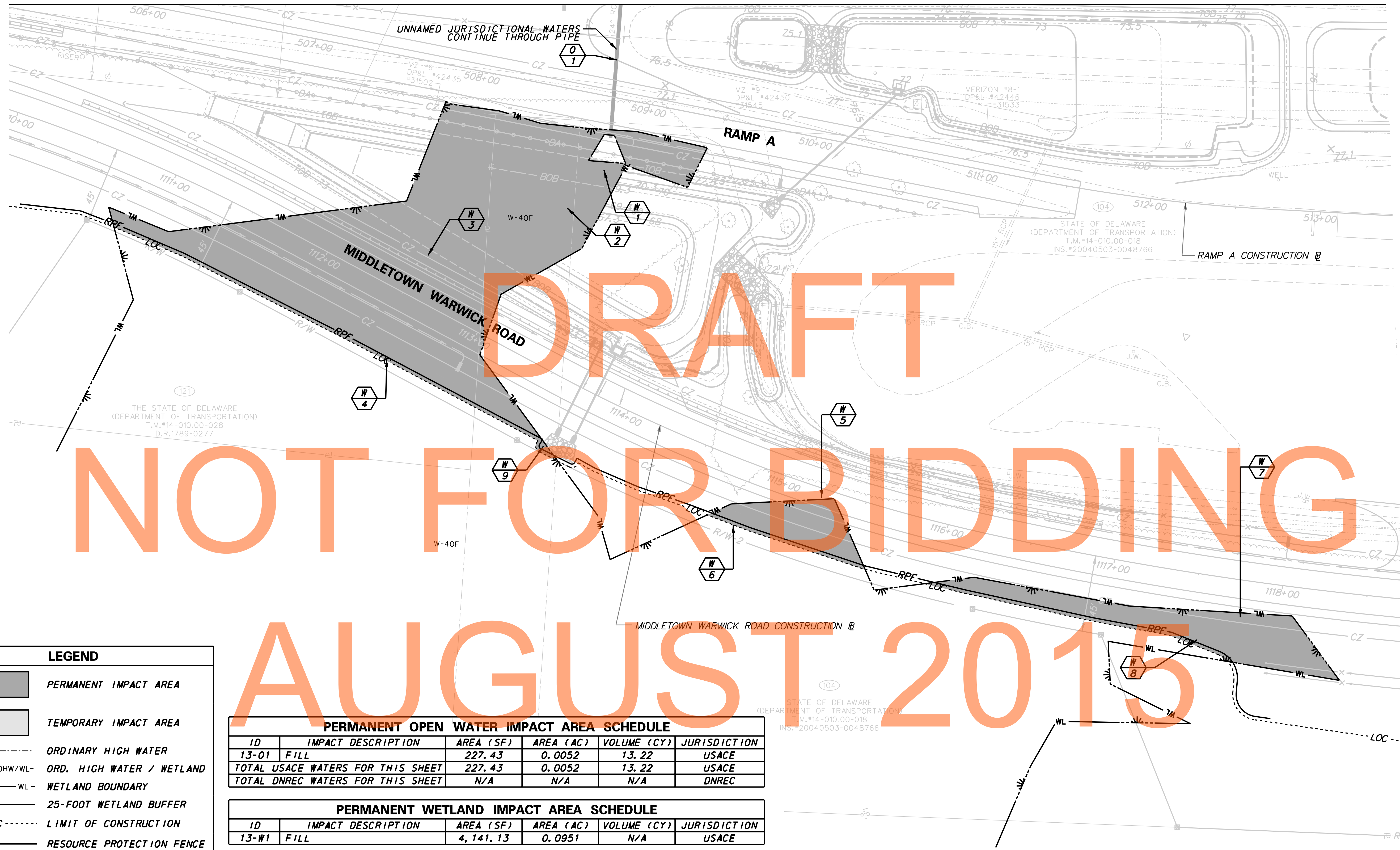
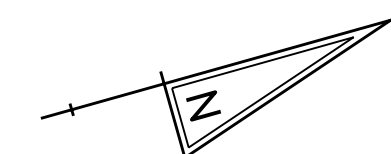


MATCH LINE EC-13

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	<b>DELAWARE DEPARTMENT OF TRANSPORTATION</b>	ADDENDUMS / REVISIONS		<b>US 301 MARYLAND STATE LINE TO LEVELS ROAD</b>	CONTRACT T200811301	BRIDGE NO. 	<b>ENVIRONMENTAL COMPLIANCE PLAN</b>	SHEET NO. 457
					COUNTY NEW CASTLE	DESIGNED BY: MJB CHECKED BY: SKH		TOTAL SHTS. 850

EC-12



DRAFT  
NOT FOR BIDDING  
AUGUST 2015

**LEGEND**

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- OHW - ORDINARY HIGH WATER
- OHW/WL - ORD. HIGH WATER / WETLAND
- WL - WETLAND BOUNDARY
- B - 25-FOOT WETLAND BUFFER
- LOC - LIMIT OF CONSTRUCTION
- RPF - RESOURCE PROTECTION FENCE

- XX IMPACT AREA TYPE ID. (SEE BELOW)
- 2X IMPACT AREA ID. AND/OR NUMBER
- WB = WETLAND BUFFER IMPACT
- O = OPEN WATER IMPACT
- T = TEMPORARY IMPACT
- W = WETLAND IMPACT

**PERMANENT OPEN WATER IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
13-01	FILL	227.43	0.0052	13.22	USACE
<b>TOTAL USACE WATERS FOR THIS SHEET</b>		227.43	0.0052	13.22	USACE
<b>TOTAL DNREC WATERS FOR THIS SHEET</b>		N/A	N/A	N/A	DNREC

**PERMANENT WETLAND IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
13-W1	FILL	4,141.13	0.0951	N/A	USACE
13-W3	FILL	11,483.13	0.2636	N/A	USACE
13-W4	EXCAVATION	1,785.74	0.0410	N/A	USACE
13-W5	FILL	1,189.80	0.0273	N/A	USACE
13-W6	EXCAVATION	668.93	0.0154	N/A	USACE
13-W7	FILL	2,644.50	0.0607	N/A	USACE
13-W8	EXCAVATION	1,323.50	0.0304	N/A	USACE
13-W9	RIPRAP	11.95	0.0003	N/A	USACE
<b>TOTAL FOR THIS SHEET</b>		28,895.76	0.6634	N/A	USACE

ADDENDUMS / REVISIONS



**US 301  
MARYLAND STATE LINE  
TO LEVELS ROAD**

CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MJB
	CHECKED BY: SKH

**ENVIRONMENTAL  
COMPLIANCE PLAN**

<b>EC-13</b>
SHEET NO. 458
TOTAL SHTS. 850

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LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	25-FOOT WETLAND BUFFER
	LIMIT OF CONSTRUCTION
	RESOURCE PROTECTION FENCE
	IMPACT AREA TYPE ID. (SEE BELOW) IMPACT AREA ID. AND/OR NUMBER
WB	WETLAND BUFFER IMPACT
O	OPEN WATER IMPACT
T	TEMPORARY IMPACT
W	WETLAND IMPACT



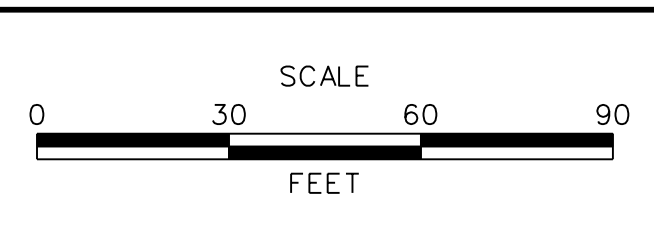
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AUGUST 2015

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
14-W1	FILL	12,688.71	0.2913	N/A	USACE
TOTAL FOR THIS SHEET		12,688.71	0.2913	N/A	USACE

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ADDENDUMS / REVISIONS	



**US 301  
MARYLAND STATE LINE  
TO LEVELS ROAD**

CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MJB
	CHECKED BY: SKH

**ENVIRONMENTAL  
COMPLIANCE PLAN**

SHEET NO. 459
TOTAL SHTS. 850

EC-14

130  
 PATRICK M. KRYGIER  
 T.M.\*15-026.00-036  
 INS.\*20080220-0011005

131  
 SEABOARD FARMS, INC.  
 T.M.\*15-026.00-007  
 D.R.276-161

124  
 DAVID A. BESTE AND TERESA L. BESTE, H/W  
 T.M.\*15-026.00-025  
 INS.\*20080606-0044280

128  
 STATE OF DELAWARE  
 DEPARTMENT OF TRANSPORTATION  
 T.M.\*15-026.00-012  
 INS.\*20080912-0061956

LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	25-FOOT WETLAND BUFFER
	LIMIT OF CONSTRUCTION
	RESOURCE PROTECTION FENCE
	IMPACT AREA TYPE ID. (SEE BELOW)
	IMPACT AREA ID. AND/OR NUMBER
WB = WETLAND BUFFER IMPACT	
O = OPEN WATER IMPACT	
T = TEMPORARY IMPACT	
W = WETLAND IMPACT	

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NOT FOR BIDDING

AUGUST 2015

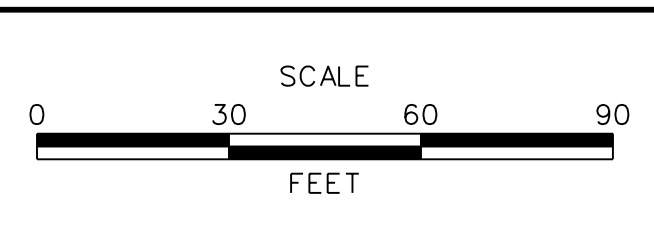
PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
15-01	FILL	663.46	0.0152	10.95	USACE
15-02	FILL	79.65	0.0018	5.71	USACE
TOTAL USACE WATERS FOR THIS SHEET		743.11	0.0171	16.66	USACE
TOTAL DNREC WATERS FOR THIS SHEET		N/A	N/A	N/A	DNREC

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
15-W1	EXCAVATION	3,816.74	0.0876	N/A	USACE
15-W2	EXCAVATION	223.65	0.0051	N/A	USACE
15-W3	RIPRAP	102.55	0.0024	N/A	USACE
TOTAL FOR THIS SHEET		4,142.94	0.0951	N/A	USACE

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ADDENDUMS / REVISIONS



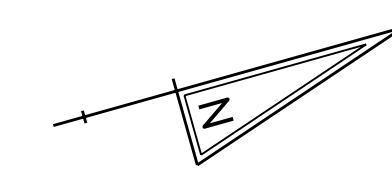
**US 301  
 MARYLAND STATE LINE  
 TO LEVELS ROAD**

CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MJB
	CHECKED BY: SKH

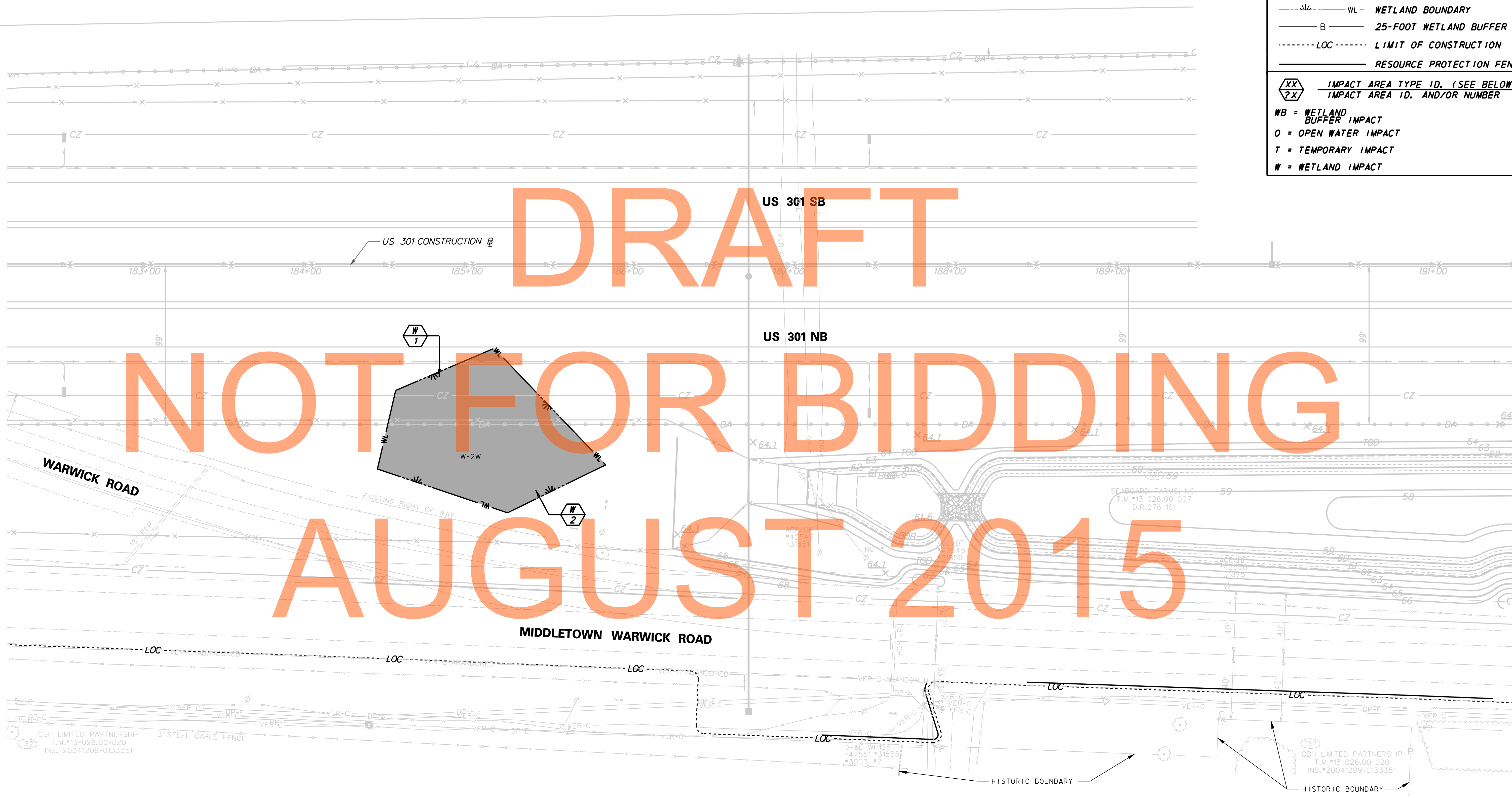
**ENVIRONMENTAL  
 COMPLIANCE PLAN**

<b>EC-15</b>
SHEET NO. 460
TOTAL SHTS. 850

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
16-W1	FILL	4,077.42	0.0936	N/A	USACE
16-W2	EXCAVATION	4,511.21	0.1036	N/A	USACE
TOTAL FOR THIS SHEET		8,588.63	0.1972	N/A	USACE



LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
	ORDINARY HIGH WATER
	ORD. HIGH WATER / WETLAND
	WETLAND BOUNDARY
	25-FOOT WETLAND BUFFER
	LIMIT OF CONSTRUCTION
	RESOURCE PROTECTION FENCE
	IMPACT AREA TYPE ID. (SEE BELOW) IMPACT AREA ID. AND/OR NUMBER
WB = WETLAND BUFFER IMPACT	
O = OPEN WATER IMPACT	
T = TEMPORARY IMPACT	
W = WETLAND IMPACT	



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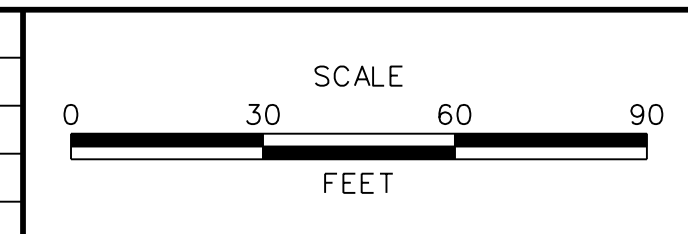
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AUGUST 2015

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**DELAWARE DEPARTMENT OF TRANSPORTATION**

ADDENDUMS / REVISIONS



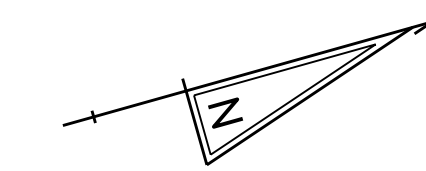
**US 301  
MARYLAND STATE LINE  
TO LEVELS ROAD**

CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MJB
	CHECKED BY: SKH

**ENVIRONMENTAL COMPLIANCE PLAN**

<b>EC-16</b>
SHEET NO. 461
TOTAL SHTS. 850





**LEGEND**

- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- OHW --- ORDINARY HIGH WATER
- OHW/WL --- ORD. HIGH WATER / WETLAND
- WL --- WETLAND BOUNDARY
- B --- 25-FOOT WETLAND BUFFER
- LOC --- LIMIT OF CONSTRUCTION
- RPF --- RESOURCE PROTECTION FENCE

**XX** / **XX** IMPACT AREA TYPE ID. (SEE BELOW)  
**XX** / **XX** IMPACT AREA ID. AND/OR NUMBER

WB = WETLAND BUFFER IMPACT  
 O = OPEN WATER IMPACT  
 T = TEMPORARY IMPACT  
 W = WETLAND IMPACT

WATERS O-WA02E ON THIS SHEET IS DNREC JURISDICTIONAL.



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NOT FOR BID

AUGUST 2010

**PERMANENT WETLAND IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
17-W1	RIPRAP	204.00	0.0047	N/A	USACE
17-W2	EXCAVATION	2176.82	0.0500	N/A	USACE
17-W3	RIPRAP	52.68	0.0012	N/A	USACE
17-W4	FILL	25,478.67	0.5849	N/A	USACE
17-W5	EXCAVATION	651.03	0.0149	N/A	USACE
17-W6	RIPRAP	200.01	0.0046	N/A	USACE
17-W7	FILL	5,778.51	0.1327	N/A	USACE
17-W8	EXCAVATION	4,209.52	0.0966	N/A	USACE
17-W9	EXCAVATION	1,508.20	0.0346	N/A	USACE
<b>TOTAL FOR THIS SHEET</b>		<b>40,529.44</b>	<b>0.9242</b>	<b>N/A</b>	<b>USACE</b>

**PERMANENT OPEN WATER IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
17-O1	FILL	3,960.96	0.0909	58.03	USACE/DNREC
17-O2	RIPRAP	126.44	0.0029	16.39	USACE/DNREC
<b>TOTAL USACE WATERS FOR THIS SHEET</b>		<b>4,087.40</b>	<b>0.0938</b>	<b>74.42</b>	<b>USACE</b>
<b>TOTAL DNREC WATERS FOR THIS SHEET</b>		<b>4,087.40</b>	<b>0.0938</b>	<b>74.42</b>	<b>DNREC</b>

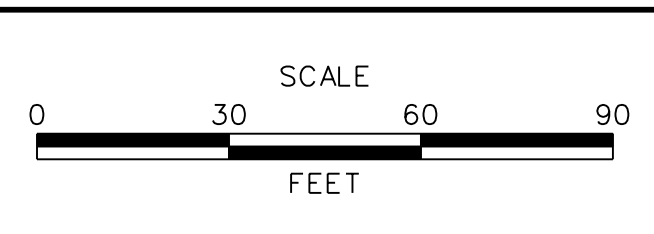
**TEMPORARY OPEN WATER IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
17-OT1	E&S AREA	81.26	0.0019	3.70	USACE/DNREC
17-OT2	TEMPORARY ACCESS	597.79	0.0137	N/A	USACE/DNREC
17-OT3	E&S AREA	157.14	0.0036	4.48	USACE/DNREC
<b>TOTAL USACE WATERS FOR THIS SHEET</b>		<b>836.19</b>	<b>0.0192</b>	<b>8.18</b>	<b>USACE</b>
<b>TOTAL DNREC WATERS FOR THIS SHEET</b>		<b>836.19</b>	<b>0.0192</b>	<b>8.18</b>	<b>DNREC</b>

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**DELAWARE DEPARTMENT OF TRANSPORTATION**

ADDENDUMS / REVISIONS

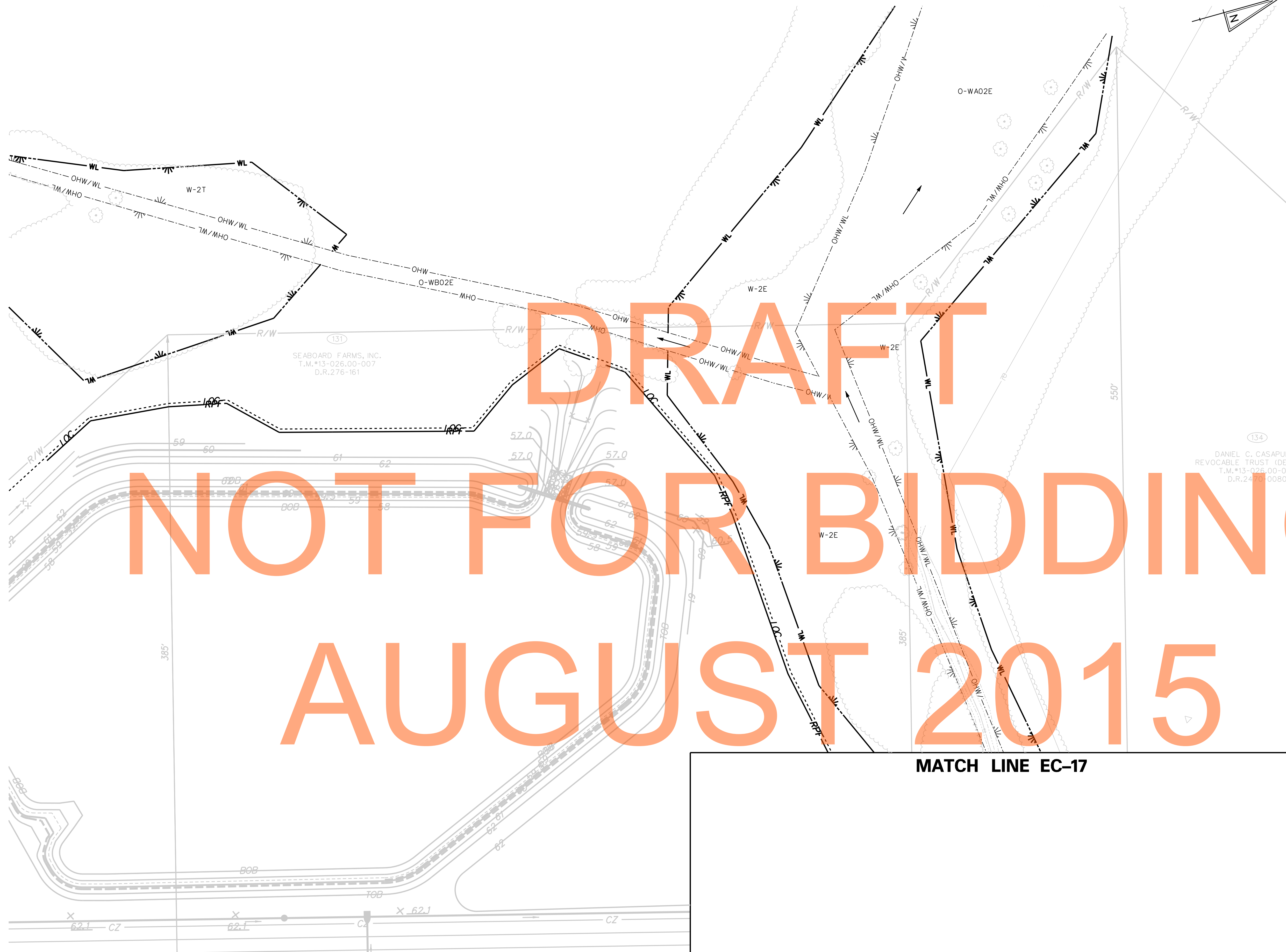
**US 301 MARYLAND STATE LINE TO LEVELS ROAD**

CONTRACT	BRIDGE NO.
T200811301	
COUNTY	DESIGNED BY: MJB
NEW CASTLE	CHECKED BY: SKH

**EC-17**

<b>ENVIRONMENTAL COMPLIANCE PLAN</b>	SHEET NO.
	462
<b>ENVIRONMENTAL COMPLIANCE PLAN</b>	TOTAL SHTS.
	850

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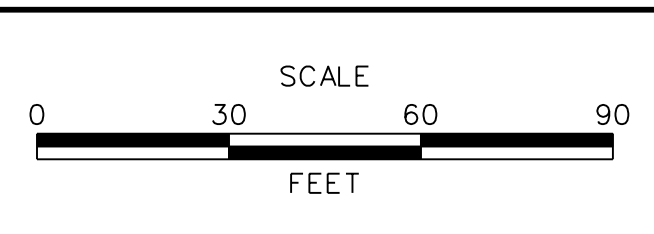
LEGEND	
	PERMANENT IMPACT AREA
	TEMPORARY IMPACT AREA
--- OHW ---	ORDINARY HIGH WATER
- - - OHW/WL - - -	ORD. HIGH WATER / WETLAND
- - - WL - - -	WETLAND BOUNDARY
— B —	25-FOOT WETLAND BUFFER
- - - LOC - - -	LIMIT OF CONSTRUCTION
— RPF —	RESOURCE PROTECTION FENCE
	IMPACT AREA TYPE ID. (SEE BELOW)
	IMPACT AREA ID. AND/OR NUMBER
WB	WETLAND BUFFER IMPACT
O	OPEN WATER IMPACT
T	TEMPORARY IMPACT
W	WETLAND IMPACT

WATERS O-WA02E, AND O-WB02E ON THIS SHEET ARE DNREC JURISDICTIONAL.  
NOTE: NO IMPACT ON THIS SHEET

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MATCH LINE EC-17

ADDENDUMS / REVISIONS



US 301  
MARYLAND STATE LINE  
TO LEVELS ROAD

CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MJB
	CHECKED BY: SKH

ENVIRONMENTAL COMPLIANCE PLAN

SHEET NO. 463
TOTAL SHTS. 850

EC-18

# DRAFT

# NOT FOR BIDDING

# AUGUST 2015

**LEGEND**

- TEMPORARY IMPACT AREA
- PERMANENT IMPACT AREA
- OHW --- ORDINARY HIGH WATER
- OHW/WL --- ORD. HIGH WATER / WETLAND
- WL --- WETLAND BOUNDARY
- W --- 25-FOOT WETLAND BUFFER
- LOC --- LIMIT OF CONSTRUCTION
- RPF --- RESOURCE PROTECTION FENCE

**XX** IMPACT AREA TYPE ID. (SEE BELOW)  
**2X** IMPACT AREA ID. AND/OR NUMBER

WB = WETLAND BUFFER IMPACT  
 O = OPEN WATER IMPACT  
 T = TEMPORARY IMPACT  
 W = WETLAND IMPACT

**NOTE:**  
 TEMPORARY IMPACT AREA WT-1 WILL BE IMPACTED UNDER CONTRACT T200911303 IMMEDIATELY FOLLOWING THIS CONTRACT. RESTORATION FOR TEMPORARY IMPACTS SHALL OCCUR UNDER CONTRACT T200911303.

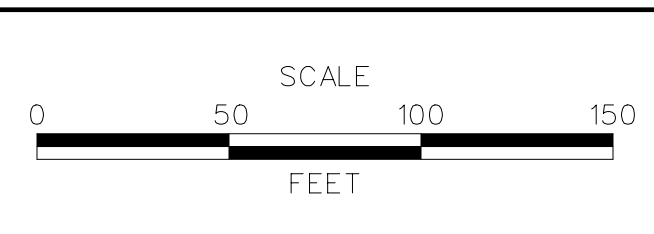
**TEMPORARY WETLAND IMPACT AREA SCHEDULE**

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
19-WT1	TEMPORARY ACCESS	3, 410. 14	0. 0783	N/A	USACE
<b>TOTAL TEMPORARY WETLAND IMPACT AREAS</b>		<b>3, 410. 14</b>	<b>0. 0783</b>	<b>N/A</b>	<b>USACE</b>

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ADDENDUMS / REVISIONS



**US 301  
 MARYLAND STATE LINE  
 TO LEVELS ROAD**

CONTRACT T200811301	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: MRS
	CHECKED BY: JTR

**ENVIRONMENTAL  
 COMPLIANCE PLAN**

<b>EC-19</b>
SHEET NO. 464
TOTAL SHTS. 850