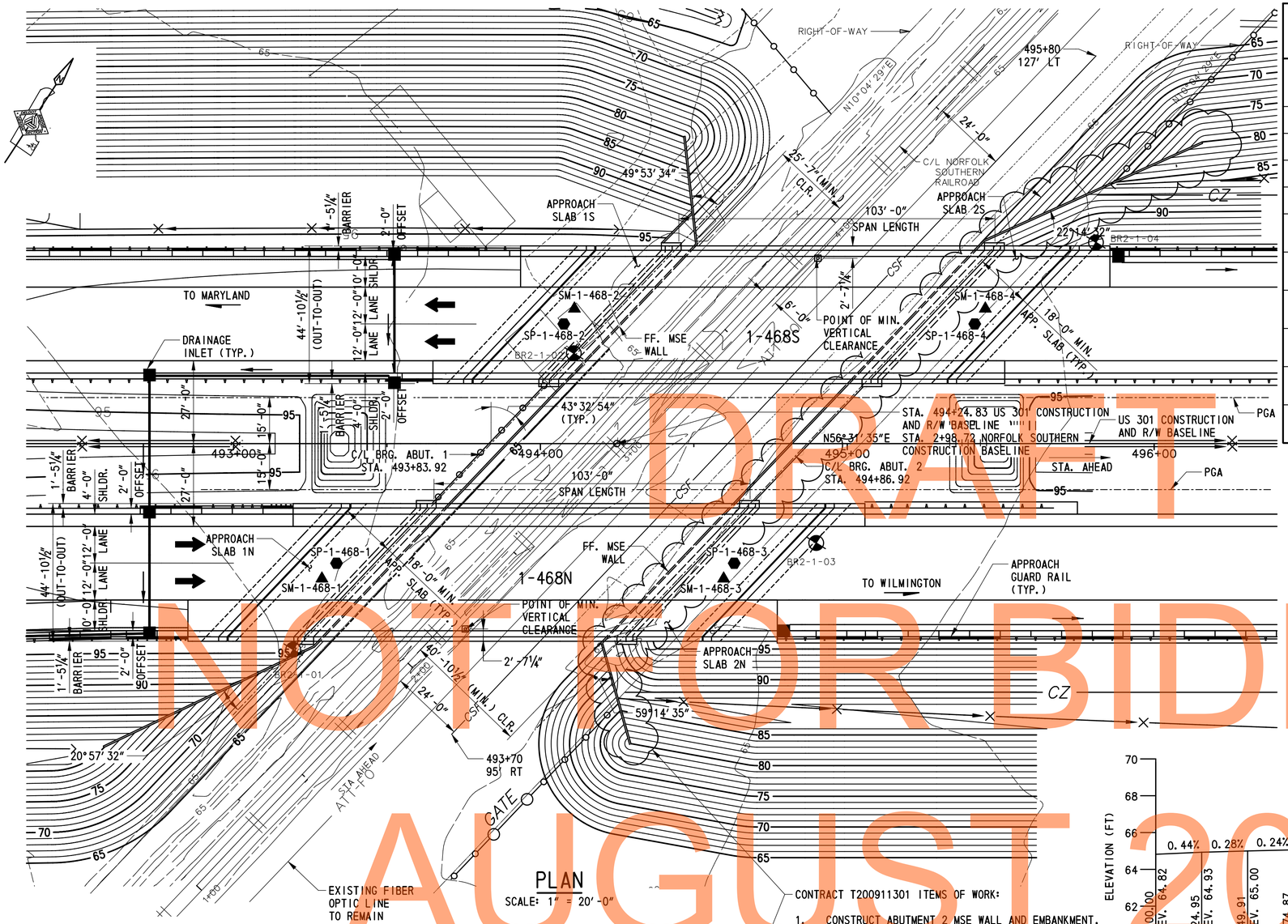
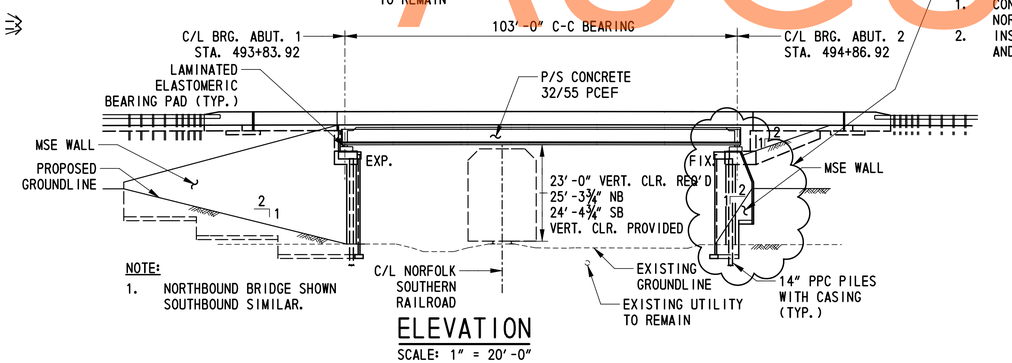




CONTRACT T200911301 ITEMS OF WORK:

1. CONSTRUCT ABUTMENT 2 MSE WALL AND EMBANKMENT, NORTHBOUND AND SOUTHBOUND.
2. INSTALL PILE CASINGS AND SETTLEMENT PLATFORM AND MONUMENTS, NORTHBOUND AND SOUTHBOUND.

100.00

90.00

80.00

70.00

DATUM 60.00

BRIDGE LEGAL LOAD RATINGS (TONS)
US 301 OVER NORFOLK SOUTHERN RAILROAD

RATING VEHICLE	RATING TYPE	CONTROLLING UNIT/SPAN/ MEMBER	CONTROLLING POINT	LOAD EFFECT	LIMIT STATE	LOAD RATING FACTOR	LOAD RATING (TONS)
HL-93 TRUCK	INVENTORY	1S & 5N	105.000	LONG. REINF. MAX. EFFECTS MAX. MOMENT W/ CONCURRENT SHEAR	STRENGTH I	1.14	N/A
HL-93 TANDEM	INVENTORY	1S & 5N	105.000	LONG. REINF. MAX. EFFECTS MAX. MOMENT W/ CONCURRENT SHEAR	STRENGTH I	1.33	N/A
HL-93 TRUCK	OPERATING	1S & 5N	105.000	LONG. REINF. MAX. EFFECTS MAX. MOMENT W/ CONCURRENT SHEAR	STRENGTH I-O	1.47	N/A
HL-93 TANDEM	OPERATING	1S & 5N	105.000	LONG. REINF. MAX. EFFECTS MAX. MOMENT W/ CONCURRENT SHEAR	STRENGTH I-O	1.70	N/A
S220	LEGAL	1S & 5N	106.000	LONG. REINFORCEMENT MIN. EFFECTS MAX. SHEAR W/ CONCURRENT MOMENT	STRENGTH I	2.36	47.26
S335	LEGAL	1S & 5N	105.000	CONC. STRESS MAX. EFFECTS DL+PS+LL BOT. OF BEAM	SERVICE III	1.34	46.83
S437	LEGAL	1S & 5N	105.000	CONC. STRESS MAX. EFFECTS DL+PS+LL BOT. OF BEAM	SERVICE III	1.27	46.66
T330	LEGAL	1S & 5N	105.000	CONC. STRESS MAX. EFFECTS DL+PS+LL BOT. OF BEAM	SERVICE III	1.80	53.86
T435	LEGAL	1S & 5N	105.000	CONC. STRESS MAX. EFFECTS DL+PS+LL BOT. OF BEAM	SERVICE III	1.57	54.78
T540	LEGAL	1S & 5N	105.000	CONC. STRESS MAX. EFFECTS DL+PS+LL BOT. OF BEAM	SERVICE III	1.38	55.26

LEGEND

⬢ - SETTLEMENT PLATFORMS

▲ - SETTLEMENT MONUMENTS

US 301 GEOMETRY

VERTICAL DATA

PVI STA. 495+50.00
EL. 99.12
VC = 860.00'
MO = -3.24'
SSD = 785.31'
+0.86% / -2.15%

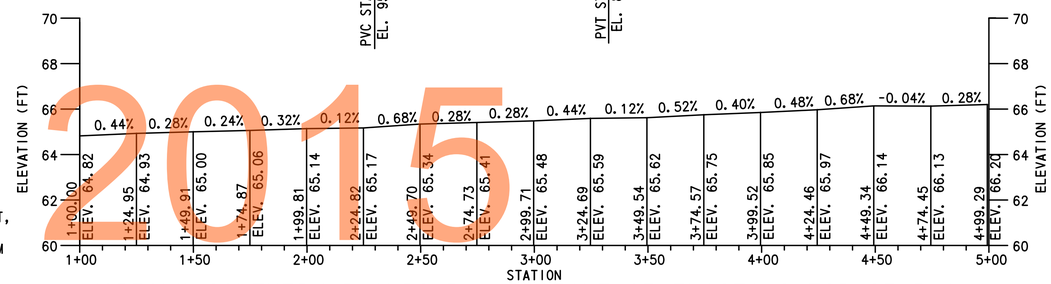
PVC STA. 491+20.00
EL. 95.42

PVT STA. 499+80.00
EL. 89.87

HORIZONTAL DATA

TANGENT

LIMITS OF 1-468



NORFOLK SOUTHERN RAILROAD - PROFILE OF EXISTING TOP OF RAIL

NOT TO SCALE

SETTLEMENT PLATFORM	STATION	OFFSET	SETTLEMENT MONUMENT	STATION	OFFSET
SP-1-468-1	493+33.57	39.00' RT	SM-1-468-1	493+28.81	44.00' RT
SP-1-468-2	494+07.64	39.00' LT	SM-1-468-2	494+11.09	44.00' LT
SP-1-468-3	494+63.17	39.00' RT	SM-1-468-3	494+59.73	44.00' RT
SP-1-468-4	495+37.24	39.00' LT	SM-1-468-4	495+42.24	44.00' LT

CROSS REFERENCE NOTES:

1. FOR SETTLEMENT PLATFORM AND MONUMENT STATIONS AND OFFSETS, SEE DWG. 1-468 DT-2.
2. FOR SETTLEMENT PLATFORM DETAILS, SEE DWG. BR1-467 DT-01.

NOTES:

1. ABUTMENTS 1, ABUTMENTS 2 AND SUPERSTRUCTURES TO BE CONSTRUCTED UNDER CONTRACT T200911303.
2. THE ELEVATION OF EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE NORFOLK SOUTHERN CHIEF ENGINEER BRIDGES AND STRUCTURES.

1-468 PE-1

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

US 301 NORFOLK SOUTHERN RR TO SR896

CONTRACT	BRIDGE NO.	1-468N&S
T200911301	DESIGNED BY: ADH	
COUNTY	CHECKED BY: DHG	
NEW CASTLE		

US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD BRIDGE PLAN AND ELEVATION

SHEET NO. 125
TOTAL SHTS. 240

G:\60049040 US301\STRUCTURE\PLANS\FINAL\B2-INS\BR2-1 CONTRACT 1C\PE01-B2-INS-AB2.DGN

GENERAL NOTES

1. DESIGN SPECIFICATIONS:

   AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION, 2007, INCLUDING 2008 AND 2009 INTERIM REVISIONS, AND AS SUPPLEMENTED BY DELAWARE DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL, MAY 2005, INCLUDING LATEST REVISIONS.

   PROVIDE MATERIALS AND PERFORM WORK IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS, AASHTO/AWS D1.5M/D1.5 BRIDGE WELDING CODE, AND CONTRACT SPECIAL PROVISIONS.

   LIVE LOAD DISTRIBUTION TO BEAMS IS BASED UPON AASHTO DISTRUBUTION FACTORS.

2. LOADING:

   UNIT WEIGHTS OF MATERIALS SHALL BE IN ACCORDANCE WITH THE DELAWARE DESIGN MANUAL.

   FUTURE OVERLAY ALLOWANCE SHALL BE 25 LBS/SQ FT.

   STEEL BRIDGE DECK FORMS WHICH STAY IN PLACE (INCLUDING CONCRETE IN FORM CORRUGATIONS) SHALL BE 15 LBS/SQ FT.

   VEHICLE LIVE LOAD SHALL BE AASHTO HL-93 DESIGN VEHICLE, WHICH CONSISTS OF A DESIGN TRUCK OR TANDEM WITH DYNAMIC LOAD ALLOWANCE AND A LANE LOAD. RATINGS SHALL USE ALL DELAWARE LEGAL LOADS SPECIFIED IN THE BRIDGE DESIGN MANUAL.

   BARRIER HAS BEEN DESIGNED FOR TEST LEVEL FOUR (TL-4).

   FATIGUE DESIGN IS BASED ON THE FOLLOWING:
   ADTT 3,045 (2030 ONE-DIRECTIONAL).

   FOR THERMAL LOADS, CONSIDER THE MODERATE TEMPERATURE RANGE AS STIPULATED IN THE AASHTO LRFD DESIGN SPECIFICATIONS, THE NORMAL TEMPERATURE SHALL BE CONSIDERED TO BE 68F.

   FOR SEISMIC LOADS, CONSIDER SEISMIC PERFORMANCE ZONE 1, WITH A SITE CLASS = D AND IMPORTANCE CATEGORY - ESSENTIAL.

   SEISMIC FORCES WERE CONSIDERED FOR ACCELERATION COEFFICIENT OF 0.08.

3. STRUCTURAL EXCAVATIONS:

   EXCAVATION REQUIRED TO ATTAIN THE GRADE FOR INSTALLATION OF MSE WALLS SHALL BE INCIDENTAL TO ITEM NO. 602772 - MECHANICALLY STABILIZED EARTH WALLS.

4. STRUCTURAL BACKFILL:

   MSE WALL BACKFILL SHALL BE AS SPECIFIED ON THE PLANS.

5. TEMPORARY RAILROAD CLEARANCES:

   A MINIMUM VERTICAL CLEARANCE OF 22'-0" ABOVE TOP OF HIGHEST RAIL SHALL BE MAINTAINED AT ALL TIMES.

   A MINIMUM HORIZONTAL CLEARANCE OF 15'-0" FROM CENTERLINE OF TRACK SHALL BE MAINTAINED AT ALL TIMES.

   CONTRACTOR TO COORDINATE ALL WORK WITH NORFOLK SOUTHERN RAILROAD IN ACCORDANCE WITH NORFOLK SOUTHERN SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS.

6. UTILITIES:

   COORDINATE ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH SECTION 107.04 OF THE STANDARD SPECIFICATIONS.

   VERIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING WORK. CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THAT THE UTILITIES WILL NOT BE DISTURBED OR ENDANGERED AND ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. THE DEPARTMENT DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISION, OR LIABILITY FOR ACCURACY OF TYPE, SIZE AND LOCATION OF ANY UTILITY.

INDEX OF DRAWINGS

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

US 301
NORFOLK SOUTHERN RR
TO SR896

CONTRACT	T200911301	BRIDGE NO.	1-468N&S
COUNTY	NEW CASTLE	DESIGNED BY: ADH	
		CHECKED BY: DHG	

US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD
GENERAL NOTES AND INDEX OF DRAWINGS

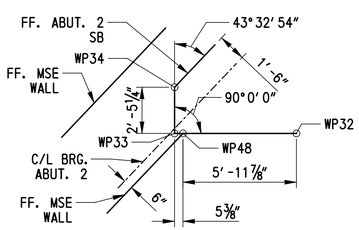
SHEET NO.	TOTAL SHTS.
126	240

G:\60049040 US301\Structure\Plans\FINAL\B2-INS\BR2-1 Contract 1C\BR2-1GN-01-AB2.dgn

GEOMETRIC LAYOUT

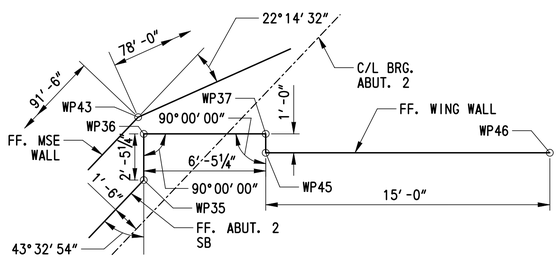
SCALE: 1/16" = 1'-0"

WORKING POINTS				
WORK PT.	STATION	OFFSET	COORDINATES	
			NORTHING	EASTING
WP25	494+84.85	0.00	542803.2443	572001.9347
WP26	494+71.33	18.56	542780.3011	572000.8916
WP27	494+64.89	18.56	542776.7505	571995.5218
WP28	494+64.89	21.00	542774.7173	571996.8662
WP29	494+24.96	63.00	542717.6632	571986.7293
WP30	494+24.96	65.44	542715.6300	571988.0738
WP31	494+31.40	65.44	542719.1806	571993.4435
WP32	495+11.25	-18.56	542833.2887	572013.7173
WP33	495+04.81	-18.56	542829.7381	572008.3476
WP34	495+04.81	-21.00	542831.7713	572007.0031
WP35	495+44.74	-63.00	542888.8253	572017.1400
WP36	495+44.74	-65.44	542890.8585	572015.7956
WP37	495+51.17	-65.44	542894.4091	572021.1654
WP38	494+81.40	0.00	542801.3418	571999.0575
WP39	494+19.74	64.87	542713.2219	571983.4011
WP40	494+29.07	98.08	542690.6644	572009.5050
WP41	494+31.40	64.44	542720.0148	571992.8920
WP42	494+37.40	64.44	542723.3241	571997.8968
WP43	495+44.44	-66.32	542891.4309	572015.0638
WP44	496+15.58	-98.30	542957.3490	572056.7628
WP45	495+51.17	-64.44	542893.5750	572021.7170
WP46	495+66.17	-64.44	542901.8483	572034.2291
WP47	494+69.96	18.56	542779.5504	571999.7563
WP48	495+05.25	-18.56	542829.9821	572008.7166



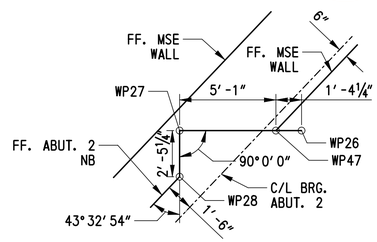
DETAIL 5

SCALE: 1/4" = 1'-0"



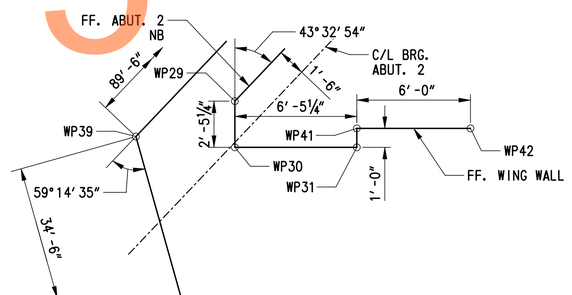
DETAIL 6

SCALE: 1/4" = 1'-0"



DETAIL 7

SCALE: 1/4" = 1'-0"



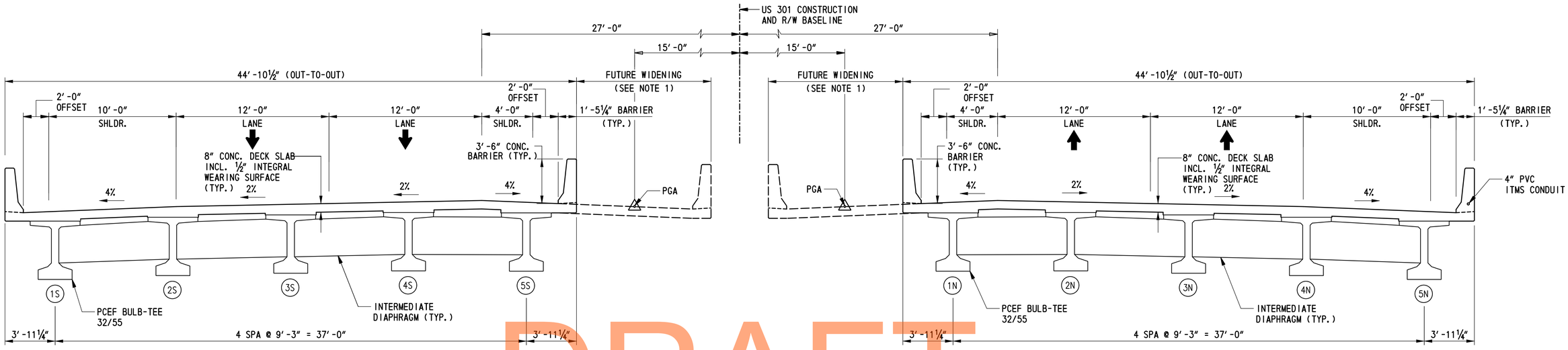
DETAIL 8

SCALE: 1/4" = 1'-0"

1-468 GG-1

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		US 301 NORFOLK SOUTHERN RR TO SR896	CONTRACT T200911301	BRIDGE NO. 1-468N&S	US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD GEOMETRIC LAYOUT
				COUNTY NEW CASTLE	DESIGNED BY: ADH	SHEET NO. 127
					CHECKED BY: DHG	TOTAL SHTS. 240

G:\60049040 US301\Structure\Plans\FINAL\B2-1NS\BR2-1 Contract 1C\BR2-1SQ-01-AB2.dgn



TYPICAL SECTION

STATIONS AHEAD
SCALE: 1/4" = 1'-0"

ESTIMATED BRIDGE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	NORTHBOUND QUANTITIES	SOUTHBOUND QUANTITIES	TOTAL
202505	SETTLEMENT PLATFORM	EA	1	1	2
202518	SETTLEMENT MONUMENT	EA	1	1	2
602772	MECHANICALLY STABILIZED EARTH WALL	LS	-	-	-

NOTE:

1. CROSS SLOPE OF FUTURE LANE SLOPES AT 2% DOWN TO PGA. THE CURRENT FASCIA BEAM HAUNCH WOULD NEED TO BE INCREASED TO ACCOUNT FOR CHANGE IN ELEVATION OF DECK SLAB.

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
1 0 1 2 3 4 5
FEET

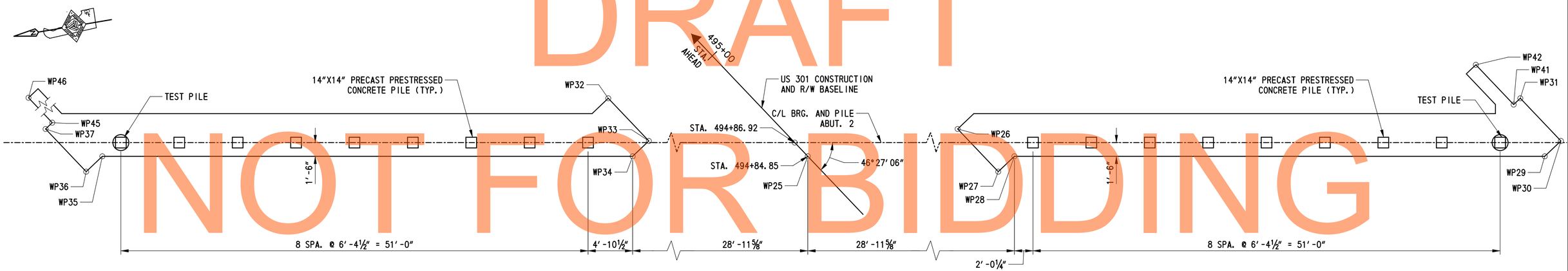
US 301
NORFOLK SOUTHERN RR
TO SR896

CONTRACT	T200911301
COUNTY	NEW CASTLE

BRIDGE NO.	1-468N&S
DESIGNED BY: ADH	
CHECKED BY: DHG	

US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD TYPICAL SECTION AND QUANTITIES

SHEET NO.	128
TOTAL SHTS.	240



ABUTMENT 2 PILE PLAN

SCALE: 3/16" = 1'-0"

NOTES:

1. PILE PLAN IS PROVIDED FOR LOCATING PILE CASINGS.
2. PILE CASINGS SHALL BE FURNISHED IN ACCORDANCE WITH ITEM 602772 AND ARE INCIDENTAL TO THE MSE WALL CONSTRUCTION.

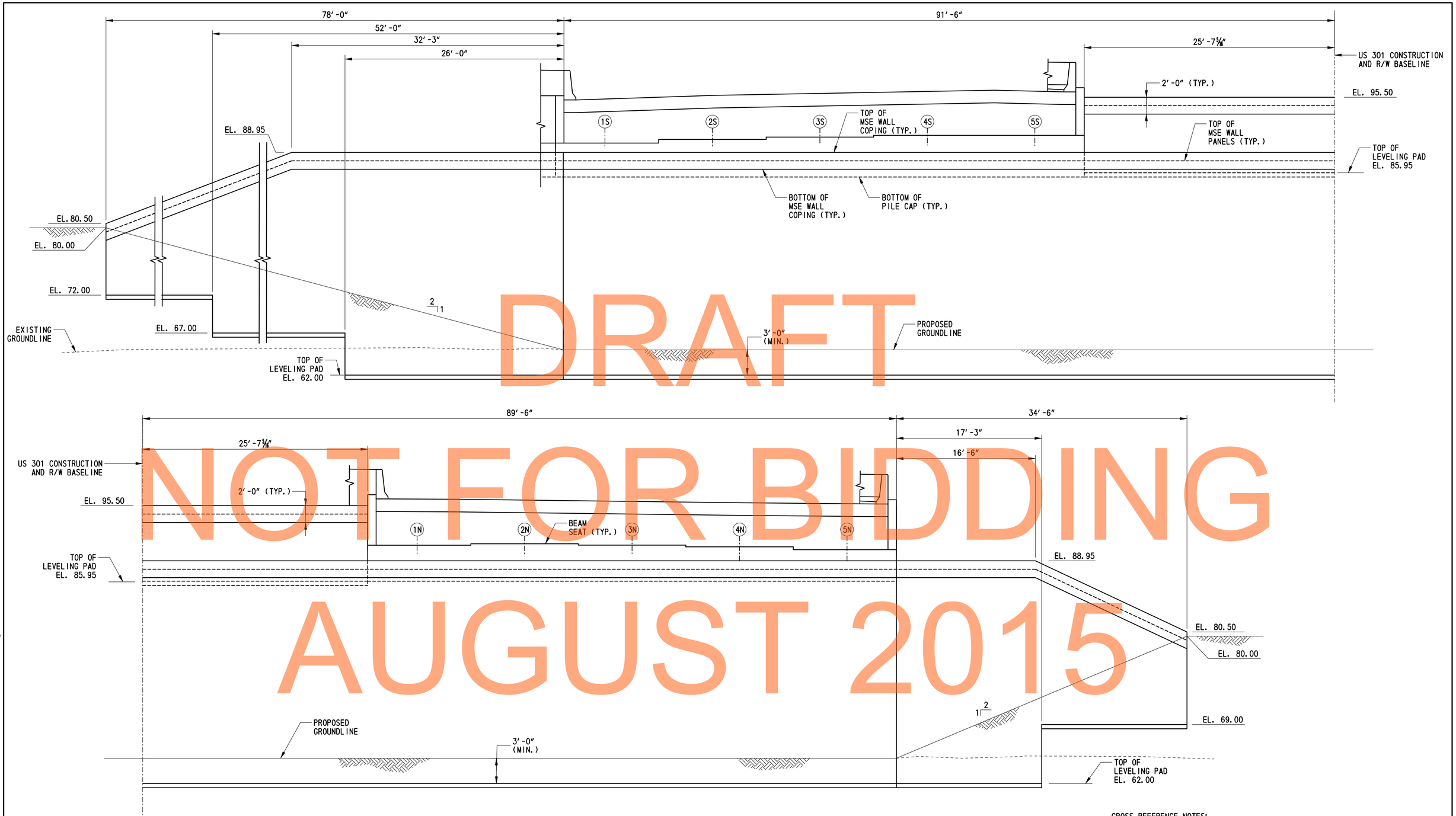
CROSS REFERENCE NOTE:

1. FOR PILE DETAILS AND NOTES, SEE DWG. 1-468 PL-2.

1-468 PL-1

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		US 301 NORFOLK SOUTHERN RR TO SR896	CONTRACT T200911301	BRIDGE NO. 1-468N&S	US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD ABUTMENT 2 - PILE PLAN	SHEET NO. 129
				COUNTY NEW CASTLE	DESIGNED BY: ADH		TOTAL SHTS. 240
					CHECKED BY: DHG		

G:\60049040 US301\Structure\Plans\FINAL\B2-INS\BR2-1 Contract 1C\BR2-1PL_01-AB2.dgn



MEDIAN AND WINGWALL ELEVATIONS - ABUTMENT 2

SCALE: 3/16″ = 1′-0″

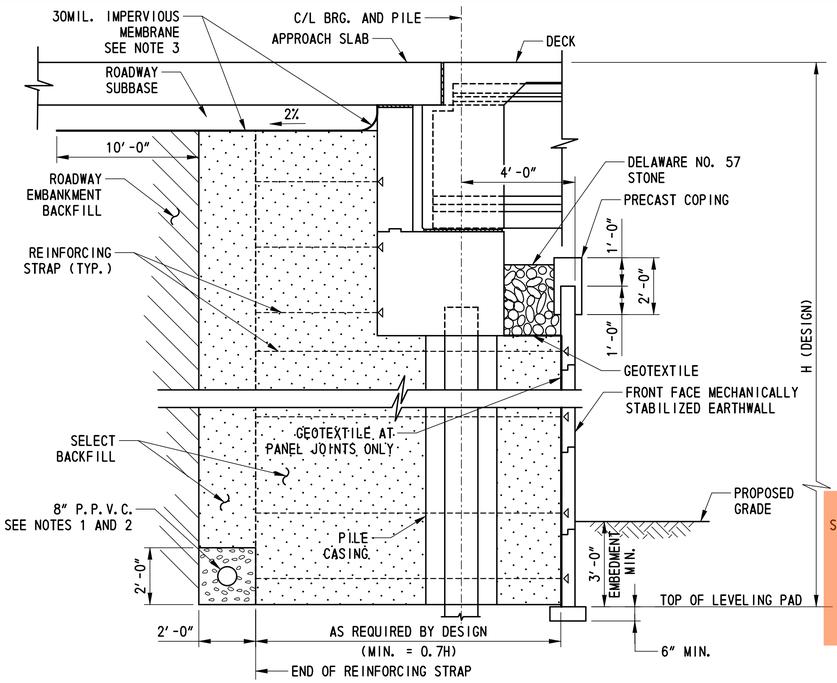
CROSS REFERENCE NOTES:

1. FOR GENERAL NOTES, SEE DWG. 1-468 GN-1.
2. FOR GEOMETRIC LAYOUT, SEE DWG. 1-468 GG-1.
3. FOR MSE WALL SECTIONS AND DETAILS, SEE DWG. 1-468 WW-3.

1-468 WW-2

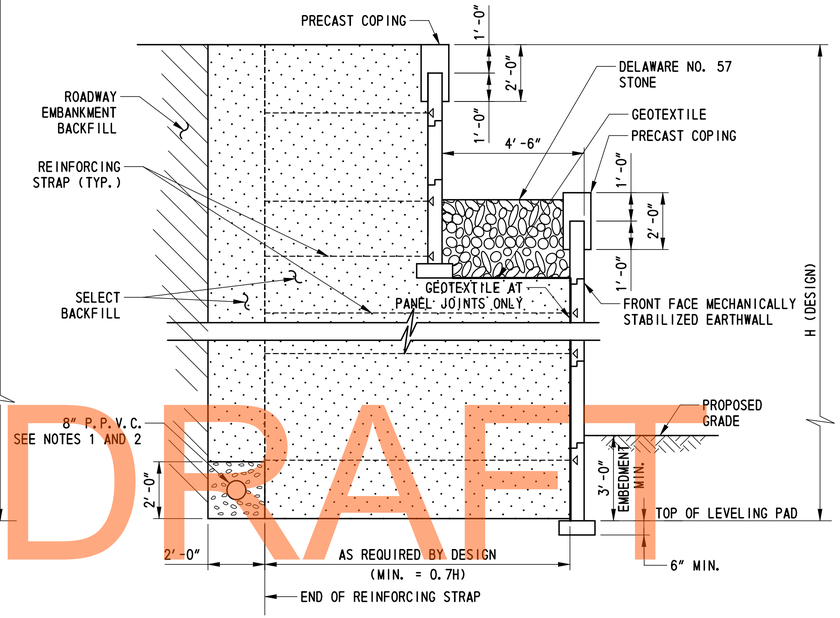
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 2 0 2 4 6 FEET	US 301 NORFOLK SOUTHERN RR TO SR896	CONTRACT T200911301	BRIDGE NO. 1-468N&S	US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD MEDIAN AND WINGWALL ELEVATIONS – ABUTMENT 2	SHEET NO. 130
				COUNTY NEW CASTLE	DESIGNED BY: ADH		TOTAL SHTS. 240
					CHECKED BY: DHG		

G:\60049040 US301\Structure\Plans\FINAL\B2-INS\BR2-1 Contract 1C\BR2-1WW-02-AB2.dgn



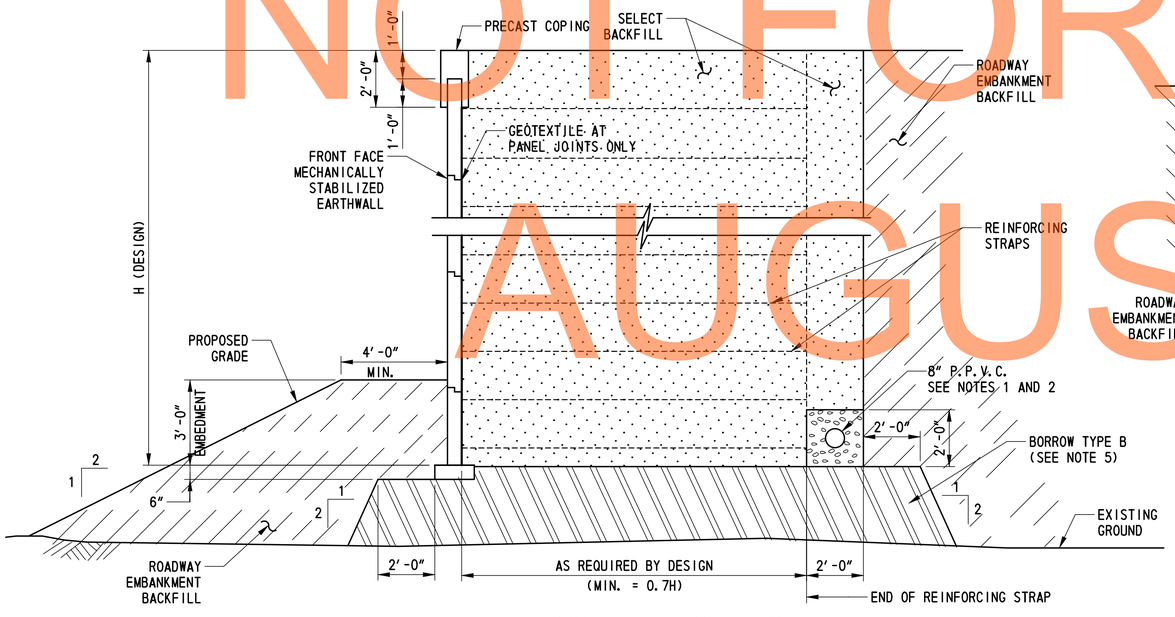
TYPICAL MSE WALL SECTION AT ABUTMENT

SCALE: 3/8" = 1'-0"



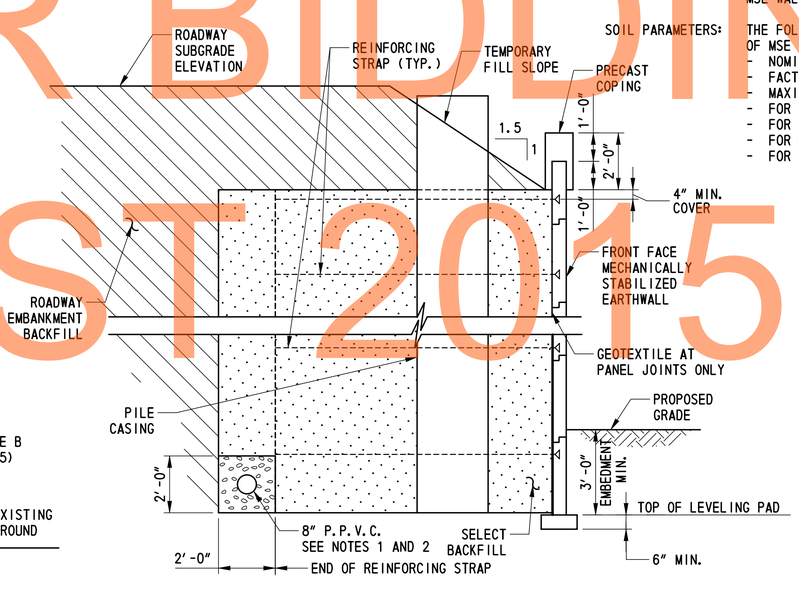
TYPICAL MSE WALL SECTION AT MEDIAN

SCALE: 3/8" = 1'-0"



TYPICAL MSE WALL SECTION WINGWALL ON FILL

SCALE: 3/8" = 1'-0"



FILL PLACEMENT DURING QUARANTINE PERIOD

SCALE: 3/8" = 1'-0"

MSE WALL NOTES:

SPECIFICATIONS: PROPRIETARY MSE WALLS SHALL BE DESIGNED IN ACCORDANCE WITH THE FOLLOWING:
- AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION WITH ALL CURRENT REVISIONS.
- FEDERAL HIGHWAY ADMINISTRATION PUBLICATION NOS. FHWA-NHI-10-024 AND FHWA-NHI-10-025, "DESIGN AND CONSTRUCTION OF MECHANICALLY STABILIZED EARTH WALLS AND REINFORCED SOIL SLOPES", VOLUME I AND VOLUME II.

CONCRETE DESIGN SHALL BE PERFORMED USING THE LOAD AND RESISTANCE FACTOR DESIGN METHOD.

CONCRETE: LEVELING PAD CONCRETE SHALL BE 3,000 PSI. MIX REQUIREMENTS SHALL CONFORM TO SECTION 812 OF THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

CHAMFERS: ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED WITH ¾" x ¾" MILLED CHAMFER STRIPS, UNLESS OTHERWISE NOTED, EXCEPT ON UNEXPOSED FOOTINGS OR WHERE INDICATED BY THE FOLLOWING NOTATION ON THE PLANS: "DO NOT CHAMFER".

REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO AASHTO M31 (ASTM A 615), GRADE 60. ALL SPLICES, NOT SHOWN, SHALL BE LAPPED AS PER THE LRFD BRIDGE DESIGN SPECIFICATIONS. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTHERWISE NOTED.

FOR TIES AND STIRRUPS, STANDARD ACI BENDING TOLERANCES ARE MODIFIED TO PLUS (+) ZERO INCHES, MINUS (-) NORMAL ACI BENDING TOLERANCE.

LEVELING PAD: THE PROPRIETARY WALL MANUFACTURER MAY RELOCATE THE LEVELING PAD STEPS AT THEIR DISCRETION PROVIDED THAT THE MINIMUM EMBEDMENT IS MAINTAINED. ANY CHANGE TO THE STEP LOCATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

ROADWAY LIMITS: THE PROPRIETARY WALL MANUFACTURER SHALL ASSURE THAT PROPOSED PROPRIETARY WALL COMPONENTS ARE POSITIONED SUCH THAT THE DESIGNATED ROADWAY LIMITS ARE NOT ENCROACHED UPON.

COORDINATION: CONTRACTOR AND PROPRIETARY WALL MANUFACTURER SHALL COORDINATE LOCATIONS OF INLETS AND PIPES WITH LOCATIONS OF PROPRIETARY WALL TIE BACK SYSTEM.

SERVICE LIFE: ALL RETAINING WALL COMPONENTS SHALL BE DESIGNED FOR A MINIMUM SERVICE LIFE OF 100 YEARS.

WALL SYSTEM: RETAINING WALL TYPE SHALL BE MECHANICALLY STABILIZED EARTH (MSE) WALLS. NO OTHER WALL TYPE MAY BE SUBSTITUTED.

MSE WALL BACKFILL: MSE WALL BACKFILL SHALL BE SELECT BACKFILL IN ACCORDANCE WITH SPECIAL PROVISION 602772 WITH MINIMUM ANGLE OF INTERNAL FRICTION OF 34 DEGREES AND A MOIST UNIT WEIGHT OF 125 LB/FT .

REINFORCING STRAPS: SET REINFORCING STRAPS TO CLEAR PILE CASING, 2" MIN. CLEARANCE. MAXIMUM IN-FIELD SKEW OF 15 DEGREES. IF GREATER SKEW ANGLE IS REQUIRED, CONTACT MSE WALL FIELD REPRESENTATIVE PRIOR TO INSTALLATION.

SOIL PARAMETERS: THE FOLLOWING ARE RECOMMENDED SOIL PARAMETERS TO BE USED FOR THE DESIGN OF MSE ABUTMENT AND WINGWALLS:
- NOMINAL BEARING RESISTANCE = 16.6 KIP/FT
- FACTORED BEARING RESISTANCE = 10.8 KIP/FT
- MAXIMUM ANTICIPATED SETTLEMENT = 4.5IN
- FOR RETAINED SOIL, MOIST UNIT WEIGHT = 120 LB/FT^3
- FOR RETAINED SOIL, ANGLE OF INTERNAL FRICTION = 30 DEGREES
- FOR FOUNDATION SOIL, MOIST UNIT WEIGHT = 120 LB/FT^3
- FOR FOUNDATION SOIL, ANGLE OF INTERNAL FRICTION = 30 DEGREES

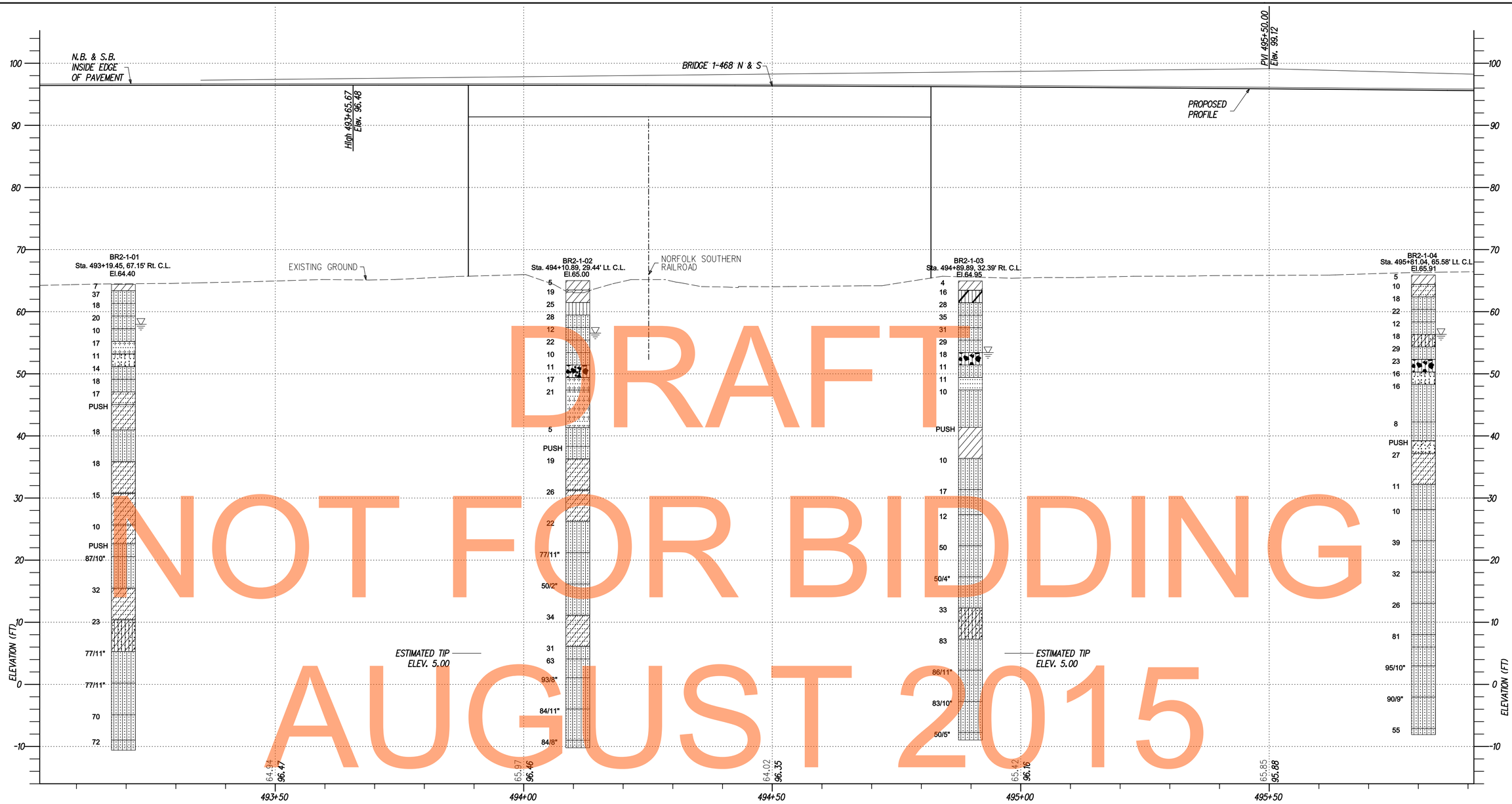
NOTES:
1. DRAIN PERFORATED POLYVINYL CHLORIDE PIPE (P.P.V.C.) TO DAYLIGHT.
2. SURROUND P.P.V.C. WITH A CONTINUOUS 2'-0"x2'-0" OF DELAWARE NO. 57 STONE ENCLOSED IN GEOTEXTILE.
3. SLOPE MEMBRANE A MINIMUM OF 2% AWAY FROM BACKWALL.
4. CONTRACTOR TO PROVIDE PROTECTION TO THE PILE CASING DURING QUARANTINE PERIOD TO PREVENT MATERIAL FROM ENTERING CASING.
5. BORROW TYPE B IS INCIDENTAL TO ITEM 602772 AND SHALL MEET THE REQUIREMENTS OF SECTION 209 OF THE STANDARD SPECIFICATIONS.

CROSS REFERENCE NOTES:
1. FOR GENERAL NOTES, SEE SHEET 1-468 GN-1.
2. FOR MEDIAN & WINGWALL ELEVATION, SEE SHEET 1-468 WW-2.
3. FOR GEOMETRIC LAYOUT, SEE SHEET 1-468 GG-1.

1-468 WW-3

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 1 0 1 2 3 FEET	US 301 NORFOLK SOUTHERN RR TO SR896	CONTRACT T200911301 / COUNTY NEW CASTLE	BRIDGE NO. 1-468N&S / DESIGNED BY: ADH / CHECKED BY: DHG	US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD MSE WALL DETAILS	SHEET NO. 131 / TOTAL SHTS. 240

G:\60049040 US301\Structure\Plans\FINAL\B2-1NS\BR2-1 Contract 1C\BR2-1MSE-01-AB2.dgn



KEY TO SYMBOLS

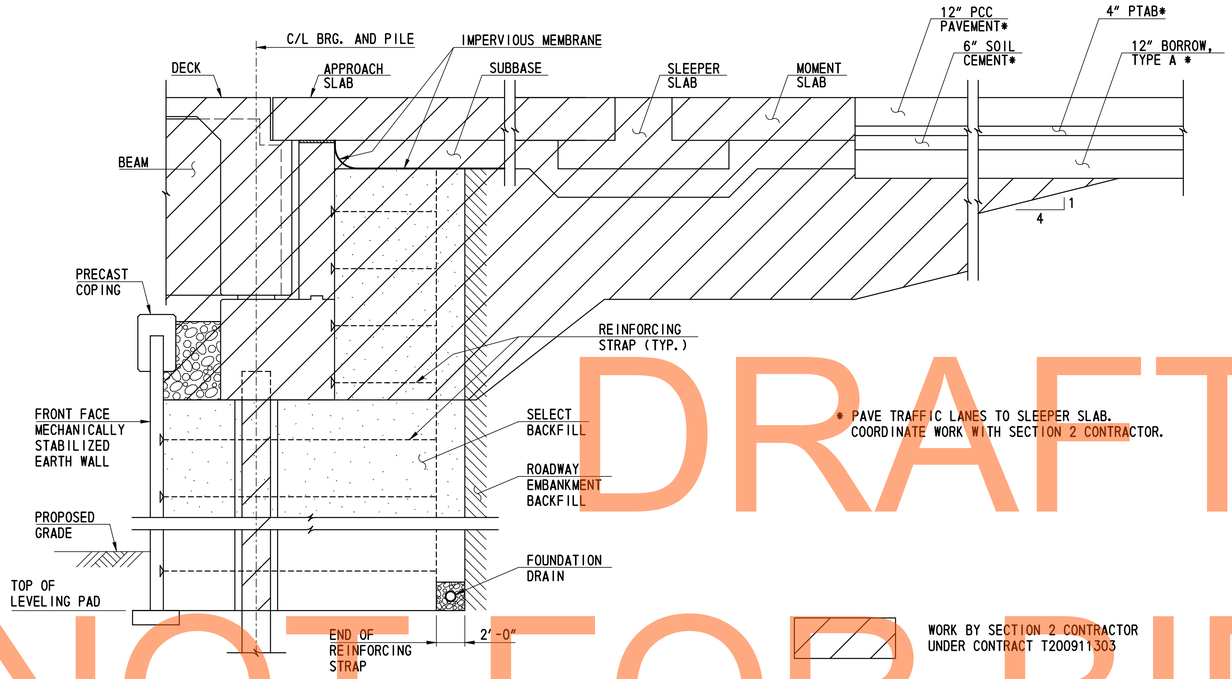
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
STRATA SYMBOLS			
	LOW PLASTICITY CLAY		WELL GRADED GRAVEL WITH SILT
	SILTY SAND		SILTY LOW PLASTICITY CLAY
	WELL GRADED SAND WITH SILT		SILTY GRAVEL
	POORLY GRADED SAND WITH SILT		WELL GRADED SAND
	CLAYEY SAND		POORLY GRADED SAND WITH CLAY
	POORLY GRADED CLAYEY SILTY SAND	MISC. SYMBOLS	
	SILT		WATER TABLE DURING DRILLING

VERTICAL SCALE FEET 0 8 16 24

1-468 BO-1

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	HORIZONTAL SCALE 0 10 20 30 FEET	US 301 NORFOLK SOUTHERN RR TO SR896	CONTRACT T200911301	BRIDGE NO. 1-468N&S	US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD TEST BORINGS
				COUNTY NEW CASTLE	DESIGNED BY: ZH	SHEET NO. 132
					CHECKED BY: RDB	TOTAL SHTS. 240

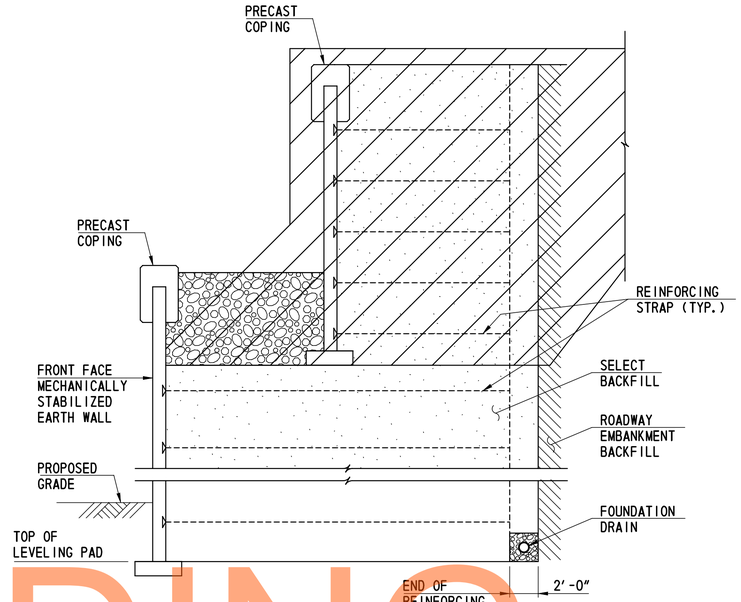
G:\60049040 US301\STRUCTURE\PLANS\FINAL\B2-INS\BR2-1 CONTRACT 1C\BR2-1BO-01-AB2.DGN



MSE WALL SECTION
AT ABUTMENT

* PAVE TRAFFIC LANES TO SLEEPER SLAB.
COORDINATE WORK WITH SECTION 2 CONTRACTOR.

WORK BY SECTION 2 CONTRACTOR
UNDER CONTRACT T200911303



MSE WALL SECTION
AT MEDIAN

ABUTMENT 2
BRIDGE 1 - 468 N & S

SEQUENCE OF CONSTRUCTION AT ABUTMENT 2 - CONTRACT T200911301

1. CONSTRUCT MSE WALLS AT ABUTMENTS AND AT MEDIAN, AND CONSTRUCT EMBANKMENT, TO THE APPROXIMATE LIMITS SHOWN.
2. PILE CASINGS SHALL BE INSTALLED AT THE PROPOSED PILE LOCATIONS DURING THE ABUTMENT MSE WALL CONSTRUCTION.

NOTES:
1. FOR BRIDGE 1-468 N & S CONSTRUCTION DETAILS, SEE SHEETS 123 TO 132.
2. ABUTMENT 1 AND ABUTMENT 2 TO BE BUILT UNDER CONTRACT T200911303.

LEGEND

BRG.	=	BEARING
N	=	NORTHBOUND
S	=	SOUTHBOUND
TYP.	=	TYPICAL

1-468 DT-1

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

US 301
NORFOLK SOUTHERN RR
TO SR896

CONTRACT	T200911301	BRIDGE NO.	1-468N&S
COUNTY	NEW CASTLE	DESIGNED BY: ADH	
		CHECKED BY: DHG	

US 301 MAINLINE OVER NORFOLK SOUTHERN RAILROAD
CONSTRUCTION SEQUENCE ABUTMENT 2

SHEET NO.	133
TOTAL SHTS.	240

G:\60049040 US301\Structure\Plans\FINAL\B2-1NS\BR2-1 Contract 1C\BR2-1DT-01-AB2.dgn